8011-01-P

SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 240 and 242

[Release No. 34-105655; File No. S7-2026-20]

RIN 3235-AN50

The Trade-Through Rule and Locked and Crossed Markets Provisions of Regulation NMS

AGENCY: Securities and Exchange Commission.

ACTION: Proposed rule.

SUMMARY: The Securities and Exchange Commission ("Commission" or "SEC") is proposing amendments to Regulation NMS ("Regulation NMS") under the Securities Exchange Act of 1934 ("Exchange Act"). The proposed amendments would rescind the trade-through rule for NMS stocks, the provision regarding locking and crossing quotations for NMS stocks, and certain defined terms. The proposed amendments would also make conforming changes to other related provisions.

DATES: Comments should be received on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's internet comment form (https://www.sec.gov/comments/s7-2026-20/amendments-regulation-nms); or
- Send an email to rule-comments@sec.gov. Please include File Number S7-2026-20 on the subject line.

Paper comments:

- Send paper comments to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090.

All submissions should refer to File Number S7-2026-20. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method of submission. The Commission will post all comments on the Commission's website (https://www.sec.gov/rules-regulations/public-comments/s7-2026-20). Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection.

Studies, memoranda, or other substantive items may be added by the Commission or staff to the comment file during this rulemaking. A notification of the inclusion in the comment file of any materials will be made available on our website. To ensure direct electronic receipt of such notifications, sign up through the "Stay Connected" option at www.sec.gov to receive notifications by email.

A summary of the proposal of not more than 100 words is posted on the Commission's website (https://www.sec.gov/rules-regulations/2026/06/s7-2026-20).

FOR FURTHER INFORMATION CONTACT: Theodore S. Venuti, Assistant Director; Kevin Brennan, Special Counsel; Sarah Counts, Special Counsel; Jennifer Dodd, Special Counsel; David Liu, Special Counsel; Gita Subramaniam, Special Counsel, at (202) 551-5500, Office of Market Supervision, Division of Trading and Markets, U.S. Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549.

SUPPLEMENTARY INFORMATION: The Commission is proposing amendments for public comment to the following rules.

Commission Reference		**CFR Citation (17 CFR)**
Exchange Act	Rule 15c3-5	§ 240.15c3-5
	Rule 15b9-1	§ 240.15b9-1
Regulation NMS	Rule 600	§ 242.600
	Rule 610	§ 242.610
	Rule 611	§ 242.611

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I. Introduction

A. Overview of Proposal

Rule 611 of Regulation NMS was adopted in 2005 and established intermarket protection against trade-throughs for all national market system stocks. A trade-through occurs when one trading center executes an order at a price that is inferior to the price of a protected quotation displayed by another trading center. Rule 610(e) was also adopted in 2005 under Regulation NMS and contains restrictions on locking and crossing quotations in national market system stocks. A locked market occurs when the best bid price equals the best offer price, and a crossed market occurs when the best bid price is higher than the best offer price.

Since the adoption of these rules, the structure of the U.S. equity markets has evolved dramatically, and today's markets are highly automated, interconnected, fast, and competitive. While a goal of Rule 611 was to incentivize displayed liquidity, since its adoption the percentage of orders interacting with non-displayed liquidity on- and off-exchange has consistently increased. In addition, since the adoption of Rules 611 and 610(e), U.S. equity markets have become increasingly fragmented and complex.

The Commission is proposing to rescind Rules 611 and 610(e) under Regulation NMS. Rules 611 and 610(e) have led to a myriad of consequences in today's trading environment, including increased costs and market structure complexity, limiting order handling and execution choice, and contributing to exchange proliferation and fragmentation of trading on equity exchanges. Moreover, technologies, particularly with respect to access and order handling and routing, have advanced significantly and obviate any continued need for Rule 611, which was

adopted at a time when exchanges and market participants were not as well connected and many linkages that did exist were relatively slow. Also, given this highly automated and interconnected nature of our equity markets today, Rule 611 is not needed to backstop a broker's duty of best execution to seek the most favorable terms for customer orders reasonably available under the circumstances. Similarly, such increases in automation and interconnectivity, as well as increases in market participant access to market data, obviate the need for Rule 610(e). Rescinding Rules 611 and 610(e) would reduce compliance costs and benefit U.S. equity markets by eliminating regulations to allow competition, innovation, and other market forces to shape the U.S. equity market's continued evolution.

B. Background

Congress, through section 11A of the Exchange Act ("section 11A"),[1] charged the Commission in 1975 with facilitating the establishment of a national market system, and identified five key components for such a system to function properly: (1) economically efficient execution of securities transactions; (2) fair competition among broker-dealers, among exchange markets, and between exchange markets and non-exchange markets; (3) price transparency; (4) best execution of investor orders; and (5) an opportunity, consistent with economic efficiency and best execution, for investor orders to meet without the participation of a dealer.[2] Following the adoption of section 11A, over the next three decades the Commission sought to facilitate the development of the national market system for NMS securities[3] by adopting rules, and working with various self-regulatory organizations ("SROs") to adopt rules and establish national market system plans ("NMS Plans"), relating to, among other things, linkages between markets; the

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1 15 U.S.C. 78k-1.

2 Exchange Act section 11A(a)(1)(C)(i) through (v); 15 U.S.C. 78k-1(a)(1)(C)(i) through (v).

3 Rule 600(b)(64) of Regulation NMS defines "NMS security" to include "any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in listed options." *See* 17 CFR 242.600(b)(64). In other words, NMS securities include NMS stocks and listed options.

collection, consolidation, and dissemination of quotation and transaction information; the display of quotations; and intermarket price protection.[4]

The years leading up to 2005 were a time of considerable transformation for the secondary markets for U.S. listed equities. In particular, "the equity markets [had] experienced sweeping changes, ranging from new technologies to new types of markets to the initiation of trading in penny increments"[5] and a majority of the Commission at that time believed there was an "inescapable" and "pressing" need to modernize the national market system.[6] Significant increases in the usage of electronic trading systems resulted in more transparent order handling and routing practices; at the same time, intensifying competition drove commissions lower and penny pricing reshaped the mechanics of trading.[7] After the "culmination of a long and comprehensive rulemaking process,"[8] and while acknowledging the wide range of different opinions on many contentious issues,[9] the Commission adopted Regulation NMS in 2005, which it described as "a series of initiatives designed to modernize and strengthen the national market system" for NMS securities.[10]

In adopting Regulation NMS, the Commission stated that it sought to promote certain principles and objectives for the national market system, namely: (1) competition among markets and competition among orders; and (2) serving the interests of long-term investors and listed companies.[11] At the same time, the Commission acknowledged that its primary challenge in

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4 *See* Securities Exchange Act Release No. 49325 (Feb. 26, 2004), 69 FR 11126 (Mar. 9, 2004) ("NMS Proposing Release") at 11130-31. *See also infra* note 13.

5 *See* Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005) ("NMS Adopting Release") at 37497.

6 *Id.* at 37497. *But see* Dissent of Commissioners Cynthia A. Glassman and Paul S. Atkins to the Adoption of Regulation NMS, *id.* at 37639-43 ("Joint NMS Dissent").

7 *See* Remarks at the Roundtable on Trade-Through Prohibitions by Paul S. Atkins, Chairman, Commission (Sept. 18, 2025), available at https://www.sec.gov/newsroom/speeches-statements/atkins-091825-remarks-roundtable-trade-through-prohibitions ("Chairman Remarks at First TTR Roundtable").

8 NMS Adopting Release at 37498; *see also id.* at 37497-98 (describing in detail the process the Commission engaged in prior to adopting Regulation NMS in 2005).

9 *Id.* at 37497.

10 *Id.* at 37496.

11 *Id.* at 37498-501.

facilitating the establishment of a national market system was to maintain an appropriate competitive balance, stating that it particularly sought to avoid the two extremes of "[i]solated markets that trade an NMS stock without regard to trading in other markets and thereby fragment the competition among buyers and sellers in that stock" and "a totally centralized system that loses the benefits of vigorous competition and innovation among individual markets."[12]

Under Regulation NMS, the Commission consolidated the then-existing national market system rules previously adopted under section 11A[13] and adopted several significant new rules, including Rule 611 (relating to restrictions on trade-throughs), Rule 610 (relating to access to quotations and restrictions on locking and crossing quotations), Rule 612 (relating to minimum increments for orders and quotations), and Rule 603 (relating to the distribution, consolidation, and display of market data).[14] Thus, as originally adopted in 2005, Regulation NMS consisted of twelve rules, along with a definitional rule (Rule 600).[15]

Rule 611 (referred to in the NMS Adopting Release as the "order protection rule," and referred to herein as the "trade-through rule") was the core of the rules adopted by the

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12 *Id.* at 37499.

13 The national market system rules predating Regulation NMS are the requirements relating to: NMS defined terms (Rule 600, previously Exchange Act Rule 11Aa2-1); public dissemination of trade reports (Rule 601, previously Exchange Act Rule 11Aa3-1) and quotations (Rule 602, previously Exchange Act Rule 11Ac1-1 and commonly referred to as the "Quote Rule"); distribution, consolidation and display of quotes and transactions in NMS stocks (Rule 603, previously Exchange Act Rule 11Ac1-2 and commonly referred to as the "Vendor Display Rule"); public display of customer limit orders (Rule 604, previously Exchange Act Rule 11Ac1-4 and commonly referred to as the "Limit Order Display Rule"); public disclosure of order execution and routing information (Rules 605, previously Exchange Act Rule 11Ac1-5, and 606, previously Exchange Act Rule 11Ac1-6); customer account statements (Rule 607, previously Exchange Act Rule 11Ac1-3); national market system plans (Rule 608, previously Exchange Act Rule 11Aa3-2); and registration of securities information processors ("SIPs") (Rule 609, previously Exchange Act Rule 11Ab2-1).

14 *See* 17 CFR 242.611, 17 CFR 242.610, 17 CFR 242.612, and 17 CFR 242.603, respectively.

15 17 CFR 242.600-612. Subsequent to the adoption of Regulation NMS in 2005, the Commission adopted: Rule 613 of Regulation NMS, which required national securities exchanges and national securities associations to submit a national market system plan to create, implement, and maintain a consolidated audit trail with respect to the trading of NMS securities ("CAT") (Securities Exchange Act Release No. 67457 (July 18, 2012), 77 FR 45722 (Aug. 1, 2012) ("CAT Adopting Release")); and Rule 614, relating to the registration and responsibilities of competing consolidators (Securities Exchange Act Release No. 90610 (Dec. 9, 2020), 86 FR 18596 (Apr. 9, 2021) ("Market Data Infrastructure Adopting Release")). Currently, Regulation NMS consists of fourteen substantive rules. 17 CFR 242.600-614.

Commission in Regulation NMS and established intermarket protection against trade-throughs[16] for all NMS stocks. In adopting Rule 611, the Commission emphasized that intermarket price protection was designed to promote national market system objectives by promoting the use of displayed "non-marketable" limit orders (orders with limit prices that are not immediately executable at current quoted prices)[17] and minimizing the extent to which investor market orders and marketable limit orders are executed at inferior prices.[18]

Broadly speaking,[19] Rule 611 requires "trading centers"[20] (which encompass national securities exchanges ("exchanges"),[21] alternative trading systems ("ATSs"),[22] over-the-counter ("OTC") market makers, and any other broker-dealer that executes orders internally) to establish, maintain, and enforce written policies and procedures reasonably designed to prevent trade-

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16 A "trade-through" means "the purchase or sale of an NMS stock during regular trading hours, either as principal or agent, at a price that is lower than a protected bid or higher than a protected offer." 17 CFR 242.600(b)(105).

17 Trade-through protection for displayed non-marketable limit orders was designed to encourage the use of such orders by increasing the likelihood of their receiving an execution in a timely manner, as greater use of displayed limit orders was believed to improve the price discovery process and contribute to increased liquidity and depth. NMS Adopting Release at 37505-07.

18 Trade-through protection for market and marketable limit orders was designed both to prevent unfairness to investors and to facilitate broker-dealers' ability to achieve best execution of their customer orders. If a broker-dealer routes an order to a trading venue that cannot execute the order at the best price, the venue cannot simply execute the order at an inferior price. It can either cancel the order back to the broker-dealer or route the order to another venue that will execute the order at the best price or better. *See* NMS Adopting Release at 37505-07.

19 *See infra* section II.A. for a more detailed discussion of Rule 611's requirements and exceptions.

20 17 CFR 242.600(b)(106) (definition of "trading center").

21 *See infra* note 22.

22 Section 3(a)(1) of the Exchange Act defines an "exchange" as "any organization, association, or group of persons…which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange as that term is generally understood…" 15 U.S.C. 78c(a)(1). Exchange Act Rule 3b-16(a) provides a functional test to assess whether a trading system meets the definition of "exchange" under section 3(a)(1) of the Exchange Act. Under Rule 3b-16(a), an organization, association, or group of persons "constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities" if it (1) brings together the orders for securities of multiple buyers and sellers; and (2) uses established, non-discretionary methods (whether by providing a trading facility or by setting rules) under which such orders interact with each other, and the buyers and sellers entering such orders agree to the terms of a trade. *See* 17 CFR 240.3b-16(a). A national securities exchange and ATS each meet the definition of exchange under section 3(a)(1) of the Act and Rule 3b-16(a) thereunder but are subject to different registration requirements. When used herein, "exchange" is used to mean "national securities exchange" unless the context specifies otherwise.

throughs,[23] *i.e.*, the execution of an order at a price that is inferior to the price of a "protected quotation."[24] To be "protected," a quotation must be immediately and automatically accessible up to its full displayed size and must be the best-priced quotation (highest bid to buy and lowest offer to sell) in round-lot sizes[25] of an exchange or a national securities association (currently the Financial Industry Regulatory Authority, Inc. ("FINRA") is the only registered national securities association and it operates the Alternative Display Facility ("ADF")).[26]

Accordingly, Rule 611 provides for intermarket price priority of an exchange's or the ADF's best bid and offer ("BBO");[27] it does not establish time priority among quotations at different trading centers, nor does it protect "depth-of-book" quotations (quotations with prices outside an exchange's BBO). Rule 611 also provides certain exceptions to its requirements, including an "intermarket sweep order" ("ISO")[28] exception that allows, among other things, a trader simultaneously to sweep multiple price levels outside of a protected quotation, as long as one or more ISOs, as necessary, are routed at the same time to execute against the full displayed size of any protected quotations with better prices.[29]

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23 *See supra* note 16.

24 17 CFR 242.600(b)(82) (definition of "protected quotation"); *see also* 17 CFR 242.600(b)(81) (definition of "protected bid or protected offer").

25 By its terms, Rule 611 only applies to round lots, as "quotation" is defined in Rule 600(b)(86) as "a bid or offer," which, in turn, is defined in Rule 600(b)(16) to be the bid price or the offer price communicated by a member of a national securities exchange or member of a national securities association to any broker or dealer, or to any customer, at which it is willing to buy or sell one or more "round lots" of an NMS security, as either principal or agent, but shall not include indications of interest. In 2024, the Commission amended the definition of "round lot" to implement a tiered approach based on an NMS stock's average closing price on its primary listing exchange. The change to the definition of "round lot" went into effect in November 2025. *See* Securities Exchange Act Release No. 101070 (Sept. 18, 2024), 89 FR 81620 (Oct. 8, 2024) ("2024 Regulation NMS Amendments").

26 *See also infra* note 90 and accompanying text (discussing the ADF, which currently has no active quoting participants).

27 17 CFR 242.600(b)(15) (definition of "best bid and best offer"); *see also* 17 CFR 242.600(b)(16) (definition of "bid or offer").

28 17 CFR 242.600(b)(47) (definition of "intermarket sweep order").

29 This allows, for example, a block trader to access large-sized quotations at prices outside protected quotations.

Another significant new rule adopted by the Commission under Regulation NMS was Rule 610 of Regulation NMS.[30] Rule 610 contains provisions relating to fair access to quotations, and includes, among other things, a cap on the fees a trading center may impose for access to quotations and restrictions on locked and crossed markets.[31] In particular and relevant to this release, Rule 610(e) requires each exchange and national securities association to implement rules requiring members reasonably to avoid displaying quotations that lock or cross protected quotations.[32] The Commission stated that "[t]he restrictions on locking or crossing quotations, in conjunction with [Rule 611], should encourage trading against displayed quotations and enhance the depth and liquidity of the markets."[33]

As discussed above, the Commission approved Regulation NMS at a time of considerable transformation in the U.S. equity markets.[34] Since the adoption of Regulation NMS in 2005, U.S. securities markets have evolved further and continue to evolve and innovate. Trading has moved from two traditional models of equity market structure that had dominated trading prior to 2005– namely, floor-based auctions for stocks listed on the New York Stock Exchange LLC ("NYSE") and dealer-based competition for stocks listed on the Nasdaq Stock Market LLC ("Nasdaq")– to evolve into today's highly automated, electronic market structure model where exchange-listed stocks trade on a wide range of different types of electronic trading centers, connected by private

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30 *See infra* section III.A. for a more detailed discussion of Rule 610's requirements.

31 *See* Rule 610(a) through (f). With respect to access fee caps under paragraph (c) of Rule 610, when first adopted in 2005 the Commission limited exchange fees for accessing protected quotations with prices of $1 or greater to 0.3 cents per share (or 30 cents per 100 shares). Subsequently, in 2024, the Commission amended Rule 610(c) to reduce the access fee caps to $0.001 (or 10 mils) per share for NMS stocks with prices of $1 or greater. At the same time, the Commission established a second minimum pricing increment of $0.005 under Rule 612 for quoting certain "tick constrained" NMS stocks and adopted new definitions of "round lot" and "odd-lot information." *See* 2024 Regulation NMS Amendments. The changes to the access fee cap in Rule 610(c) and the minimum pricing increment in Rule 612 have yet to be implemented. *See infra* note 76.

32 17 CFR 242.610(e). A locking quotation is when a bid is displayed with a price equal to the price of a previously displayed offer, or when an offer is displayed with a price equal to the price of a previously displayed bid. A crossing quotation is when a bid is displayed with a price higher than the price of a previously displayed offer, or when an offer is displayed with a price lower than the price of a previously displayed bid.

33 NMS Adopting Release at 37584.

34 *See supra* notes 5-7 and accompanying text.

linkages, including exchanges, ATSs, single-dealer trading platforms ("SDPs"),[35] and other broker-dealer trading systems. Rapid changes in technology led to the rise of sophisticated algorithmic trading strategies and high-volume proprietary trading firms.

Moreover, since the adoption of Regulation NMS in 2005, the number of national securities exchanges for NMS stocks has proliferated, further fragmenting the trading landscape. Currently, there are 17 operating national securities exchanges that trade NMS stocks and three exchanges approved to trade NMS stocks but not yet operating,[36] as compared to eight national securities exchanges that traded NMS stocks in 2005 (plus Nasdaq, which did not become an exchange until 2006).[37]

There has also been a significant increase in the volume and proportion of trading executing against non-displayed liquidity.[38] Since the adoption of Rule 611, fragmentation among non-displayed venues has occurred as trading volumes in U.S. equities have increased on off-exchange venues, such as ATSs, SDPs, and wholesalers,[39] with the market share of off-

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35 An SDP is a type of business operated by some OTC market makers which primarily seeks to attract the orders of institutional investors for internal execution. *See Where Do Stocks Trade?*, FINRA (Sept. 28, 2023) *available at* https://www.finra.org/investors/insights/where-do-stocks-trade (for further discussion about SDPs).

36 The 17 operating national securities exchanges are: Cboe BYX Exchange, Inc. ("Cboe BYX"); Cboe BZX Exchange, Inc. ("Cboe BZX"); Cboe EDGA Exchange, Inc. ("Cboe EDGA"); Cboe EDGX Exchange, Inc. ("Cboe EDGX"); Investors Exchange LLC ("IEX"); Long-Term Stock Exchange, Inc. ("LTSE"); MEMX LLC ("MEMX"); MIAX Pearl, LLC ("MIAX PEARL"); Nasdaq Texas, LLC. ("Nasdaq TX"); Nasdaq PHLX LLC ("Nasdaq Phlx"); The Nasdaq Stock Market LLC ("Nasdaq"); NYSE; NYSE American LLC ("NYSE American"); NYSE Arca, Inc. ("NYSE Arca"); NYSE Texas, Inc. ("NYSE Texas"); NYSE National, Inc. ("NYSE National"); and 24X National Exchange LLC ("24X"). The three national securities exchanges approved to trade NMS stocks, but not yet operating, are: Green Impact Exchange, LLC ("GIX"); MX2 LLC ("MX2") and Texas Stock Exchange LLC ("TXSE").

37 *See* NMS Adopting Release at 37576, n.730 (listing the eight national securities exchanges that traded NMS stocks in 2005).

38 *See*, *e.g.*, Staff of the Division of Trading and Markets, *Trade Through Roundtable Supporting Data*, pp. 10-15 (Sept.12, 2025), *available at:* https://www.sec.gov/files/trade-through-roundtable-supporting-data.pdf (providing measures of the number of round lots at the best bid and number best bids from 2015-2025); *see also Memorandum re: Rule 611 of Regulation NMS from SEC Division of Trading and Markets to SEC Market Structure Advisory Committee*, dated Apr. 30, 2015 at 21, available at https://www.sec.gov/spotlight/emsac/memo-rule-611-regulation-nms.pdf ("EMSAC Market Structure Memo").

39 Wholesalers fall within the definition of an OTC market maker in Rule 600(b)(75) of Regulation NMS — any dealer that holds itself out as being willing to buy from and sell to its customers, or others, in the United States, an NMS stock for its own account on a regular or continuous basis otherwise than on a national securities exchange in amounts of less than block size. The term "wholesaler" is not defined in

exchange trading steadily increasing in the last decade, and, since the end of 2024, now regularly exceeding 50% of overall volume.[40] Even on exchanges, the percentage of volume executed against liquidity that is not displayed (*i.e.*, is "hidden" or "dark") has steadily increased.[41]

The U.S. equities markets are continuing to evolve rapidly. Advances in technology and increased automation and efficiencies have recently enabled settlement times to shrink[42] and have made near 24 hour equity trading a reality.[43] In addition, innovative technology such as distributed ledger technology ("DLT") allows issuers to tokenize a security by issuing it in the

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Regulation NMS but commonly refers to an OTC market maker that seeks to attract orders from broker-dealers that service the accounts of retail investors.

40 For example, from February 2005 to February 2014, the total percentage of volume executed by non-displayed ATSs and broker-dealers rose from 29.4% to 38.6% for Nasdaq-listed stocks and from 13.0% to 34.6% for NYSE-listed stocks. *See* EMSAC Market Structure Memo at 9-12. From February 2014 to January 2026, these off-exchange volumes have risen even further, with total percentage of volume executed off-exchange for Nasdaq-listed stocks climbing to 51.9% and NYSE-listed stocks climbing to 47%. *See* 2026 Data Update of the 2015 EMSAC Market Structure Memo, by Staff of the Office of Analytics and Research, Division of Trading and Markets (June 11, 2026), available at https://www.sec.gov/rules-regulations/public-comments/s7-2026-20. *See The Volume Explosion No One Saw Coming*, by Jeff O'Oconnor, Liquidnet (Oct. 20, 2025) (noting that off-exchange volumes first began to consistently clear 50% of total market volumes in Q4 of 2024). *See also Rosenblatt Trading Talk – Market Structure Analysis* (Feb 6, 2026). For daily and monthly summaries of NMS stock volumes executed on each exchange or reported to each trade reporting facility, *see* https://www.cboe.com/us/equities/market_statistics/historical_market_volume/.

41 *See*, *e.g.*, Summary Metrics by Exchange, *available at* https://www.sec.gov/data-research/sec-markets-data/marketstructuredata-exchange. Analysis of this data indicates, for example, that in the first quarter of 2015, the median proportion of equity exchange volume executed against non-displayed orders for stocks was 16.0%, but in the second quarter of 2025, it was 30.7%, and that comparable numbers for ETPs were 12% and 16.6%. This change was an increase of 92% for stocks and 38% for ETPs. Similarly, in the first quarter of 2015, the exchange with the smallest proportion of volume executed against hidden orders for stocks had 3.7% and the largest 28.4%, but in the second quarter of 2025, the smallest had 13.7% and the largest had 54.6%. In the first quarter of 2015, the exchange with the smallest proportion of volume executed against hidden orders for ETPs had 1.5% and the largest 17.1%, but in the second quarter of 2025, the smallest had 5.6% and the largest had 43.1%. This analysis is based on quarterly averages of the "etp_hidden_volume" and "stock_hidden_volume" data for each exchange, and excluded one exchange that consistently executed nearly all trades against non-displayed liquidity. *See also It's Darkest in the Middle of the Day*, by Phil Mackintosh, Nasdaq, available at https://www.nasdaq.com/articles/its-darkest-middle-day (discussing off-exchange market share rising above 50% for the first time in 2025 and lit price discovery (exchange trades at the NBBO) at around 30% during portions of the trading day).

42 *See* Securities Exchange Act Release No. 96930 (Feb. 15, 2023), 88 FR 13872 (Mar. 6, 2023) (Shortening the Securities Transaction Settlement Cycle).

43 National securities exchanges have recently been approved to trade NMS stocks on an almost 24/5 basis. *See* Securities Exchange Act Release Nos. 102400 (Feb. 11, 2025), 90 FR 9794 (Feb. 18, 2025) (order approving NYSE Arca Inc. proposal to lengthen its trading session to 22 hours per day, 5 days per week); 101777 (Nov. 27, 2024); 89 FR 97092 (order approving application of 24X National Exchange, LLC for registration as a national securities exchange and to trade 23 hours per day, 5 days per week, once the SIPs are able to concurrently collect, consolidate, process and disseminate consolidated data at all times during that time). In addition, certain ATSs make NMS stocks available for trading during the overnight session.

format of a crypto asset and facilitate trading among market participants.[44] The use of DLT, including smart contract applications undergirding automated market makers, has introduced new methods of trading securities and opened access to such trading to various types of market participants. Such innovative technology also raises challenges and questions relating to current equities market structure and the application of current regulatory requirements.[45]

Given the importance of the U.S. national market system, the Commission and its staff have periodically engaged in assessments of equity market structure over the two decades since the adoption of Regulation NMS,[46] most recently examining the impact of Rule 611 and related rules on equity market structure. To this end, the Commission held two public roundtables in late 2025 and engaged a range of panelists, including representatives from exchanges, ATSs, retail and institutional broker-dealers, investor advocacy groups, academics, and regulators.[47] In conjunction with the TTR Roundtables, the Commission also welcomed public comments

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44 *See* Statement on Tokenized Securities; Division of Corporation Finance, Division of Investment Management, Division of Trading and Markets; Commission, Jan. 28, 2026, *available at* https://www.sec.gov/newsroom/speeches-statements/corp-fin-statement-tokenized-securities-012826-statement-tokenized-securities.

45 *See, e.g.*, *Beyond Reg NMS: A Market Structure Framework for the Modern Era,* Michael Cahill, CEO, and Brandon Ferrick, General Counsel, Duoro Labs LLC ("Duoro Labs Paper"), at 18-19.

46 For example, in 2010 the Commission conducted a broad review of equity market structure and invited public comment on a wide range of market structure issues, including high frequency trading, order routing, market data linkages, and liquidity. *See* Securities Exchange Act Release No. 61358 (Jan. 14, 2010), 75 FR 3594 (Jan. 21, 2010) ("Concept Release on Equity Market Structure"). In 2015 the Commission established an Equity Market Structure Advisory Committee ("EMSAC") to provide the Commission with "diverse perspectives on the structure and operations of the U.S. equities markets, as well as advice and recommendations on matters related to equity market structure." *See* Securities Exchange Act Release No. 74092 (Jan. 20, 2015), 80 FR 3673 (Jan. 23, 2015). The EMSAC used its inaugural meeting in May 2015 to focus on Rule 611. *See* https://www.sec.gov/newsroom/press-releases/2015-70 and EMSAC Market Structure Memo at 18. *See also supra* note 15 (discussing amendments to Regulation NMS following its 2005 adoption). Even preceding the adoption of Regulation NMS, the Commission and its staff have undertaken periodic reevaluations of market structure. *See, e.g.,* Concept Release on Market Fragmentation, 65 FR 10577 (Feb. 28, 2000); *Market 2000: An Examination of Current Equity Market Developments*, Division of Market Regulation, Commission (Jan. 1994) (''Market 2000 Study'').

47 The first *Roundtable on Trade-Through Prohibitions* ("First TTR Roundtable") was held at the Commission's Washington DC headquarters on September 18, 2025. A transcript and webcast of the First TTR Roundtable can be found at: https://www.sec.gov/newsroom/meetings-events/roundtable-trade-through-prohibitions ("First TTR Roundtable Transcript"). Data analysis supporting this roundtable can be found at: https://www.sec.gov/files/trade-through-roundtable-supporting-data.pdf. The second *Roundtable on Rule 611* ("Second TTR Roundtable" and, together with the First TTR Roundtable, the "TTR Roundtables") was held in Austin, TX on December 16, 2025. A transcript and webcast of the Second TTR Roundtable can be found at: https://www.sec.gov/newsroom/meetings-events/roundtable-rule-611-regulation-nms ("Second TTR Roundtable Transcript"). A broad overview from the roundtables is summarized below.

regarding issues relating to Rule 611 and related rules.[48] Through the TTR Roundtables and the public comment process, the Commission received a wide range of input on Regulation NMS broadly, and the current Rule 611 trade-through prohibition specifically, from a variety of market participants, including industry groups, exchanges, broker-dealers, financial services firms, and individual investors. While some commenters[49] indicated support for the trade-through rule in its current form,[50] many commenters criticized Rule 611[51] and its effect on equity market structure.[52]

In particular, some commenters questioned whether the trade-through rule is at least partly to blame for the substantial increase in the number of exchanges and excessive fragmentation of liquidity among trading venues.[53] Some commenters contended that, by requiring market participants to consider the protected quotations of all exchanges and to route orders to execute against those quotations in certain contexts, Rule 611 enables more exchanges to stay in business than may have otherwise been the case.[54] Similarly, some commenters argued

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48 *See* https://www.sec.gov/comments/4-862/4-862.htm.

49 The term "commenters" throughout this document refers to both the panelists at the TTR Roundtables and those who submitted written comments.

50 *See, e.g.*, letter from Allen Spence (Aug. 13, 2025) at 1-2; letter from R. T. Leuchtkafer (Aug. 25, 2025) ("Leuchtkafer Letter") at 4; letter from Haoxiang Zhu, Associate Professor of Finance, MIT Sloan School of Management (Dec. 15, 2025) ("Zhu Letter") at 1; First TTR Roundtable Transcript at 36 (Julie Andress, Securities Traders Association and KeyBanc Capital Markets). Some of these commenters also expressed support for maintaining other aspects of Regulation NMS, such as Rule 610(e)'s prohibition on locked and crossed markets. *See, e.g.*, Leuchtkafer Letter at 5-6; letter from Christopher Nagy, Research Director, Healthy Markets Association (Dec. 12, 2025) ("Healthy Markets Letter II") at 2 n.7.

51 *See, e.g.*, letter from James J. Angel, Associate Professor, Georgetown University, McDonough School of Business (Sept. 1, 2025) ("J. Angel Letter") at 1, 16; letter from Matt Billings, President, Robinhood Financial, LLC and Robinhood Securities, LLC (Sept. 16, 2025 ("Robinhood Letter") at 2-5; letter from Raz Tirosh and Calvin Hayes, Jane Street (Sept. 23, 2025) ("Jane Street Letter") at 2 (stating the continuation of Rule 611 "imposes negative externalities"); letter from Joseph Saluzzi, Partner, Themis Trading LLC (Dec. 17, 2025) at 3 (calling Rule 611 flawed and offering reforms).

52 *See, e.g.*, letter from Ari Burstein, General Counsel, Imperative Execution, IntelligentCross (Sept. 17, 2025) ("IntelligentCross Letter") at 3-4; Kelvin To, Founder and President, Data Boiler Technologies, *Can Order Protection be replaced by Competing Market Forces?* (Sept. 8, 2025) ("Data Boiler Comment") at 1, 4; letter from John A. Zecca, Executive Vice President, Global Chief Legal, Risk & Regulatory Officer, Nasdaq (Sept. 24, 2025) ("Nasdaq Letter I") at 1-2.

53 *See, e.g.*, Robinhood Letter at 3-5; letter from William O'Brien, Former CEO, Direct Edge (Sept. 16, 2025) ("O'Brien Letter") at 5; First TTR Roundtable Transcript at 57 (Pankil Patel, Bank of America), at 277 (Daniel Gerhardstein, FIA Principal Traders Group and Jump Trading Group).

54 *See, e.g.*, Jane Street Letter at 2; First TTR Roundtable Transcript at 235 (Mehmet Kinak, T. Rowe Price).

that the proliferation of exchanges increases costs and complexity for market participants by, for example, requiring them to connect to each exchange, directly or indirectly, and to pay for and monitor market data from each exchange, regardless of such venue's utility.[55]

Some commenters also attributed other market structure concerns to Rule 611. For example, some stated that the trade-through rule has indirectly led to more non-displayed trading by constraining the nature of competition on displayed venues to factors such as speed and fees.[56] In addition, some commenters stated that Rule 611 has led to unnecessary costs and complexity for market participants[57] and to the proliferation of complex order types.[58] Others have stated that the trade-through rule has harmed institutional investors that seek to trade in large size by forcing them to access small-sized quotations that may signal their trading intentions to short-term proprietary traders.[59] Commenters critical of Rule 611 generally contended that it has not succeeded in achieving the Commission's stated objective of enhancing the reward for the display of limit orders and has produced negative unintended consequences for market participants.[60]

Based on these critiques, some commenters recommended rescinding Rule 611 in its entirety.[61] Other commenters offered alternatives to rescission of Rule 611, including

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55 *See, e.g.*, Robinhood Letter at 2, 5; First TTR Roundtable Transcript at 68-69 (Pankil Patel, Bank of America).

56 *See, e.g.*, Nasdaq Letter I at 1-2. Non-displayed trading is sometimes referred to as "dark" liquidity and can include off-exchange trading as well as non-displayed (or "hidden") liquidity on exchanges. Displayed trading is sometimes referred to as "lit" trading.

57 *See, e.g.*, Robinhood Letter at 5; O'Brien Letter at 6.

58 *See, e.g.*, Robinhood Letter at 4; FIA PTG Position Paper – Regulation NMS: A Renewed Call for Reform, FIA PTG Principal Traders Group, Sept. 2025 ("FIA PTG Paper") at 4; First TTR Roundtable Transcript at 78-80 (Maureen O'Hara, Cornell University, SC Johnson Graduate School of Management), at 169 (Armando Diaz, PureStream).

59 *See*, e.g., letter from Christopher Nagy, Research Director, Healthy Markets Association (Sept. 16, 2025) ("Healthy Markets Letter I") at 8.

60 *See, e.g.*, First TTR Roundtable Transcript at 57 (Pankil Patel, Bank of America), 144-45 (Adam Nunes, Hudson River Trading).

61 *See, e.g.*, Second TTR Roundtable Transcript at 51-52 (Mehmet Kinak, T. Rowe Price), at 52-53 (Dmitry Bulkin, Bernstein), at 53 (Brett Redfearn, Panorama Financial Markets Advisory); Robinhood Letter at 2; O'Brien Letter at 7.

modifications to Rule 611[62] or modifications to other aspects of Regulation NMS instead.[63] Several commenters described the interconnectedness of the trade-through rule with best execution obligations[64] and some commenters recommended, in light of possible changes to Rule 611, consideration of ways to support best execution compliance.[65] Some commenters suggested that if the Commission rescinds Rule 611, it would need to change other parts of Regulation NMS, including eliminating or modifying the access fee caps set forth in Rule 610(c)[66] or the prohibition on locked and crossed markets in Rule 610(e).[67]

The Commission is cognizant of the complex and interconnected nature of our equity market structure and believes that proceeding with any changes requires taking a holistic view to help ensure that changes result in improvements in, and not a deterioration of, our national market system. Changes to a single rule could have profound effects, both expected and unexpected, on a multitude of other rules and aspects of market structure. Thus, changes to, and modernizations of, the U.S. regulatory structure for our equity markets should be done through a deliberative and calibrated process that is designed to result in improved market efficiency and reduced costs and complexity for investors.

Based on the experience of the Commission and its staff overseeing the equity markets and taking into consideration the input from panelists at the TTR Roundtables and other

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62 *See, e.g.*, Healthy Markets Letter I at 8-10; Zhu Letter at 1-2; letter from Timothy J. Boyle, Chief Operating Officer, McKay Brothers, LLC (Sept. 5, 2025) ("McKay Letter").

63 *See, e.g.*, letter from Patrick Sexton, EVP, General Counsel, and Corporate Secretary, Cboe Global Markets, Inc. (Dec. 15, 2025) ("Cboe Letter II") at 3-6.

64 *See, e.g.*, letter from Adrian Griffiths, Head of Market Structure, MEMX LLC (Sept. 18, 2025) ("MEMX Letter") at 9-10 n.9; Healthy Markets Letter I at 5; FIA FTG Paper at 2-3; Jane Street Letter at 1-2.

65 *See, e.g.*, Nasdaq Letter I at 3-7; McKay Letter at 2-3; Healthy Markets Letter II at 6-7.

66 *See, e.g.,* letter from Patrick Sexton, EVP, General Counsel, and Corporate Secretary, Cboe Global Markets, Inc. (Sept. 15, 2025) ("Cboe Letter I") at 4; Nasdaq Letter I at 4; Second TTR Roundtable Transcript at 34-35 (Kevin Tyrell, New York Stock Exchange). *See also* O'Brien Letter at 7 (recommending the Commission rescind Rule 611 and modify Rules 605 (disclosure of order execution information) and 612 (minimum pricing increment)).

67 *See, e.g.*, MEMX Letter at 17-18; FIA PTG Paper at 6; Cboe Letter I at 4-5; First TTR Roundtable Transcript at 129-130 (Jonathan Kellner, MEMX); Second TTR Roundtable Transcript at 55 (Brett Redfearn, Panorama Financial Markets Advisory).

comments received, the Commission is proposing certain targeted changes to Regulation NMS. Specifically, as described below in greater detail, the Commission proposes to:

- Rescind Rule 611 of Regulation NMS in its entirety;[68]
- Rescind Rule 610(e) of Regulation NMS in its entirety;[69] and
- Make conforming revisions to Regulation NMS and other Commission rules to reflect the rescission of Rules 611 and 610(e), including amending the definitional rule of Rule 600 to rescind terms that would no longer be necessary to retain in Regulation NMS given the proposed rescissions of Rules 611 and 610(e).[70]

The Commission understands these proposed changes could impact related aspects of equity market structure. To the extent other changes may be warranted to Commission rules, SRO rules, and NMS Plans[71] in light of this proposal, the Commission requests market participants to submit comments explaining these market structure impacts and other needed changes.[72] Such areas for comment may include, but are not limited to: (i) whether, and to what extent, best execution requirements and guidance should be updated if the proposed amendments

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68 *See infra* section II.

69 *See infra* section III.

70 *See infra* section IV. Specifically, the provisions of Regulation NMS that are proposed to be rescinded are Rules 600(b)(6), (7), (47), (54), (81), (82) and (105); the provisions of Regulation NMS that are proposed to be revised are Rules 600(b)(26), (72), and (89), and Rule 610(c); and the other Commission rules that are proposed to be revised are Rules 15c3-5 and 15b9-1 under the Exchange Act.

71 *See* Rule 608 (Filing and amendment of national market system plans), 17 CFR 242.608, which allows two or more SROs, acting jointly, or the Commission itself to propose amendments to effective NMS Plans.

72 Listed options have their own rules prohibiting trade-throughs and locked and crossed markets, which is set forth in the Options Order Protection and Locked/Crossed Market Plan, a Commission approved NMS Plan. *See infra* note 83. The options markets are materially different than the equities markets in a number of ways. For example, as highlighted by commenters, there is no off-exchange trading in listed options, options are more commonly quote-driven versus order-driven, and there are a great deal more listed options than listed equities. *See, e.g.,* First TTR Roundtable Transcript at 94-98 (Chris Isaacson, Cboe Global Markets, Inc.; Chris Solgan, MIAX Exchange Group). These differences between the equities and options markets necessitate a separate review of the options markets to determine if any structural changes are warranted. To that end, the Commission hosted a roundtable on April 16, 2026, to discuss listed options market structure, including facilitating competition in a quote driven market, evaluating the customer experience, and identifying opportunities and challenges for continued growth. *See* https://www.sec.gov/newsroom/press-releases/2026-24-sec-announces-roundtable-options-market-structure-reform.

to Regulation NMS are adopted;[73] (ii) whether, and to what extent, revisions should be made to market data revenue allocation formulas;[74] (iii) whether, and to what extent, conforming changes would be required to SRO rules and NMS Plan provisions if the proposed amendments to Regulation NMS are adopted;[75] and (iv) whether, and to what extent, the access fee caps under

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73 A broker's duty of best execution derives from common law agency principles and fiduciary obligations, and is incorporated implicitly, through judicial and Commission decisions, in the antifraud provisions of the Federal securities laws. Securities Exchange Act Release No. 37619A, 61 FR 48290, 48322 (Sept. 12, 1996) ("Order Execution Obligations Adopting Release"), citing Market 2000 Study at V-1, 2 and sources cited therein. The Commission has stated that the duty of best execution requires broker-dealers to execute customers' trades at the most favorable terms reasonably available under the circumstances. Id. FINRA's best execution rule (FINRA Rule 5310) requires FINRA member firms to "use reasonable diligence to ascertain the best market" for a customer order for a securities transaction and to execute in such market to provide the customer with a price that is "as favorable as possible under prevailing market conditions." FINRA Rule 5310(a)(1).

74 The Commission recognizes that the quality of consolidated data, including the national best bid and national best offer ("NBBO"), is critical to the health of our markets. When the Commission adopted Regulation NMS, it also implemented a new market data formula for revenue allocation among the relevant SROs, essentially allocating half of market data revenues to trading and half to quoting. *See* NMS Adopting Release at 37557-70. Some have criticized the formula's quoting component, which they argued has contributed to the creation of new exchanges and subsidizes exchanges that quote but rarely trade, thus providing minimal value to market participants. *See, e.g.*, Jane Street Letter; FIA PTG Paper; McKay Letter. On June 2, 2026, the members of the CT Plan LLC ("CT Plan") filed Amendment No. 3 to the CT Plan pursuant to Rule 608 of Regulation NMS (proposing certain revisions to the provisions of the plan that govern the allocation of net revenues received under the CT Plan among its members to impose a limit on the ratio of revenue distributed to each individual member that is attributable to its quoting activity compared to revenue such member receives for trading activity under the revenue formula). The CT Plan was approved in November 2024 to become the successor to and replacement for the Nasdaq UTP Plan and the CTA/CQ Plans. *See* Securities Exchange Act Release No. 101672 (Nov. 20, 2024), 89 FR 94924 (Nov. 29, 2024) ("CT Plan Approval Order"). The CT Plan is expected to begin disseminating quote and trade data in the second quarter of 2027. *See* CT Plan FAQs, *available at* https://thectplanllc.com/faqs/.

75 For example, if the proposed amendments to Regulation NMS are adopted, SROs would no longer be required to have rules restricting trade-throughs and locking or crossing quotations. In such a case, the Commission believes, that most, if not all, SROs would seek to amend rules originally designed for compliance with Rules 611 and 610(e). Similarly, if the proposed amendments to Regulation NMS are adopted, key terms such as "protected quote," "trade-through," and "intermarket sweep orders" would no longer be defined in Regulation NMS and SRO rulebooks would need to redefine or eliminate such terms. In addition, the text of certain NMS Plans may reference Regulation NMS requirements or defined terms that are being proposed to be rescinded and plan participants may choose to amend such plans. For example, the NMS Plans relating to the collection, consolidation, processing and dissemination of consolidated equity market data by the SIPs, including the CT Plan, the Nasdaq UTP Plan and the CTA/CQ Plan, currently determine "quote credits" based on certain automated quotations that do not lock or cross a previously displayed automated quotation. *See* CT Plan Approval Order; Securities Exchange Release Nos. 104670 (Jan. 22, 2026), 91 FR 3609 (Jan. 27, 2026) (Notice of Filing of the Fifty-Fifth Amendment to the Joint Self-Regulatory Organization Plan Governing the Collection, Consolidation and Dissemination of Quotation and Transaction Information for Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges Basis); and 104665 (Jan. 22, 2026), 91 FR 3602 (Jan. 27, 2026) (Notice of Filing of Fortieth Substantive Amendment to the Second Restatement of the CTA Plan and Thirty-First Substantive Amendment to the Restated CQ Plan). As discussed further below, the Commission is proposing to rescind the defined term "automated quotation" and to eliminate the prohibitions on locking and crossing markets. As a result, plan participants may determine to amend such plans to revise how "quote credits" are determined under the plans. *But see, e.g.,* Second TTR Roundtable Transcript at 56 (Brett Redfearn, Panorama Financial Markets Advisory) (stating that even if the Commission rescinds the prohibition on locked and crossed markets, the SIP revenue allocation formula should not reward participants for actively

Rule 610(c) under Regulation NMS should be revised.[76]

II. Rule 611

Rule 611 was adopted as the most significant and controversial piece of Regulation NMS.[77] At the time, the Commission believed that, in adopting Rule 611: (1) investors, particularly retail investors, would be assured that orders would be filled at the best prices, thereby giving them greater confidence that they would be treated fairly when they participated in the equity markets; and (2) the promotion of the best displayed and accessible prices would promote deep and stable markets that minimized investor transaction costs.[78] Rule 611 was the centerpiece of Regulation NMS and has been likened to the "head of an octopus" because of its ability to impact many different areas of equity market structure.[79] Rule 611 has recently been

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locking or crossing a market). *See also, e.g.,* section VI.A.1. of the NMS Plan to Address Extraordinary Market Volatility ("Limit Up/Limit Down Plan"), *available at* https://www.luldplan.com/plans (which excludes from certain requirements of the plan "transactions excepted or exempt from Rule 611 under Regulation NMS"); section 8.1.2. of Appendix D of the Limited Liability Company Agreement of Consolidated Audit Trail, LLC, dated Aug. 29, 2019, *available at* https://catnmsplan.com/sites/default/files/2026-01/LLC_Agreement_of_Consolidated_Audit_Trail_LLC-as-of-01.13.26.pdf (referencing "protected best bid and offer").

76 Rule 610(c) was adopted at the same time as Rule 611 and Rule 610(e), and was designed to promote fair and non-discriminatory access to quotations displayed in the national market system, ensure the fairness and accuracy of displayed quotations by establishing an outer limit on the cost of accessing such quotations, and preclude trading centers that posted protected quotations from raising their fees in an attempt to take improper advantage of the trade-through protections. *See* 2024 Regulation NMS Amendments at 81643-44. In 2024, the Commission adopted amendments to the Rule 610(c) access fee caps in conjunction with changes to Rule 612 of Regulation NMS (Minimum Pricing Increment). *See* 2024 Regulation NMS Amendments. These amendments to Rules 610(c) and 612 are scheduled to be implemented in November 2026. *See* Securities Exchange Act Release No. 104172 (Oct. 31, 2025), 90 FR 51418 (Nov. 17, 2025) ("2025 Temporary Exemptive Relief"). However, on Feb. 26, 2026, the Commission received a request for exemptive relief from the November 2026 implementation deadline, which request was published for comment on Mar. 20, 2026. *See* Securities Exchange Act Release No. 105058 (Mar. 20, 2026), 91 FR 14602 (Mar. 25, 2026). *See also infra* notes 231-238 and accompanying text (discussing access fee caps and locked and crossed markets).

77 *See, e.g.,* NMS Adopting Release at 37498 ("Clearly, the Order Protection Rule was most controversial and attracted the most public comment and attention."); *see also* Joint NMS Dissent at 37633-35.

78 NMS Adopting Release at 37498.

79 *See* First TTR Roundtable Transcript at 45-46 (Katie Kolchin, SIFMA) ("Like the octopus, market structure involves many moving, interconnected pieces, and Rule 611 represents the head of this octopus. If you move or change one piece, other parts could move as well."). *See also supra* notes 66-67 and accompanying text (relating to other areas of Regulation NMS commenters believed to be closely connected to Rule 611).

analogized to the scaffolding of the national market system, akin to a temporary structure that can now be taken down because it is no longer necessary.[80]

A. Description of Rule 611

1. Intermarket Price Protection

The core of Rule 611 is paragraph (a)(1), which promotes intermarket price protection of orders by restricting the execution of trades on one venue at prices that are inferior to displayed quotations at another venue. Specifically, it requires a "trading center"[81] to establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent trade-throughs on that trading center of "protected quotations,"[82] unless one of the exceptions to the trade-through restrictions set forth in paragraph (b) of the rule applies. A "trade-through" is

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80 *See* First TTR Roundtable Transcript at 123 (Jim Angel, Georgetown University). *See also* J. Angel Letter; Jane Street Letter at 2 (stating that modern automated electronic markets have now evolved beyond the baseline requirements of Rule 611 and that "[w]hile arguably Rule 611 served a historical function, its continuation imposes negative externalities on market participants").

81 Rule 600(b)(106) defines "trading center" to mean "a national securities exchange or national securities association that operates an SRO trading facility, an alternative trading system, an exchange market maker, an OTC market maker, or any other broker or dealer that executes orders internally by trading as principal or crossing orders as agent." 17 CFR 242.600(b)(106). Trading center is defined broadly to include venues that execute trades in today's equity market structure, including registered exchanges, ATSs, OTC market makers, and any other broker-dealers that execute orders internally, whether as principal or agent.

82 Rule 600(b)(82) provides that "protected quotation" means "a protected bid or a protected offer." 17 CFR 242.600(b)(82). Rule 600(b)(81) provides that a "protected bid or protected offer" means "a quotation in an NMS stock that: (i) is displayed by an automated trading center; (ii) is disseminated pursuant to an effective national market system plan; and (iii) is an automated quotation that is the best bid or best offer of a national securities exchange, or the best bid or best offer of a national securities association." 17 CFR 242.600(b)(81).

defined as the purchase or sale of an "NMS stock"[83] during "regular trading hours"[84] either as agent or principal, at a price that is lower than a protected bid or higher than a protected offer.[85]

The definition of "protected bid or protected offer"[86] (collectively, "protected quotations") includes several key elements. First, they must be "automated quotations"[87] displayed by an "automated trading center."[88] The definitions of automated trading center and automated quotation generally require that quotations must be immediately and automatically executable, without any programmed delay.[89] Second, to be protected, a quotation must be

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83 An NMS stock generally means any exchange-listed security (other than listed options) for which consolidated market data is disseminated. Rule 600(b)(65) defines an "NMS stock" to mean "any NMS security other than an option." 17 CFR 242.600(b)(65). *See supra* note 3 (defining NMS security). Listed options have their own trade-through rule, which is set forth in the Options Order Protection and Locked/Crossed Market Plan. That NMS Plan introduced features to the listed options markets analogous to Rule 611 for the equity markets, including requiring its participants to establish, maintain and enforce written policies and procedures that are reasonably designed to prevent trade-throughs, and provided for a number of exceptions to the trade-through requirement (including ISOs). In addition, the plan requires participants to have rules to reasonably avoid displaying locked and crossed markets. *See* Securities Exchange Act Release No. 60405 (July 30, 2009), 74 FR 39362 (Aug. 6, 2009).

84 Rule 600(b)(88) defines "regular trading hours" to mean "the time between 9:30 a.m. and 4:00 p.m. Eastern Time, or such other time as is set forth in the procedures established pursuant to 17 CFR 242.605(a)(2)." 17 CFR 242.600(b)(88).

85 17 CFR 242.600(b)(105) (definition of "trade-through").

86 *See supra* note 82.

87 Rule 600(b)(6) defines the term "automated quotation" as "a quotation displayed by a trading center that: (i) permits an incoming order to be marked as immediate-or-cancel; (ii) immediately and automatically executes an order marked as immediate-or-cancel against the displayed quotation up to its full size; (iii) immediately and automatically cancels any unexecuted portion of an order marked as immediate-or-cancel without routing the order elsewhere; (iv) immediately and automatically transmits a response to the sender of an order marked as immediate-or-cancel indicating the action taken with respect to such order; and (v) immediately and automatically displays information that updates the displayed quotation to reflect any change to its material terms." 17 CFR 242.600(b)(6).

88 Rule 600(b)(7) defines the term "automated trading center" as "a trading center that: (i) has implemented such systems, procedures, and rules as are necessary to render it capable of displaying quotations that meet the requirements for an automated quotation set forth in [Rule 600(b)(6)]; (ii) identifies all quotations other than automated quotations as manual quotations; (iii) immediately identifies its quotations as manual quotations whenever it has reason to believe that it is not capable of displaying automated quotations; and (iv) has adopted reasonable standards limiting when its quotations change from automated quotations to manual quotations, and vice versa, to specifically defined circumstances that promote fair and efficient access to its automated quotations and are consistent with the maintenance of fair and orderly markets." 17 CFR 242.600(b)(7).

89 *See* NMS Adopting Release at 37534 ("The term "immediate" precludes any coding of automated systems or other type of intentional device that would delay the action taken with respect to a quotation."). In 2016, the Commission updated its interpretation of the term "immediate" given technological and market developments since the adoption of Regulation NMS and stated that "immediate" in the context of Regulation NMS does not preclude a *de minimis* intentional delay – *i.e.*, a delay so short as to not frustrate the purposes of Rule 611 by impairing fair and efficient access to an exchange's quotations. *See* Securities Exchange Act Release No. 78102 (June 17, 2016), 81 FR 40785 (June 23, 2016).

disseminated in the consolidated market data feeds. Consequently, Rule 611 does not apply when the consolidated market data feeds are not operating. Third, to be protected, a quotation must be the "best bid" (highest-priced bid) or "best offer" (lowest-priced offer) of an exchange or a national securities association (currently FINRA through its ADF). Currently, 17 exchanges quote and trade NMS stocks but there are no active quoting participants in the ADF,[90] which means that, practically, Rule 611 only applies to the best round-lot prices on an exchange. Rule 611 does not cover any additional depth-of-book prices (lower prices for bids and higher prices for offers) that are outside the best prices displayed by an automated trading center.

Rule 611 restricts trades at prices worse than a protected quotation, though it does not affirmatively require the routing of orders to trading centers that are displaying the best prices. Any trading center is free to execute trades at prices that are equal to or better than a protected quotation, regardless of whether such trading center is currently quoting at that price or is a non-displayed trading center that never displays quotations.[91] Thus, for example, Rule 611 does not prohibit the execution of trades on non-displayed trading centers (non-displayed ATSs which are sometimes referred to as "dark pools," off-exchange market makers, and other broker-dealers that execute orders internally) at prices that match displayed prices at displayed trading centers. Moreover, Rule 611 does not mandate transparency or force investors to display their trading interest when they wish not to do so.[92] Any investor can choose not to display an order, whether on an exchange or a non-displayed trading center, and such orders can be executed as long as they are executed at NBBO prices or better.

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90 *See* https://www.finra.org/filing-reporting/alternative-display-facililty-adf (stating "[c]urrently, there are no active quoting ADF participants.").

91 Stated another way, Rule 611 does not require orders to be routed to execute against displayed quotations before trades could be executed at matching prices (sometimes referred to as a "trade-at" restriction).

92 For example, Rule 604 of Regulation NMS provides an exception from display for all block-sized limit orders (unless the customer requests display), as well as an exception for limit orders of any size for which the customer expressly requests non-display. Rule 604 of Regulation NMS (Display of Customer Limit Orders). 17 CFR 242.604.

2. Exceptions under Rule 611(b)

Paragraph (b) of Rule 611 sets forth nine exceptions to the trade-through restrictions of paragraph (a). Two of the most significant of these involve the use of intermarket sweep orders.[93] ISOs are defined as limit orders that are routed, as necessary, to execute against the full displayed size of all protected quotations with prices that are better than the price of the ISO. Thus, while ISOs are exceptions to Rule 611, they remain consistent with the trade-through rule's objective of promoting intermarket price priority. One ISO exception allows a trading center to execute a trade immediately at any size and price as long as it simultaneously routes ISOs to execute against any better-priced protected quotations.[94] The other ISO exception allows a trading center to execute an order it receives immediately at any size and price when the order is identified as an ISO.[95] This exception enables order routers to control the execution of their own orders, while effectively relieving trading centers of the necessity of checking protected quotations at other trading centers. For example, if an order router wishes to immediately access a large-sized quotation with a price inferior to protected quotations at other trading centers, it can route an ISO to execute against the large-sized quotation, while simultaneously routing additional ISOs to execute against all of the better-priced protected quotations.

Another significant exception to Rule 611 is the "one-second window."[96] This exception was primarily designed to deal with the practical difficulties that existed when Regulation NMS was adopted of preventing intermarket trade-throughs during a fast-moving market when

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93 Rule 600(b)(47) defines an "intermarket sweep order" to mean "a limit order for an NMS stock that meets the following requirements: (i) when routed to a trading center, the limit order is identified as an intermarket sweep order; and (ii) simultaneously with the routing of the limit order identified as an intermarket sweep order, one or more additional limit orders, as necessary, are routed to execute against the full displayed size of any protected bid, in the case of a limit order to sell, or the full displayed size of any protected offer, in the case of a limit order to buy, for the NMS stock with a price that is superior to the limit price of the limit order identified as an intermarket sweep order. These additional routed orders also must be marked as intermarket sweep orders." 17 CFR 242.600(b)(47).

94 Rule 611(b)(6); 17 CFR 242.611(b)(6).

95 Rule 611(b)(5); 17 CFR 242.611(b)(5).

96 Rule 611(b)(8); 17 CFR 242.611(b)(8).

quotations can change rapidly (sometimes referred to as "flickering quotes").[97] This exception provides that if a trade is executed at a price that would not have been a trade-through of protected quotations as they stood at any point within the previous one second (the one-second window), then the trade is excepted from Rule 611.

Other exceptions to Rule 611 include: (1) the "self-help" remedy that allows market participants to disregard the protected quotations of trading centers that are experiencing systems problems;[98] (2) transactions that are not "regular way contracts";[99] (3) single-priced opening, reopening, and closing transactions;[100] (4) trades during a crossed market when a protected bid is higher than a protected offer;[101] (5) trades executed at benchmark prices rather than current quoted prices (such as volume-weighted average price ("VWAP") transactions and other types of average price transactions);[102] and (6) transactions in "stopped orders."[103] The Commission has also issued several exemptions from Rule 611.[104]

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97 In adopting the exception in 2005, the Commission stated that it "generally does not believe that the benefits would justify the costs imposed on trading centers of attempting to implement an intermarket price priority rule at the level of sub-second time increments." NMS Adopting Release at 37523. The Commission emphasized, however, that the exception is not an exception to the duty of best execution. For example, a broker-dealer that owes a duty of best execution to its customers cannot disregard a quotation for purposes of best execution if experience shows that it is likely to be accessible. *Id.* at n. 213 ("In making a best execution determination, for example, a broker-dealer cannot rely on the Rule's exception for flickering quotations to justify ignoring a recently displayed, better-priced quotation when experience shows that the quotation is likely to be accessible.").

98 Rule 611(b)(1); 17 CFR 242.611(b)(1).

99 Rule 611(b)(2); 17 CFR 242.611(b)(2).

100 Rule 611(b)(3); 17 CFR 242.611(b)(3).

101 Rule 611(b)(4); 17 CFR 242.611(b)(4).

102 Rule 611(b)(7); 17 CFR 242.611(b)(7).

103 Rule 611(b)(9); 17 CFR 242.611(b)(9). In particular, Rule 611(b)(9) provides an exception for the execution by a trading center of an order for which, at the time of receipt of the order, the trading center had guaranteed an execution at no worse than a specified price (a "stopped order"), where: (i) the stopped order was for the account of a customer; (ii) the customer agreed to the specified price on an order-by-order basis; and (iii) the price of the trade-through transaction was, for a stopped buy order, lower than the national best bid in the NMS stock at the time of execution or, for a stopped sell order, higher than the national best offer in the NMS stock at the time of execution. *Id.*

104 *See* Securities Exchange Act Release No. 54389 (Aug. 31, 2006), 71 FR 52829 (Sept. 7, 2006), as modified by Securities Exchange Act Release No. 57620 (Apr. 4, 2008), 73 FR 19271 (Apr. 9, 2008) (exemptive order for "qualified contingent trades"); Securities Exchange Act Release No. 54678 (Oct. 31, 2006), 71 FR 65018 (Nov. 6, 2006) (exemptive order for certain sub-penny trade-throughs); Securities Exchange Act Release No. 55884 (June 8, 2007), 72 FR 32926 (June 14, 2007) (exemptive order for certain error correction transactions); Securities Exchange Act Release No. 55883 (June 8, 2007), 72 FR 32927 (June

B. Proposed Rescission of Rule 611

The Commission proposes to rescind Rule 611 in its entirety. The Commission recognizes that our national market system is complex and interconnected, and that any changes could impact other parts of the national market system and result in unintended consequences. It is precisely for these reasons that the Commission has sought the input of market participants in assessing Regulation NMS and Rule 611 in advance of formulating this proposal.[105]

The Commission has engaged in a broad assessment of the regulatory environment since the adoption of Rule 611 and the economic effects of Rule 611[106] and has taken into consideration the comments and input received. Based on its assessment, rescinding Rule 611 and its trade-through restrictions may be appropriate and beneficial for the national market system and, in particular, our equity markets. As discussed in more detail below, Rule 611 has contributed to a myriad of consequences that have resulted in costs to market participants. In addition, equity markets have significantly evolved since 2005 such that the trade-through prohibition in Rule 611 may no longer be needed in our current equity markets because of advancements in technologies, particularly with respect to access and order handling and routing.[107] Also, best execution obligations should continue to ensure brokers use reasonable diligence to secure the most favorable terms for customer orders.[108] Moreover, removing the trade-through prohibition of Rule 611 would allow market participants greater freedom in order handling execution and routing decisions, which could promote competition and foster innovation among trading centers and executing brokers.

14, 2007) (exemptive order for certain print protection transactions); Securities Exchange Act Release No. 57621 (Apr. 4, 2008), 73 FR 19270 (Apr. 9, 2008) (exemptive order for non-convertible preferred securities).

105 *See, e.g., supra* notes 47-67 and accompanying text (discussing TTR Roundtables).

106 *See infra* section VI.

107 *See infra* section II.B.3.a.

108 *See infra* section II.B.3.b.

In general, our equity markets are well served by allowing competition, innovation, and other market forces, rather than prescriptive requirements on market participants, to shape their continued evolution to the greatest extent possible. If Rule 611 were to be rescinded, U.S. equity markets may benefit from reduced costs associated with the reduction in market structure complexity and fragmentation, and competition, innovation, and other market forces would no longer be constrained by the restrictions of Rule 611.[109] Today's trading environment is highly competitive, interconnected, and automated, which was not the case when the Commission adopted Rule 611. Rule 611 therefore is unnecessary given that the Commission's concern expressed at the time of adoption of Rule 611 regarding the lack of mechanisms to connect markets is no longer relevant. Rule 611 also is not needed as a backstop to best execution given today's highly automated, interconnected and competitive equity markets, where retail investors have widely available access to market data and execution quality information, and a broker's duty to provide best execution would apply regardless.[110]

Accordingly, the Commission believes that rescission of Rule 611 would be in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets in that removing Rule 611 may, in furtherance of the goals of section 11A of the Exchange Act,[111] allow for more economically efficient executions of securities transactions, the execution of investor orders in the best market, and remove impediments to competition.[112]

1. Allowing Market Forces to Shape Equity Market Structure

The goal of the changes proposed in this rulemaking is to strengthen our national market system and, in furtherance of section 11A of the Exchange Act,[113] to allow for more economically efficient executions of securities transactions, and to remove impediments to

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109 *See infra* section VI.C.1.

110 *See* Order Execution Obligations Adopting Release at 48323-24.

111 Exchange Act section 11A(a)(1)(C); 15 U.S.C. 78k-1(a)(1)(C).

112 *See id. See also supra* notes 1-2 and accompanying text (discussing section 11A).

113 Exchange Act section 11A(a)(1)(C); 15 U.S.C. 78k-1(a)(1)(C).

competition,[114] in order to help ensure that the U.S. remains the preeminent securities market in the world, where issuers, investors, and other market participants look to entrust their companies, savings, and capital. When the Commission adopted Regulation NMS in 2005, the U.S. equity markets were undergoing significant changes with respect to technology, trading, and competition. At this time of still-emerging and still-evolving technologies, the Commission adopted Regulation NMS, which set forth a uniform trade-through rule, in order to address inefficiencies in the equity market structure that existed at the time. Rule 611 resulted in market participants needing, as a practical matter, to connect, directly or indirectly, to all markets with protected quotations.[115] Moreover, Rule 611 led to market participants focusing particularly on price and speed with respect to executing trades, as described further in sections II.B.2. and II.B.3 below. While this may be beneficial to the execution quality of retail orders, the overall execution quality for large institutional orders may be negatively affected.[116] Moreover, Rule 611's restriction on trading through protected quotations may have had the effect of incentivizing exchanges to adopt a particular trading protocol (*i.e.*, price-time matching), thereby reducing innovation in exchange trading models and limiting competition among exchanges.[117]

Markets are now once again undergoing a period of significant technological change.[118] U.S. equity markets are highly competitive and resilient, and they should, whenever possible, be allowed to develop on their own. The Commission's involvement should be focused on those areas where its regulatory reach can improve their functioning.[119] Thus, core to the

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114 *See supra* notes 1-2 (discussing section 11A). *See also* section VI.D.1.a. (discussing the Commission's Economic Analysis regarding the benefits of rescinding Rule 611).

115 *See infra* note 121 and accompanying text (discussing the practical need for market participants to connect to all markets).

116 *See infra* section VI.B.2.a. (discussing economic effects on large institutional orders).

117 *See infra* section VI.B.4.

118 *See, e.g., supra* notes 42-45 and accompanying text (discussing the rapidly changing technology in today's markets).

119 *See Horses and Bourses: Remarks at the 12th Annual Conference on Financial Market Regulation*, by Commissioner Hester M. Peirce (May 16, 2025), available at https://www.sec.gov/newsroom/speeches-statements/peirce-remarks-financial-market-regulation-051625.

Commission's proposal to rescind Rule 611 is that, where appropriate, market forces should shape U.S. equity market structure. By proposing to remove the regulatory restrictions contained in Rule 611, the Commission seeks to simplify the regulation and structure of our equity markets rather than continue to impose requirements and costs that are no longer necessary, and thus empower market participants to compete on merit and innovation—whether through service, price, technology, costs, or a combination thereof. The Commission believes that removing such restrictions could foster innovation in trading protocols and venue design and increase competition among trading centers and executing brokers.[120]

2. Addressing the Adverse Consequences of Rule 611

a. Market Structure Complexity

Rule 611 and its numerous exceptions and exemptions have been at the core of the complexity in our equity market structure since the adoption of Regulation NMS in 2005. The prohibition against trade-throughs effectively requires market participants to connect or have routing capability to all exchanges and to monitor quotes and route orders to exchanges that they otherwise might choose not to do business with.[121] This complexity may be particularly impactful for institutional and larger-sized orders where requirements may result in executions across multiple venues with varying fee structures and latencies, potentially leading to worse overall execution quality than alternative approaches.[122]

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120 *See infra* section VI.D.1.

121 Rule 611 does not mandate that trading centers connect to all trading centers with protected quotes, or even that they have routing capabilities to reach such trading centers. Trading centers can operate without any routing capabilities so long as they abide by the trade-through restrictions of Rule 611 (*i.e.*, that, absent an exception under Rule 611(b), they not trade-through protected quotes at away markets); however, the practical effect of the rule for many market participants has been that they have routing capabilities to reach all trading centers with protected quotes, directly or indirectly. *Trade-Through Roundtable Supporting Data*, by Staff of the Office of Analytics and Research, Division of Trading and Markets (Sept. 9, 2025, revised Sept. 12, 2025) ("121 Analysis"), available at https://www.sec.gov/files/trade-through-roundtable-supporting-data.pdf.

122 *See* Jane Street Letter at 2. *See also infra* section VI.

In addition, since the adoption of Rule 611, there has been a proliferation of order types offered by exchanges.[123] Many of these order types were developed in response to Rule 611 and other Regulation NMS-related requirements and are now commonplace among equity exchanges.[124] These order types include but are not limited to ISOs and "price to comply" orders and variations thereof.[125] When such order types are combined or interact with other similarly complex order types offered by trading venues, the resulting mix of combinations and permutations that need to be considered increases the complexity faced by market participants.[126] In addition, many order types themselves have one or more modifiers, which can add even more market structure complexity,[127] which may increase costs to market participants.[128] Moreover,

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123 *See* Robinhood Letter at 4 (citing "Complaints Rise Over Complex U.S. Stock Orders," by Herbert Lash, Reuters (Oct. 19, 2012)).

124 Some commenters have stated that this increase in order types stems directly from Rule 611 and related Regulation NMS market structure requirements (such as Rule 610(e)'s prohibition on locking and crossing markets), and that such order types have been developed to enable market participants to take advantage of the complexities. *See* Nasdaq Letter I at 1-2 (citing EMSAC Market Structure Memo, *supra* note 46). *See also* First TTR Roundtable Transcript at 230 (Matt Billings, Robinhood), at 78-80 (Maureen O'Hara, Cornell University, SC Johnson Graduate School of Management), at 168 (Matt Mackenzie, Optiver), at 169 (Armando Diaz, PureStream); Robinhood Letter at 4; Healthy Markets Letter I at 9. One commenter stated that certain order types are "not designed to enhance execution quality but to comply with display rules while maintaining [SIP] visibility…" *See* FIA PTG Paper at 4. *See also* First TTR Roundtable Transcript at 165-66 (Hubert De Jesus, BlackRock). *See also* First TTR Roundtable Transcript at 169 (Armando Diaz, PureStream) (noting that "the overwhelming majority of volume" on an exchange was using order types "that are meant to suppress or sidestep 611"), at 168 (Matt Mackenzie, Optiver).

125 ISO order types are designed to allow market participants to avail themselves of the ISO exceptions under Rules 611(b)(5) through (6); 17 CFR 242.611(b)(5) through (6). "Price to comply" orders and variations thereof seek to automatically adjust an order's price to avoid locking or crossing markets. *See, e.g.,* Nasdaq Rule 4702(b)(1). See *also supra* note 29 and accompanying text and section II.A.2. (discussing the ISO exceptions and order types) and *infra* section III.B.3. (discussing complexities associated with Rule 610(e)).

126 *See, e.g.,* First TTR Roundtable Transcript at 167 (Adam Nunes, Hudson River) ("[O]ne of the things that adds a great deal of complexity is that you have features to do one thing sitting on top of features to do another thing, and the combinations of those can get quite extreme."); O'Brien Letter at 6-7 (discussing complexity attributable to Rule 611); Robinhood Letter at 4 (stating that "[t]here has also been an exponential increase in the number and complexity of order types offered by exchanges, with one source estimating that exchanges offer 2,000 variations of order types").

127 *See, e.g., Trading Talk – An In-Depth Look at Exchange Order Types*, Rosenblatt Securities Inc. (June 26, 2013) ("Rosenblatt Order Type Report"); *No Order Type Conspiracy, Rosenblatt Study Says*, by Editorial Staff, Traders Magazine (July 5, 2013) (discussing findings of Rosenblatt Order Type Report, including that "the proliferation of order types had indeed added to the complexities of the marketplace and that 'undoubtedly creates opportunities for the savviest market participants.'").

128 *See infra* section VI.C.1. (discussing estimated cost savings due to reduced complexity if Rule 611 is rescinded). Some commenters stated that this complexity also increases risks to market IT infrastructure and systems. *See, e.g.,* O'Brien Letter at 7. *See also* Robinhood Letter at 5; FIA PTG Paper at 4. One commenter stated that Rule 611's rigid requirements make the equity markets more "brittle" because of all the complexity they add. First TTR Roundtable Transcript at 291 (Cameron Smith, Texas Stock Exchange).

this complexity and the costs associated therewith may provide an advantage to more sophisticated market participants, such as high-tech algorithmic traders with expansive data and processing capacities who are more capable of managing increased complexity.[129]

In addition to this equity market structure complexity, Rule 611's trade-through prohibition has contributed to an environment where speed has become the primary competitive advantage, allowing fast algorithms to capture price discrepancies.[130] As discussed below, Rule 611 has contributed to the fragmentation of displayed liquidity across numerous order books.[131] This in turn creates latency arbitrage opportunities and has incentivized massive investment in low-latency infrastructure to gain a speed advantage over competitors, resulting in the rise of high-frequency traders ("HFTs").[132] In today's equity markets, participants are locked in a technology and latency arms race for speed,[133] and the Commission believes that Rule 611 has contributed to this.

The Commission believes that rescinding Rule 611 would reduce the complexity in our equity market structure that has occurred since its adoption in 2005, which would in turn reduce costs for market participants and foster innovation and competition.

b. Exchange Proliferation and Fragmentation

Rule 611's trade-through restrictions have contributed to greater fragmentation in the U.S. equity markets. Rule 611 effectively lowered barriers to entry for exchanges by giving all

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129 *See infra* section VI.B.3.

130 *See* First TTR Roundtable Transcript at 72-73 (Dave Lauer, Urvin Finance and We the Investors) (citing Rule 611 as a factor driving the "speed race"), at 218 (Vlad Khandros, One Chronos) (stating Rule 611 is exacerbating the "latency arms race"). *See also* Data Boiler Comment at 2 (stating that the trading community is in a "low-latency arms race").

131 *See infra* section II.B.2.b.

132 *See* letter from Benjamin L. Schiffrin, Director of Securities Policy, Better Markets, Inc. (Sept. 18, 2025) ("Better Markets Letter"). This commenter states that HFTs pay the exchanges fees for high-speed proprietary data feeds, fees for market data, and fees for having their computers "co-located" in the exchanges' data centers. *Id.* at 3.

133 *See, e.g.,* First TTR Roundtable Transcript at 56-57 (Pankil Patel, Bank of America) (discussing a "more sophisticated technology arms race"), 218 (Vlad Khandros, OneChronos) (stating that there is a "latency arms race"), 219 (Jon Herrick, New York Stock Exchange) (discussing "the technological arms race that we're faced with").

exchanges, no matter their trading volume or other competitive distinctions, an opportunity to display a protected quotation, and thus avail themselves of guaranteed market data and connectivity revenue as market participants are effectively required to connect, directly or indirectly, to their markets. As a result, Rule 611 and Regulation NMS have contributed to the proliferation of exchanges in our equity markets.[134] To be clear, the Commission welcomes competition and believes that exchanges that introduce innovations to our markets, such as providing new ways to trade, can benefit the national market system overall. However, the Commission believes that Rule 611 has distorted incentives in the U.S. equity markets by providing new exchanges with protected quotation status at their inception, essentially guaranteeing that market participants must connect to them and subscribe to their market data feeds,[135] and this has led to a proliferation of exchanges.

This proliferation of exchanges has increased fragmentation of trading on equity exchanges, spreading market share across the increasing number of exchanges, resulting in a dispersal of liquidity.[136] This dispersal of displayed liquidity across numerous exchange order books increases routing complexity and potentially thins size at each exchange's best

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134 *See, e.g.,* O'Brien Letter at 5; Robinhood Letter at 3-4; FIA PTG Paper at 3-4; First TTR Roundtable Transcript at 181-82 (Hubert De Jesus, BlackRock). *See also infra* section II.B.2.b. (discussing exchange proliferation).

135 As one commenter stated, "[a]ll a new venue needs to do is post a quotation and the entire market must connect to its infrastructure, code to its systems and re-shape its trading algorithms to accommodate it." *See* O'Brien at 5. *See also* FIA PTG Letter at 4; Robinhood Letter at 4 (stating that six exchanges account for approximately 80% of the volume traded on all exchanges while 10 exchanges individually account for less than a 2% market share); First TTR Roundtable Transcript at 49, 72-73 (Dave Lauer, Urvin Finance and We the Investors) (stating that most of the additional exchanges have been "copycat" exchanges), at 288-89 (Mehmet Kinak, T.Rowe Price) (stating that the additional exchanges have not offered anything to differentiate themselves from existing exchanges), at 277 (Daniel Gerhardstein, FIA Principal Traders Group and Jump Trading Group) (stating that "Rule 611 creates artificial incentives for the establishment of new exchanges" and that "[a]chieving the protected quote status provides exchanges with guaranteed revenue through the forced connectivity, market data, and access fees, without regard to new value delivered to market participants").

136 *See, e.g.,* Better Markets Letter at 1-2; FIA PTG Paper at 2 (stating that during the first half of 2025, no exchange had more than 20% market share based on notional volume and 9 exchanges had market share of less than 1%, and that the primary listing exchanges had a combined market share of less than 30% over the first half of 2025 (citing Cboe Exchange Inc, Historical Market Data Volume, available at https://www.cboe.com/us/equities/market_statistics/historical_market_volume/)). *See also infra* section II.B.2.b. (discussing exchange proliferation and fragmentation of displayed liquidity).

quotations.[137] This fragmentation is particularly impactful for large and institutional orders because, as the fragmentation of displayed liquidity increases, institutional child orders face more venues with small top-of-book sizes, which raises the complexity and cost of routing to meet the requirements of Rule 611. This greater dispersion across exchanges can make institutional trading intentions easier to detect, which can increase slippage and hurt the overall execution quality of the parent order.[138]

Moreover, with the increase in the number of U.S. equity exchanges, costs for market participants have increased due to the need to connect to trading centers with protected quotes, maintain such connections and routing capabilities thereto, and subscribe to their market data feeds.[139] These costs include incurring connection, routing, and market data fees to certain exchanges that some participants feel may provide limited value, but that such participants must nevertheless incur due to the requirements of Rule 611.[140] In addition, market participants incur

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137 *See infra* section VI.B.2.c.

138 *See infra* section VI.B.2.

139 *See, e.g.,* O'Brien Letter at 6-7; Robinhood Letter at 3-5; FIA PTG Paper at 1 (stating that major firms spend millions annually on market data and connectivity fees to all U.S. exchanges), 3. *See also* Jane Street at 2 (stating that these types of costs were a "regulated subsidy for venue proliferation, as new exchanges can effectively mandate that certain market participants purchase their connectivity and market data services"); First TTR Roundtable Transcript at 51, 70-71 (Joe Mecane, Citadel), at 56-58 (Pankil Patel, Bank of America) (discussing increased costs for infrastructure, colocation/connectivity, and market data), at 48, 72-73 (Dave Lauer, Urvin Finance and We the Investors), at 232-233, 277 (Daniel Gerhardstein, FIA Principal Traders Group and Jump Trading Group) (stating that "[a]chieving the protected quote status provides exchanges with guaranteed revenue through forced connectivity, market data, and access fees, without regard to new value delivered to market participants"), at 246 (Vlad Khandros, OneChronos). Certain commenters have stated that some of the costs that emanate from Regulation NMS have come down due to advances in technology and competition, particularly in areas relating to routing. *See, e.g.,* First TTR Roundtable Transcript at 158 (Allison Bishop, Proof Trading), at 160 (Jeff Starr, Schwab). *See also* First TTR Roundtable Transcript at 19-26 (Dan Mathisson, Commission, Division of Trading and Markets, Office of Analytics and Research). The Commission acknowledges that certain costs may have come down, however, costs resulting from the trade-through prohibition in Rule 611 still remain high because, in practice, Rule 611 results in market participants connecting to all protected markets, even if indirectly through connectivity providers, and rescission of Rule 611 should result in reduced costs for market participants.

140 One commenter stated that, according to its calculations, the increased costs to the industry as a whole for connectivity, market data and options regulatory fees associated with small venues (*i.e.,* for equities venues with less than 2% market share and options venues with less than 4% market share) is approximately $375 million a year, which is about two thirds of the total revenue for those 21 venues. *See* First TTR Roundtable Transcript at 51, 70-71 (Joe Mecane, Citadel Securities). This commenter, however, also stated that it did not believe that eliminating the trade-through rule would impact that cost significantly for a variety of reasons, including because firms are already connected to such venues and because firms' best execution obligations would make it difficult to simply disconnect from a venue to save costs. *See id.*

costs to monitor for pre-trade and post-trade compliance with Rule 611, which costs increase with the number of venues providing protected quotes.[141]

Without the requirements of Rule 611, market participants will no longer effectively be required to connect, directly or indirectly, to every exchange, which should reduce the connectivity, market data, routing, and compliance costs associated with such connections.[142] In turn, this may result in fewer new exchanges and potentially fewer existing exchanges, as the exchange revenue streams currently associated with market data and connectivity fees would no longer be guaranteed as they currently are. In addition, without the requirements of Rule 611, market participants will have greater choice in determining which trading center provides the best market for execution of their orders given their investment objectives. Among other things, if the Commission were to rescind Rule 611, market participants would have more flexibility to send their orders to trading centers that have a consistently higher volume of order flow, more reliable speed of execution, or lower adverse selection costs, if they are not constrained by requirements to first route to execute against any protected quotation. Fragmentation may be reduced as broker-dealers concentrate their orders on more liquid trading centers with better execution quality. In turn, trading centers would have more flexibility to innovate and compete for order flow on factors other than price and speed. And rescinding Rule 611 would allow institutional investors more flexibility to route child orders, thereby allowing them to avoid

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141 *See, e.g.,* Robinhood Letter at 5; J. Angel Letter; First TTR Roundtable Transcript at 90 (Julie Andress, Securities Traders Association and KeyBanc Capital Markets) (discussing trade-through compliance).

142 *See infra* section VI.C.1. One commenter estimated that the fixed costs of connecting to U.S. equity exchanges are 350 percent greater than the average connection costs of the top ten markets that its firm trades in globally. First TTR Roundtable Transcript at 232-33 (Daniel Gerhardstein, FIA Principal Traders Group and Jump Trading Group). Another commenter estimated its costs associated with onboarding new exchanges and connectivity maintenance costs to be $1.5 million for onboarding and $200,000 annually for maintenance. First TTR Roundtable Transcript at 68-69 (Pankil Patel, Bank of America) (stating that, with respect to onboarding a new exchange, the costs for his firm were estimated to be approximately $1.5 million and included not just connectivity and market data, but costs associated with integration into the firm's ecosystem, such as "third party sourcing, procurement, technology, testing, hardware, CAD integration, [and] billing" and that ongoing maintenance costs were estimated at approximately $200,000 per year, and included continued connectivity costs, maintaining upgrades, and ensuring surveillance systems were up-to-date, among other things).

trading at exchanges that may increase their information leakage and reducing slippage.[143] Accordingly, rescinding Rule 611 could lead to reduced exchange fragmentation, enable competition and innovation among trading venues, reduce costs, and remove unnecessary regulatory requirements that may advantage some market participants over others in today's equity markets.

3. Rule 611 is Unnecessary

a. Technology Has Advanced Significantly

When the Commission adopted Rule 611 and Regulation NMS, one of its goals was to seek the proper balance between competition among markets and competition among orders, and the Commission stated that investors "must be assured that they are participants in a system which maximizes the opportunities for the most willing seller to meet the most willing buyer."[144] The Commission expressed concern regarding market fragmentation and the absence of mechanisms and linkages "designed to assure that public investors are able to obtain the best price for securities regardless of the type or physical location of the market upon which his transaction may be executed."[145] Following the adoption of Regulation NMS in 2005, including Rule 611 and its trade-through protections, market participants moved quickly towards electronification of trading and invested in intermarket linkages and routing technologies for the equity markets.[146] One commenter stated that Rule 611 "helped spur investment in interlinkages between venues as routing technology was developing, and best execution practices were less sophisticated" and "served almost as 'training wheels' for the national market system, providing clear, objective standards for order routing processes."[147] While it is possible that such changes would have occurred in our equity markets without the intervention of Regulation NMS and

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143 *See infra* section VI.C.1.

144 *See* NMS Adopting Release at 37499 (quoting H.R. Rep. 94–123, 94th Cong., 1st Sess. 50 (1975)).

145 *See id.* at 37499, n.13.

146 *See* J. Angel Letter at 11-13.

147 Jane Street Letter at 2.

some have argued that it would have been preferable to allow the markets to evolve and develop such technology and processes more naturally through competitive forces,[148] the adoption of Rule 611's requirements and Regulation NMS generally did push the U.S. equity markets toward automation and away from the inefficiencies that existed previously.[149] Currently, the U.S. equity markets are highly automated and interconnected and the Commission's concern expressed at the time of Regulation NMS's adoption in 2005 regarding the lack of mechanisms to connect markets is no longer an issue. Today's market participants have quick, electronic access to the markets and state-of-the-art routing technology is widely available for those seeking it.[150] Liquidity providers now routinely provide enhanced execution results that surpass any minimum benefits of Rule 611, such as through price improvement relative to the national best bid and offer and the execution of orders at midpoint prices.[151] The Commission believes that these execution quality benefits are not dependent on Rule 611, but instead are due to the intense competition among liquidity providers and the availability of execution quality benchmarks and data,[152] which will continue even if Rule 611 were to be rescinded.

The widely-available and fast routing capabilities and linkages in today's equity markets contrast with the period before the adoption of Regulation NMS, when exchanges and market

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148 *See, e.g.,* Robinhood Letter at 2. *See also* Chairman Remarks at First TTR Roundtable.

149 *See, e.g.,* First TTR Roundtable Transcript at 62 (Katie Kolchin, SIFMA) (referring to the Intermarket Trading System that previously linked various stock exchanges); O'Brien Letter at 3 and Robinhood Letter at 3 (linking NYSE's adoption of electronic quoting and trading to the status automated quotations under Rule 611).

150 *See* First TTR Roundtable Transcript at 21-23 (Dan Mathisson, Commission, Division of Trading and Markets, Office of Analytics and Research) (discussing the Division of Trading and Market's analysis that showed that an overwhelming majority of firms outsource some or all of their routing and fewer than 20 firms directly connect to/trade on every exchange). While fewer than 20 firms have such direct connections, the practical effect of Rule 611 for nearly all trading centers has been that they incur costs for routing capabilities to reach all trading centers with protected quotes, whether directly or indirectly through a connectivity provider. *See also supra* notes 121 and 139-140 and accompanying text (costs of connecting to trading centers with protected quotes).

151 *See* Jane Street Letter at 2.

152 *See, e.g.,* Rule 605 of Regulation NMS, 17 CFR 242.605 (requiring certain reporting entities to publicly disclose order execution quality statistics).

participants were not as well connected and many linkages that did exist were relatively slow.[153] Because of the advances in these technologies and the competition among liquidity providers since Regulation NMS's adoption in 2005,[154] Rule 611 is no longer necessary to address the Commission's concerns in 2005. As discussed above, while Rule 611 may have served a historical function, it also has resulted in adverse consequences in the equity markets.[155] As technological advancements have changed how the U.S. securities markets operate since the adoption of Regulation NMS, to remain effective, the Commission must continuously monitor the market environment and, as appropriate, adjust and modernize our rules, regulations, and oversight tools and activities. At this point, Rule 611 is unnecessary to the functioning of our equity markets, and the continued maintenance of the rule may inhibit innovation and the development of new technologies, products, and services that could enhance competition in the U.S. equity markets to the benefit of investors.[156]

b. Rule 611 Is Not Needed as a Backstop to Best Execution

When adopted, Rule 611 was "designed to assure that public investors are able to obtain the best price for securities" given the absence of robust intermarket linkages at the time.[157] The Commission was concerned that investors "often may have difficulty monitoring whether their orders receive the best available prices."[158] The Commission stated that "furthering the interests

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153 *See* NMS Adopting Release at 37538-59 (describing linkages in 2005 for exchange-listed stocks through the Intermarket Trading System, or "ITS", Plan, with "receiving markets generally having up to 30 seconds to respond").

154 *See, e.g.,* J. Angel Letter at 12-13; O'Brien Letter at 5; Jane Street Letter at 2; First TTR Roundtable Transcript at 62-64 (Katie Kolchin, SIFMA), at 216, 234 (Mehmet Kinak, T. Rowe Price).

155 *See supra* section II.B.2. (discussing market structure complexity, exchange proliferation and fragmentation, and costs to market participants).

156 *See also* IntelligentCross Letter at 3 ("The elimination of the trade-through prohibitions would . . . foster a more competitive playing field among lit venues, and more easily facilitate the introduction of innovation to the displayed markets."); Duoro Labs Paper (describing generally how the crypto market has evolved and innovated in the absence of prescriptive regulatory requirements and stating that, because of prescriptive rules like the trade-through rule, the equity markets "have not embraced mechanisms such as intents-based trading, automated market makers, decentralized price oracles, or atomic cross-domain settlement, which all emerged naturally in crypto").

157 *See* NMS Adopting Release at 37499, n.13.

158 *Id.* at 37511.

of these investors in obtaining best execution on an order-by-order basis is a vitally important objective that warrants adoption of [Rule 611.]"[159] The Commission further stated, in adopting Rule 611, that Rule 611 "will backstop a broker's duty of best execution on an order-by-order basis by prohibiting the practice of executing orders at inferior prices, absent an applicable exception."[160]

A broker-dealer has a legal duty to seek best execution of customer orders.[161] The duty of best execution predates the Federal securities laws and is derived from an implied representation that a broker-dealer makes to its customers.[162] The duty of best execution is incorporated into SRO rules and, through judicial and Commission decisions, the antifraud provisions of the Federal securities laws.[163] This obligation requires that a "broker-dealer seek to obtain for its customer orders the most favorable terms reasonably available under the circumstances."[164] In other words, broker-dealers should execute trades "at the best reasonably available price."[165] And, as the Commission has recognized, price is a critical concern for investors.[166] In addition, the Commission has described a non-exhaustive list of factors that may be relevant to broker-dealers' best execution analysis. These factors include the size of the order,[167] speed of

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159 *Id.*

160 *Id.* at 37516.

161 *See, e.g.*, *Newton v. Merrill, Lynch, Pierce, Fenner & Smith, Inc.*, 135 F.3d 266, 269-70, 274 (3d Cir.), *cert. denied*, 525 U.S. 811 (1998).

162 *See id.* 135 F.3d at 270.

163 *See supra* note 73.

164 *See id.* (noting that a broker-dealer's duty of best execution requires the execution of customer trades at the best reasonably available price, recognizing several terms in addition to price as relevant to best execution, and stating that a broker-dealer must also take into account order size, trading characteristics of the security, speed of execution, clearing costs, and the cost and difficulty of executing an order in a particular market). *See also id.* (citing Order Execution Obligations Adopting Release).

165 Reg NMS Adopting Release at 37538.

166 *See* Securities Exchange Act Release No. 43590 (Nov. 17, 2000), 65 FR 75414, 75418 (Dec. 1, 2000) ("Order Execution and Routing Practice Release") ("The Commission strongly believes, however, that most investors care a great deal about the quality of prices at which their orders are executed, and that an opportunity for more vigorous competition among market participants to provide the best quality of execution will enhance the efficiency of the national market system.").

167 It is the Commission's understanding that when an institutional customer gives a large order to be executed on behalf of one account (e.g., a single mutual fund or pension fund), it expects the broker-dealer that handles and executes such large order to do so in a manner that ensures best execution is provided to the

execution, clearing costs, the trading characteristics of the security involved, the availability of accurate information affecting choices as to the most favorable market center for execution and the availability of technological aids to process such information, and the cost and difficulty associated with achieving an execution in a particular market center.[168] FINRA Rule 5310 requires broker-dealers to use reasonable diligence to ascertain the best market for a security such that the price the customer receives is as favorable as possible under the prevailing market conditions.[169]

As noted above, to comply with their best execution obligations, firms must consider a number of factors when handling and executing a customer's order, which should include the best price.[170] When adopting Rule 611, the Commission made clear the duty of best execution requires broker-dealers to "periodically assess the quality of competing markets to assure that order flow is directed to the markets providing the most beneficial terms for their customer orders."[171] And, broker-dealers "must examine their procedures for seeking to obtain best execution in light of market and technology changes and modify those practices if necessary to enable their customers to obtain the best reasonably available prices."[172]

Rule 611 is no longer needed to backstop a broker's duty of best execution given the evolution of U.S. equity markets since 2005. Since the adoption of Rule 611, U.S. equity markets

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"parent" order. In other words, to the extent that a parent order is split into smaller "child" orders, the institutional customer expects the best execution analysis to evaluate whether the parent order was executed at the most favorable price possible under prevailing market conditions according to customer instructions. See, e.g., Concept Release on Equity Market Structure at 3604-3605 (measuring the transaction costs of institutional investors "can be extremely complex" because their "large orders often are broken up into smaller child orders and executed in a series of transactions" and "[m]etrics that apply to small order executions may miss how well or poorly the large order traded overall.").

168 *See* Order Execution and Routing Practice Release at 75418.

169 *See supra* note 73.

170 *See id.*; FINRA Rule 5310. Some have been critical of Rule 611 with respect to best execution, because its focus on displayed price did not take into account other factors that may be important to clients. *See, e.g.,* FIA PTG Paper at 2-3. *See also Prepared Remarks of Paul S. Atkins at the SEC Investor Advisory Committee*, by Paul Atkins (June 10, 2021), available at https://patomak.com/2021/06/10/prepared-remarks-of-paul-s-atkins-at-the-sec-investor-advisory-committee-june-10-2021/.

171 Regulation NMS Adopting Release at 37538.

172 *Id.*; *see also* Order Execution Obligations Adopting Release at 48322-23.

have become highly automated and interconnected, and routing technologies have become increasingly sophisticated, resulting in increasingly accessible prices for investors. In addition, since 2005, retail investor participation in the equity markets has significantly increased,[173] as has investor access to market data and execution quality information.[174] Given the evolution of the U.S. equity markets since 2005 and the widely available access to liquidity, market data, and execution quality information, the concern the Commission had in 2005, that Rule 611 was beneficial as a backstop to best execution because of investors' difficulty monitoring whether their orders receive the best available prices and the absence of robust intermarket linkages, is no longer applicable.[175] Moreover, a broker's duty to seek to obtain for its customer orders the most favorable terms reasonably available under the circumstances will continue to apply regardless of whether Rule 611 is rescinded. And a firm's commercial and competitive incentives should result in the firm routing orders to execute against the best price at an away market when consistent with the duty of best execution (rather than being required to do so by Rule 611).[176]

For the reasons discussed above, the Commission proposes to rescind Rule 611 in its entirety.

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173 *See, e.g.,* Caitlin McCabe, "New Army of Individual Investors Flexes Its Muscle," The Wall Street Journal (Dec. 30, 2020), *available at* https://www.wsj.com/articles/new-army-of-individual-investors-flexes-its-muscle-11609329600.

174 *See, e.g.,* Rule 605 Amendments Adopting Release at section IX.C. (discussing the availability of certain information to, and how that information is used by, various types of market participants); Charles M. Jones, *Understanding the Market for U.S. Equity Market Data* (Aug.31, 2018), *available at* https://www.sec.gov/comments/4-729/4729-4545881-176154.pdf at 3-8 (discussing available equity market data products and their uses). *See also* Robinhood Letter at 7 (stating that "[u]nlike any other moment in history, retail investors today have easy access to tools and platforms, educational resources, real-time market data and investment analytics").

175 As further discussed in section VI.C.2. *infra*, retail brokers route most of their customers' marketable orders to off-exchange wholesalers, who usually internalize the order (*i.e.*, execute the order in a principal capacity). As a consequence, most marketable retail orders do not directly interact with protected quotes. The majority of marketable retail orders are instead internalized off-exchange.

176 *See* First TTR Roundtable Transcript at 26-29 (Arun Manoharan, Commission, Division of Trading and Markets, Office of Analytics and Research) (discussing analysis of trade-through rates during the second quarter of 2025, including that trade-through rates during periods when Rule 611's requirements did not apply (such as for odd-lot trades and pre- and after-market trading sessions) remained relatively low, at 2.4% or less); OAR Roundtable Analysis. *See also infra* section VI.C.1.c. (discussing analysis of trade-throughs of odd-lot quotes inside the NBBO for high-priced stocks, showing trade-through rates of 1-5% for trades that occur on exchange and trade-through rates of 11-19% for trades that occur off-exchange and are larger than one share).

C. Request for Comment

The Commission generally requests comment from the public on the proposed rescission of Rule 611. More specific requests for comment are set forth below. Responses supported by empirical data are particularly helpful.

1. Do commenters agree with the Commission's proposed rescission of Rule 611? Why or why not? Are there benefits to maintaining Rule 611?
2. If Rule 611 is rescinded, should any other rules (of Regulation NMS or otherwise) be modified or rescinded in addition to what the Commission is proposing herein?
3. Rather than rescinding Rule 611, should the Commission instead modify Rule 611? If so, please be specific and describe how Rule 611 should be modified. What advantages or disadvantages are there to such a modification in comparison to the proposed rescission? Please also describe how such a modification would address the adverse consequences the Commission has identified in section II.B.2.
4. Would the rescission of Rule 611 affect investor confidence? Why or why not? If it were to decrease investor confidence, how could that effect be mitigated?
5. Given best execution obligations and the current level of automation and interconnectedness of the U.S. equity markets, is Rule 611 still needed? Will a broker-dealer's processes to fulfill its best execution obligations be affected by rescission of Rule 611? What steps should be taken by the Commission and/or SROs with respect to best execution if the Commission were to rescind Rule 611? Is there a need for additional best execution guidance concerning retail order handling? Institutional order handling? If so, what should that guidance include and should that guidance be principles-based or more prescriptive?
6. What impact has Rule 611 had on complexity in the equity markets, including but not limited to order types, exchange proliferation, and fragmentation? Will rescinding Rule 611 reduce the complexity in our equity market structure that has occurred since

its adoption in 2005? Will rescinding Rule 611 reduce fragmentation of liquidity in the equity markets? Will rescinding Rule 611 reduce costs on market participants? If so, which costs and by how much?

7. What impacts have market technologies, including those relating to routing and connectivity, had on Rule 611? Have market technologies advanced to such a degree that Rule 611 is no longer needed? Why or why not?
8. Are the concerns regarding equity market structure that the Commission expressed when it adopted Rule 611 still relevant? Is Rule 611 necessary to the current functioning of our equity markets? Would the continued maintenance of Rule 611 inhibit innovation and the development of new technologies?
9. What is the impact of Rule 611 on the number of equity exchanges? What would be the impact of the rescission of Rule 611 on the number of equity exchanges? Would rescission of Rule 611 result in fewer or more equity exchanges? Why or why not?
10. What is the impact of Rule 611 on displayed liquidity? Would the rescission of Rule 611 result in more displayed liquidity, or instead more non-displayed liquidity? Why or why not? What steps, if any, should be taken to bolster displayed liquidity if Rule 611 were to be rescinded? How would the availability of displayed liquidity and the quality of the NBBO be impacted by the rescission of Rule 611?
11. What steps (if any) would broker dealers, exchanges, and other market participants need to take to implement a rescission of Rule 611? Are there any implementation concerns if the Commission were to rescind Rule 611? For example, if Rule 611 is rescinded how long should the implementation period be? Should implementation be done in phases or tranches (and if yes, please be specific to describe what should be phased and when)? Should the timing for implementation be tied to the timing for implementation rescission of Rule 610(e), if applicable? If so, in what way?

12. Are there any NMS Plan amendments that would be necessary or desirable if Rule 611 is rescinded? If so, which ones, why, and in what way?

13. Are there any amendments to SRO rules that would be necessary or desirable if Rule 611 is rescinded? If so, which ones, why, and in what way?

III. Rule 610(e)

As discussed above,[177] the adoption of Regulation NMS included the adoption of Rule 610, often referred to as the "Access Rule." Broadly, Rule 610 was designed to promote fair and non-discriminatory access to quotations displayed by NMS trading centers through a private linkage approach for all NMS stocks.[178] As originally adopted, Rule 610 primarily addressed: (1) the means of access to quotations; (2) the fees for accessing protected quotations and any other quotations that are the best bid or offer of a national securities exchange or national securities association; and (3) locking and crossing quotations.[179]

In conjunction with the proposed rescission of Rule 611, the Commission is also proposing to rescind paragraph (e) of Rule 610, which sets forth restrictions on locking and crossing quotations. Advancements in the marketplace, including increased automation and interconnectivity, that have occurred since the time the rule was adopted may have rendered the rule no longer necessary. In addition, rescinding Rule 610(e) could reduce unnecessary complexity in the U.S. equity markets stemming from the rule's requirements. Recission of Rule 610(e) would also facilitate the benefits of the rescission of the trade-through prohibition in Rule 611. The Commission is also proposing conforming changes to Rule 610(c) to reflect the proposed rescission of Rule 611 and the elimination of the concept of "protected quotations," as discussed in section IV.B. below.

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177 *See supra* section I.

178 NMS Adopting Release at 37497.

179 *Id.* at 37539.

A. Description of Rule 610(e)

Rule 610(e) of Regulation NMS addresses the locking and crossing of quotations.[180] Specifically, Rule 610(e) requires each national securities exchange and national securities association to establish, maintain, and enforce written rules that: (1) require their members to reasonably avoid displaying quotations[181] that lock or cross any protected quotation in an NMS stock, and displaying manual quotations[182] that lock or cross any quotation in an NMS stock disseminated pursuant to an effective NMS Plan;[183] (2) are reasonably designed to assure the reconciliation of locked and crossed quotations in an NMS stock;[184] and (3) prohibit their members from engaging in a pattern or practice of displaying quotations that lock or cross any protected quotation in an NMS stock, or from displaying manual quotations that lock or cross any quotation in an NMS stock disseminated pursuant to an effective NMS Plan, other than displaying quotations that lock or cross any protected or other quotation as permitted by an exception contained in its rules established pursuant to Rule 610(e)(1).[185] The rule does not prohibit trading centers from displaying automated quotations that lock or cross the manual quotations of other trading centers.[186] Of note, Rule 610(e) also does not itself impose prohibitions on the locking and crossing of markets, but rather requires SROs to establish,

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180 *See supra* note 32 (explaining locking and crossing quotations). The other paragraphs of Rule 610, broadly relating to access, are described generally in section I. *supra* note 31 and accompanying text.

181 As with respect to Rule 611, by its terms, Rule 610(e) only applies to round lots, as a result of the definition of "quotation." *See supra* note 25.

182 Rule 600(b)(54) provides that a "manual quotation" means "any quotation other than an automated quotation." 17 CFR 242.600(b)(54).

183 Rule 610(e)(1); 17 CFR 242.610(e)(1). In this regard, the rule distinguishes between protected automated quotations and manual quotations.

184 Rule 610(e)(2); 17 CFR 242.610(e)(2). For example, the Commission stated that an SRO's rules must require the market participant responsible for displaying the locking or crossing quotation to take reasonable action to resolve the locked or crossed market. NMS Adopting Release at 37550.

185 Rule 610(e)(3); 17 CFR 242.610(e)(3). Rule 610(e)(3), together with the reasonable avoidance directive of Rule 610(e)(1), was designed to recognize that locked and crossed markets may occur accidentally (such as during updating of quoting), and that SRO rules could include "ship and post" procedures that would require a member to first attempt to execute against a relevant displayed quotation while posting a quotation that could lock or cross such a quotation. NMS Adopting Release at 37550.

186 NMS Adopting Release at 37503.

maintain, and enforce rules that comply with the rule's requirements. Throughout this discussion, we refer to Rule 610(e)'s requirements generally as "locked and crossed market prohibitions."

Adoption of Rule 610(e) was driven by concerns over the rise in the incidence of locked and crossed markets at the time due to market fragmentation coupled with limitations on the level of interconnectivity among markets.[187] In addition, the economic incentives created by access fee and liquidity rebate strategies at the time, as well as differences in the speed or certainty of access among market centers, were believed to be contributing to the increase in the frequency of locked markets.[188] The Commission believed that the practice of displaying quotations that lock or cross previously displayed quotations was inconsistent with fair and orderly markets and detracted from market efficiency.[189] Moreover, the Commission believed that reducing the instance of locked and crossed quotations would promote capital formation by providing market participants a clear picture of the true trading interest in a stock.[190]

B. Proposed Rescission of Rule 610(e)

The Commission proposes to rescind Rule 610(e) in its entirety. Based on its assessment of the national market system,[191] the Commission believes that the rescission of Rule 610(e)

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187 *See* NMS Proposing Release at 11154-56. In establishing the NMS, Congress stated that "market fragmentation becomes of increasing concern in the absence of mechanisms designed to assure that public investors are able to obtain the best price for securities regardless of the type or physical locations of the market upon which his transaction may be executed." NMS Adopting Release at 37499, n.13 and accompanying text (citing H.R. Rep. 94–123, 94th Cong., 1st Sess. 50 (1975).

188 NMS Proposing Release at 11154-56. It was thought, for example, that market participants' unwillingness to pay the fee on the locked market, and preference to instead wait to receive the maker rebate, was a contributor to locked markets. *See id.* at 11156-57. Additionally, some believed that electronic communications network ("ECN") access fees exacerbated locked markets and that certain ECNs programmed their systems to lock the quote of other market participants automatically instead of routing to the other quote to force the contra-party to be a liquidity taker and thereby collect the associated access fee rebate for themselves. *See id.* at 11158.

189 NMS Adopting Release at 37547. In particular, the Commission stated that "an automated quotation is entitled to protection from locking or crossing quotations" and that "[w]hen two market participants are willing to trade at the same quoted price, giving priority to the first-displayed automated quotation will encourage posting of quotations and contribute to fair and orderly markets." *Id.*

190 NMS Adopting Release at 37596. For example, prior to the prohibition there could be an offer to sell at a certain price displayed on one market at the same price as an offer to buy on another market, but the orders could not meet because the two markets were not linked. As a result, some market centers at the time would perceive the quotes to be stale. *See* NMS Proposing Release at 11155.

191 *See supra* note 46 and accompanying text.

could benefit market participants by allowing for narrower spreads and improving price discovery.[192] Furthermore, rescinding Rule 610(e) should reduce the prevalence of certain order types designed to automatically avoid displaying orders that lock or cross quotations thereby reducing market complexity, as well as burdensome compliance costs. Additionally, the concerns the Commission sought to address in 2005 with the adoption of Rule 610(e), namely concerns about the level of automation and interconnectivity in the marketplace at that time, as well as the potential for investor confusion when markets become locked or crossed, are no longer prevalent in today's trading environment. As such, rescission of Rule 610(e) would appear to be in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets in that removing the prohibitions on locked and crossed markets may allow for more economically efficient executions of securities transactions, remove impediments to competition, and improve the quality and availability of information with respect to trading interest.[193] Rescission of Rule 610(e) would also facilitate the benefits of rescinding Rule 611, due to the connection between the two and the concept of "protected quotations."[194]

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192 *See infra* section VI.C.2.a. (discussing the potential for narrower spreads for some stocks, including the possibility of a quoted spread of zero, which may, for some stocks, be closer to economic fundamentals).

193 *See supra* note 2 (discussing section 11A); *infra* sections III.B.1., B.2. and B.3. (discussing, among other things, the potential for more efficient price discovery and opportunities for competition if Rule 610(e) is rescinded).

194 Some market participants expressed a similar view about the interconnectedness of the rules. *See, e.g.*, MEMX Letter at 17 (stating that the prohibition on locked and crossed markets is directly tied to trade-through protections); Nasdaq Letter I at 2-3 (stating that the prohibition against locked and crossed markets would be impacted by rescinding Rule 611); First TTR Roundtable Transcript at 43-44 (Chris Isaacson, Cboe Global Markets, Inc.), at 129-130 (Jonathan Kellner, MEMX), at 144 (Chris Nagy, Healthy Markets Association). *See also* First TTR Roundtable Transcript at 166 (Adam Nunes, Hudson River) (stating that Rule 611 and 610(e) are effectively the same rule "from an implementation and compliance standpoint"). Others stated that removing the prohibitions on locked and crossed markets was necessary to get the full benefit of rescinding the trade-through rule. *See, e.g.*, Second TTR Roundtable Transcript, at 55-56 (Brett Redfearn, Panorama Financial Markets Advisory) (stating, that if eliminating Rule 611, it does make sense to eliminate the locked and crossed market provisions), at 58-59 (Oliver Sung, Cboe Global Markets) (stating that it seems logical to remove the locked and crossed prohibition to get the full benefit of 611 removal).

1. Evolution of Market Structure and Investor Sophistication

Since the adoption of Regulation NMS, equity market structure has changed due, in part, to the many technological advancements that have altered the speed and nature of trading.[195] Computer-assisted trading tools are common and include smart order routing systems that are designed to deal with the large number of trading centers in the fragmented U.S. equity market structure. These tools also include trading systems with automated functionalities that enable orders to be submitted to the marketplace in ways that are far beyond the manual capacities of a human trader.[196] As the Commission has previously recognized, the U.S. securities markets have become almost entirely electronic and highly dependent on sophisticated trading and other technology, including complex and interconnected routing, market data, regulatory, surveillance and other systems.[197] At the same time, retail investor participation in the equity markets has significantly increased,[198] as has investor access to market data and execution quality information.[199] When the Commission proposed Rule 610(e), it recognized that, as automated executions become more prevalent, there may be less reason to lock a displayed quote.[200] Given the evolution of the U.S. equity markets since 2005, Rule 610(e) may be no longer necessary and the concerns it sought to address in 2005 may be no longer relevant. For example, increases in

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195 Securities Exchange Act Release No. 99679 (Mar. 6, 2024), 89 FR 26428, 26429 (Apr. 15, 2024) ("Rule 605 Amendments Adopting Release") (citing Securities Exchange Act Release No. 96493 (Dec. 14, 2022), 88 FR 3786 (Jan. 20, 2023) (Rule 605 Amendments Proposing Release) at 3787-88 (Jan. 20, 2023)).

196 "Equity Market Structure Literature Review Part II: High Frequency Trading Staff of the SEC Division of Trading and Markets," SEC, Mar. 14, 2014, available at https://www.sec.gov/marketstructure/research/hft_lit_review_march_2014.pdf.

197 Securities Exchange Act Release No. 73639 (Nov. 19, 2024), 79 FR 72252 (Dec. 5, 2014) ("Regulation SCI Adopting Release") at 72254. *See also supra* notes 146 and 150 and accompanying text (discussing technological developments since the adoption of Regulation NMS).

198 *See, e.g.,* Caitlin McCabe, "New Army of Individual Investors Flexes Its Muscle," The Wall Street Journal (Dec. 30, 2020), *available at* https://www.wsj.com/articles/new-army-of-individual-investors-flexes-its-muscle-11609329600.

199 *See, e.g.,* Rule 605 Amendments Adopting Release at section IX.C. (discussing the availability of certain information to, and how that information is used by, various types of market participants); Charles M. Jones, *Understanding the Market for U.S. Equity Market Data* (Aug. 31, 2018), *available at* https://www.sec.gov/comments/4-729/4729-4545881-176154.pdf at 3-8 (discussing available equity market data products and their uses). *See also* Robinhood Letter at 7 (stating that "[u]nlike any other moment in history, retail investors today have easy access to tools and platforms, educational resources, real-time market data and investment analytics").

200 NMS Proposing Release at 11159.

market fragmentation at that time, and a lack of interconnectivity, resulted in a reduction in the interaction between orders displayed in competing market centers; and there were greater differences in speed among market centers than exist currently (*i.e.*, there were more markets that relied heavily on human traders to quote and trade, and which may not have adjusted their quotations as quickly as automated markets).[201] These kinds of inefficiencies are no longer prevalent.[202] While the equity markets continue to be highly fragmented, with the greater automation and interconnectivity in today's equity market structure, and increased access to market data and execution quality information, market participants now have the tools necessary to better navigate them.

In addition, the potential for investor confusion that could result from removing the locked and crossed market prohibitions would be limited and, to the extent that it does occur initially, would diminish over time as market participants adjust their behavior in response to the new trading environment.[203] Today's investors have significantly greater access to market data, execution quality information, and trading technologies,[204] giving them the tools and market information necessary to navigate the equity markets even when they are locked. Also, any confusion from crossed markets should be mitigated by today's routing technology, speed of execution, and the resulting rate at which crossed markets are resolved.[205]

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201 *See, e.g.*, *id.* at 11159.

202 *See, e.g., infra* section VI.B.4.b. (discussing, among other things, the speed at which market participants are able to react in today's equity markets).

203 *See infra* note 241 and accompanying text; section VI.C.2.b. (discussing investor confusion as a potential cost associated with rescission of Rule 610(e)). Some commenters also stated that rescission of the crossed markets prohibition could lead to investor confusion. *See, e.g.*, Second TTR Roundtable Transcript at 64-65 (Dmitry Bulkin, Bernstein) (stating that retail brokers may need to take some time to educate their clients), at 65 (Mehmet Kinak, T. Rowe Price) (stating that self-directed or retail investors may not be confused by a locked market, but that crossed markets could lead to some investor confusion). Other commenters did not think that rescission would lead to investor confusion. *See*, *e.g.*, First TTR Roundtable Transcript at 145-147 (Adam Nunes, Hudson River).

204 *See* supra note 199 and accompanying text.

205 *See, e.g.,* Phil Mackintosh and Eugenio Piazza, *Locked, Crossed and Barrel* (Dec. 11, 2025) (analyzing the significance of locked and crossed markets to investors), available at https://www.nasdaq.com/articles/locked-crossed-and-barrel; Second TTR Roundtable at 57 (Mehmet Kinak, T. Rowe Price), at 59 (Oliver Sung, Cboe Global Markets) (stating that in a crossed market arbitrage opportunities would clear out crosses quickly).

Additionally, eliminating restrictions on trading through protected quotations and displaying orders that lock or cross quotations would provide broker-dealers greater freedom when determining how to handle their customers' orders, including where to route those orders to achieve best execution.[206] Among other things, if the Commission were to rescind the locked and crossed market prohibitions, and to the extent permitted by SRO rules,[207] market participants would have more flexibility to post their trading interest on trading centers that have a consistently higher volume of order flow, more reliable speed of execution, or lower adverse selection costs, if they are not constrained by requirements to first route to execute against any locking contra-side interest. In turn, trading centers would have more flexibility to compete for order flow.

2. Potential for Improved Price Discovery and Competition

Rescission of Rule 610(e) could also lead to improved price discovery and tighter spreads and foster competition among trading venues, which could benefit investors. Specifically, allowing locked markets could strengthen public price formation to the extent that locked markets are a natural consequence of competitive quoting, and that disallowing locked markets (as is the case currently) may arbitrarily widen spreads.[208] Locked markets may be indicative of fair and efficient markets, and allowing them could lead to more advantageous pricing and cost savings for some investors.[209] Additionally, a quotation that would qualify as a locking quotation

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206 *See supra* section II.B.3.b.

207 Under Rule 610(e), the Commission requires exchanges to have rules that prohibit locked and crossed markets. As a result, if the Commission rescinds Rule 610(e), the exchanges would still have those rules and would need to decide whether to eliminate them. *See also infra* note 224

208 *See, e.g.*, Cboe Letter I at 4-5. (stating that locked markets are a natural consequence of competitive quoting, provide optimal pricing for investors, and contribute to fair markets and that allowing locked markets would narrow or, in some cases, eliminate spreads to the benefit of investors); Second TTR Roundtable Transcript at 56-57 (Mehmet Kinak, T. Rowe Price) (stating that trading at the market is true price discovery and has benefits: there is no spread, no adverse selection, no information leakage).

209 *See infra* section VI.C.2.a. (discussing the potential benefits of rescinding Rule 610(e), including the potential for more advantageous pricing and a reduction in transaction costs for some stocks). *See also* Cboe Letter II at 6. This commenter stated that that locked markets occur naturally when quoting is competitive, are indicative of fair and efficient markets, and allowing them would lead to optimal pricing and cost savings to investors. This commenter also stated that the artificially wide spreads resulting from the prohibition on locked markets creates an opportunity for off-exchange venues to execute orders at better prices between such spreads that would not otherwise exist. *Id.*

for purposes of the prohibition may in fact not be a locking quotation if one were to consider the price with fees.[210] In this regard, the prohibition on display of locked quotations may be preventing the display of trading interest that would not be considered locking interest based on the net price (*e.g.*, if the exchange fees associated with taking the locking offer would cause the order's effective price to be higher than its displayed price).

Moreover, allowing locked markets could foster competition between exchanges and other trading centers.[211] A significant portion of trading in NMS stocks has migrated off exchange in recent years.[212] The structure of the OTC market that permits the execution of orders more readily in finer increments has been a factor that contributes to this result.[213] Allowing locked markets means that the NBBO spread may, in some cases, be tightened to zero. Competition may drive OTC market makers to provide even better prices in the event of locked markets than they otherwise would currently. Allowing locked markets could also remove an impediment to competition in that market participants would have fewer restrictions on their selection of trading centers that best meet their trading objectives and trading centers could better compete for order flow based more fully on the merits of their system.

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210 *See* NMS Proposing Release at 11159 (stating, at the time Rule 610(e) was proposed, that in addition to accidental locks, which are often resolved quickly, quotes also may lock because one or both quotes have an access fee attached, which increases the net price of trading with that quote, and creates an undisclosed spread). Some market participants make a similar observation. *See, e.g.,* Second TTR Roundtable Transcript at 56-57 (Oliver Sung, Cboe Global Markets). *See also* FIA PTG Paper at 6 (stating that "[w]hile we are likely to see more locked markets in the absence of a prohibition, these prices represent the true state of supply and demand, accounting for the cost of access and other potential market frictions.").

211 *See infra* sections VI.D.2.c. (discussing that rescission of Rule 610(e) may improve liquidity on exchanges for some stocks) and VI.D.2.e. (discussing that improved efficiency and liquidity on exchanges could, in turn, allow exchanges to better compete with off-exchange market makers for order flow).

212 *See supra* notes 39-41 and accompanying text.

213 *See* 2024 Regulation NMS Amendments at 81643. *See also* Securities Exchange Act Release No. 96494 (Dec. 14, 2022), 87 FR 80266 (Dec. 29, 2022) (proposing release for the 2024 Regulation NMS Amendments) at 80273-74 (describing how the combination of the requirements of Rule 612 and differences in the underlying regulatory framework for exchanges, ATSs, and OTC market makers gives OTC market makers the ability to more readily trade in finer increments than exchanges and ATSs). In the 2024 Regulation NMS Amendments, the Commission stated that under Rule 612 as amended, the OTC Markets would continue to be able to trade more readily in comparatively smaller increments than exchanges and ATSs. As stated by one commenter, "the current prohibition on locked markets artificially widens spreads, creating an opportunity for off-exchange venues to execute orders at better prices between an artificially wide spread that would otherwise not exist." Cboe Letter II at 6.

In fact, when the Commission originally proposed Rule 610(e), the Commission requested comment on the extent of the concerns arising from locked markets in particular, recognizing that some market participants stated that locked quotes convey *useful* price information, and that the ability to lock quotes enables markets to efficiently communicate their trading interest.[214] In addition, the Commission stated that the problem of apparent locked markets resulting from quotes with access fees attached may be reduced by the adoption of other access provisions of Regulation NMS.[215] For example, the Commission stated that if quoting market centers and quoting market participants have fair access to each other's quotations, and access fees are limited to *de minimis* levels, the economic incentives that currently encourage locked markets may diminish.[216] The Commission also recognized that as automated executions become more prevalent, there may be less reason to lock a displayed quote,[217] and specifically requested comment on the necessity of adopting restrictions on locked markets in the light of its proposed provisions governing intermarket access and access fees.[218] As discussed, the equity markets have become more automated and interconnected, diminishing the need for Rule 610(e).

Locked markets may occur naturally when quoting is competitive, and may represent greater price transparency, fairer competition, and more efficient markets that provide optimal pricing for investors.[219] Currently, even with the requirements of Rule 610(e), the NBBO may appear locked or crossed for part of each trading day; however, such occurrences are rare.[220] If

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214 *See* NMS Proposing Release at 11159.

215 *Id.*

216 *Id.*

217 *Id.*

218 *Id.*

219 *See infra* section VI.C.2.a. (discussing that locked markets can be a natural consequence of competitive quoting and that in certain circumstances the potential reduction in transaction costs from allowing locked markets could be significant).

220 *See infra* section VI.B.3. *See also* Mackintosh and Piazza, *supra* note 205 (reporting that while the NBBO may appear locked or crossed for part of each trading day, such occurrences are rare and more commonly involve the appearance of a *locked* market, and providing data that shows the appearance of locked and crossed markets happens much more frequently in lower-priced, tick-constrained stocks, and that locks and crosses resolve quickly). *Id.* This data includes an analysis of S&P 500 stocks and shows that on average,

locked markets were allowed, the Commission believes that spreads could narrow to zero for some securities, which could result in cost savings to investors.[221]

3. Reduction in Complexity and Compliance Costs

Rescinding Rule 610(e) could reduce both unnecessary complexity in the marketplace and compliance costs. Notably, Rule 610(e) does not itself prohibit locked and crossed markets. Rather, the rule requires SROs to establish, maintain, and enforce rules for their members that require the avoidance of such behavior and the reconciliation of locked and crossed quotations, and all 20 of the exchanges approved to trade NMS stocks and FINRA have adopted such rules.[222] These rules generally require members to avoid entering orders that would create a locked or crossed market and, in some cases, mandate specific handling procedures for such orders, as discussed further below.[223]

The Commission believes that the requirements of Rule 610(e) have contributed to the proliferation of order types and attributes that cause the orders to be repriced, displayed at a price that does not represent the market participants' true trading interest, or that otherwise prohibit the acceptance of such orders, and which introduce complexity in the equity markets.[224] Some of

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each stock is locked for around 2.5 seconds each day, and that markets are crossed far less – with an average of just 4.2 milliseconds each day. According to this market participant, the current rules mostly make the NBBO unlock "much faster than a human can blink" and they have evidence that market makers and arbitrageurs act very quickly to uncross markets. Their data also shows that latency in both time to report and dissemination of SIP data appearing to be major contributing factors. *Id.*

221 *See infra* section VI.C.2.a. *See also supra* note 209 and accompanying text.

222 *See supra* note 207.

223 *See*, *e.g.*, NYSE Rule 7.37 (requiring, with certain exceptions, the exchange and its members to reasonably avoid displaying, and prohibiting the exchange and its members from engaging in a pattern or practice of displaying, any quotations that lock or cross the protected best bid or protected best offer); Nasdaq Rules 4702 and 4703 (providing order types and order attributes designed to prevent the locking or crossing of protected quotations, as well as orders on the Nasdaq book); FINRA Rule 6240 (requiring FINRA members, with certain exceptions, to reasonably avoid displaying, and not engage in a pattern or practice of displaying, any quotations that lock or cross a protected quotation, and any manual quotations that lock or cross a quotation previously disseminated pursuant to an effective NMS Plan); Cboe BYX Rule 11.20(b) (the BYX system shall not make available for dissemination, and BYX users shall reasonably avoid displaying, and shall not engage in a pattern or practice of displaying, any quotations that lock or cross a protected quotation, and any manual quotations that lock or cross a quotation previously disseminated pursuant to an effective national market system plan).

224 Some market participants expressed a similar view. *See, e.g.,* FIA PTG Paper at 4, 6 (citing the prohibition on locked and crossed markets as a factor in the proliferation of complex order types, such as price-to-comply orders); First TTR Roundtable at 166-69 (Adam Nunes, Hudson River Trading; Matt Mackenzie,

these order types and attributes include re-pricing features that automatically adjust the order's displayed price to avoid locking or crossing quotations, such as "price-to-comply" and other re-pricing order types, and provide market participants with the ability to execute only on that market, and in some instances only against later arriving interest in order to ensure that the market participant entering such order will be the provider of liquidity.[225] These repricing features may mask a market participant's true trading interests by, among other things, resulting in the display of the market participant's order at a price lower (for a buy order) or higher (for a sell order) than the price at which the market participant is willing to trade, primarily to avoid locking or crossing the market. For these reasons, the Commission believes that rescission of Rule 610(e) could allow more unconstrained competition among trading centers and among orders, could provide greater price transparency, and would provide more freedom to market participants to make trading and order handling decisions based on the unique characteristics of their order flow.[226]

Optiver) (discussing that a lot of the order types designed for compliance are related to the lock-cross prohibitions), at 168-69 (Matt Mackenzie, Optiver) (stating that their firm uses approximately 50 complex order types and that the firm has to develop strategies to use such orders); Second TTR Roundtable at 59-60 (Oliver Sung, Cboe Global Markets) (stating that currently it is necessary to have order types to hide and price slide orders that would otherwise lock the market and discussing, as an exchange operator, the number of order types and mechanisms created to, for example, prevent locking the market), at 60 (Kevin Tyrrell, New York Stock Exchange) (stating that it, an exchange operator, would be able to get rid of a lot of the order types that lead to investor confusion if Rule 610(e) were eliminated). *See also infra* sections VI.B.3. (discussing the development of specialized order types to comply with the prohibition on locked and crossed markets) and VI.C.2.a. (discussing potential benefits that could flow from elimination of such order types).

225 *See, e.g.,* Cboe BYX Rule 11.9(g)(1) Display-Price Sliding (allowing an order that, at the time of entry, would create a violation of Rule 610 by locking or crossing a protected quotation of an external market, to be ranked at the locking price in the BYX book and displayed at one minimum price variation below the current NBB (for bids) or to one minimum price variation above the current NBO (for offers)); Nasdaq Texas Rules 4702 (b)(1)(A), (2)(B), and (4)(A) (describing the characteristics of the exchange's Price to Comply Order, Price to Display Order, and Post-Only Order types, respectively, and their design for compliance with Rule 610's locked and crossed market prohibitions). *See also* Rosenblatt Order Type Report at 10-36 (discussing various pricing mechanisms, including those that re-price to prevent locking or crossing the market and to keep interest on an exchange's order book). This report also states that the behavior of order types like the Post Only order type creates actionable information that "isn't inherently nefarious, but [that] a sophisticated *trader* can use to make a meal out of an *investor* who doesn't have the time, money or inclination to achieve an equal level of sophistication"). *Id.*

226 As discussed above in the context of the proposed rescission of Rule 611, market participants should be more free to compete on merit, and not based on their ability to maneuver around regulatory strictures. *See supra* section II.B.1. *See also infra* section VI.B.4.f. (discussing potential impact on market participants' routing strategies and interference costs resulting from Rule 610(e)) and section VI.C.2.a (discussing how reduced complexity could reduce costs to broker-dealers associated with their order routing logic).

Importantly, rescission of Rule 610(e) would not create a requirement that SROs rescind their rules designed to comply with Rule 610(e)'s current prohibitions. Rather, market forces and consistency with the Exchange Act would dictate which rules and practices, if any, SROs and, as applicable, other trading centers, would seek to rescind or modify.[227] The Commission anticipates, however, that most, if not all, SROs would seek to amend rules originally designed for compliance with Rule 610(e). Recognizing that some of these rules are reliant upon defined terms that the Commission is proposing to rescind from Regulation NMS (*e.g.*, "protected quotation"),[228] however, the Commission is requesting comment on whether such defined terms should be retained or modified, even if Rules 611 and 610(e) are rescinded, as proposed.[229]

Additionally, the Commission believes that rescission of Rule 610(e) should eliminate certain compliance costs associated with monitoring and preventing locked and crossed markets.[230] Depending on whether SROs modify their own rules to eliminate prohibitions on locked and crossed markets, market participants may also be able to reduce their costs associated with maintaining routing logic designed to avoid locking and crossing. Consistent with section 11A of the Exchange Act, removing unnecessary complexity and compliance costs could help to remove impediments to competition and foster efficiency. The level of any reduction in

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227 SROs would be required to file any proposed changes to their rules with the Commission pursuant to 15 U.S.C. 78s(b) (section 19(b) of the Exchange Act) and the rules and regulations thereunder, and such changes would be subject to public notice and comment, and, if applicable, Commission approval. NMS Stock ATSs would be required to comply with the requirements of 17 CFR 242.304 (Rule 304 of Regulation ATS) for any changes to their practices and amend their publicly available disclosures on Form ATS-N, as applicable.

228 *See, e.g.,* Nasdaq Rulebook, Equity 2, section 5(e)(2)(A) (defining "protected quotation" as having the meaning set forth in Rule 600(b) of Regulation NMS); Cboe BYX Rulebook, Chapter 1, Rule 1.5(t) (defining "protected bid," "protected offer," and "protected quotation" to mirror the definitions in Rule 600(b)(81) of Regulation NMS); *see also infra* note 258.

229 *See infra* section IV.C.

230 *See* sections VI.B. and VI.C.2.a. (discussing, respectively, the costs of, and potential benefits of rescinding, Rule 610(e), including the potential to reduce operating costs to exchanges related to compliance). *See also* FIA PTG Paper at 6 (stating that rescinding Rule 610(e) would eliminate elaborate systems designed to capture quote snapshots and satisfying intermarket sweep orders solely to demonstrate that a quote was not locked, crossed or traded through*);* First TTR Roundtable Transcript at 171-173 (Adam Nunes, Hudson River Trading) (discussing systems necessary to demonstrate compliance).

complexity or compliance costs would, however, be impacted by whether and how SROs determine to modify their own rules.

4. Crossed Markets

The Commission recognizes that elimination of the crossed markets prohibition could raise concerns over intentional crossing and market distortion in the absence of access fee caps[231] or net pricing, concerns that more illiquid symbols could remain crossed for significant periods of time, and concerns regarding the calculation of execution quality and price improvement in a crossed market.[232] However, arbitrage opportunities associated with crossed markets would

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231 Rule 610(c) provides an access fee cap that applies to protected quotations for NMS stocks and also applies to any other quotation of a trading center that is the best bid or offer of a national securities exchange or national securities association. Rule 610(c); 17 CFR 242.610(c). As discussed above, the rule was designed to promote fair and non-discriminatory access to quotations displayed in the national market system, ensure the fairness and accuracy of displayed quotations by establishing an outer limit on the cost of accessing such quotations, and preclude trading centers that posted protected quotations from raising their fees in an attempt to take improper advantage of the trade-through protections. *See supra* note 76 (citing 2024 Regulation NMS Amendments at 81643-44). Specifically, Rule 610(c) was designed to address the potential distortions caused by substantial, disparate fees, and was not intended to reduce access fees; rather, the fee limitation was designed to preclude individual trading centers from raising their fees substantially in an attempt to take improper advantage of strengthened protection against trade-throughs and the adoption of a private linkage regime. In particular, a purpose of the fee limitation was to address "outlier" trading centers that otherwise might charge high fees and pass most of the fees through as rebates to attract liquidity providers. It also was designed to preclude a trading center from charging high fees selectively to competitors. NMS Adopting Release at 37544-45; *see also supra* notes 31 and 76 (discussing amendments to Rule 610(c) adopted by the Commission in 2024, as well as the status of such amendments). As discussed below, while the Commission is not proposing to rescind Rule 610(c), the Commission is proposing to amend the rule to remove the reference to "protected quotations" given the proposed rescission of Rule 611 and related defined terms. *See infra* section IV.B.

232 A number of commenters expressed greater concern about removing the crossed market prohibition as compared to the locked market prohibition and the increase in crossed markets that could result. *See, e.g.,* Second TTR Roundtable Transcript at 57-59 (Mehmet Kinak, T. Rowe Price; Oliver Sung, Cboe Global Markets). One commenter stated that if the crossed market restriction were removed, a net pricing model would be needed so that people are not crossing the market intentionally. *See* Second TTR Roundtable Transcript at 57-58 (Mehmet Kinak, T. Rowe Price). Under a "net pricing model," the displayed quote would reflect the "all-in" or ultimate execution price per share to the buyer or seller, inclusive of applicable exchange fees and rebates. This commenter expressed concern that without access fee caps or net pricing, the market would be distorted, which would cause market participants to be interested in crossing the market. *Id.* Another commenter stated that without the crossed market prohibition, more illiquid symbols could remain crossed all day because they are not traded much and no one is paying attention to them. *See* Second TTR Roundtable Transcript at 58-59 (Oliver Sung, Cboe Global Markets). One commenter raised concerns regarding the implications for market quality and stated that measuring quality of execution and price improvement is clear for locked quotes but needs to be thought through for crossed quotes. Second TTR Roundtable Transcript at 64-65 (Dmitry Bulkin, Bernstein) (questioning how to measure quality of execution for retail in the case of crossed quotes but stating that it is easy to measure price improvement in the case of locked quotes).

likely cause them to be cleared quickly by market participants.[233] Additionally, the Commission believes access fee caps are significant in helping to maintain the economic incentive for such arbitrage opportunities.[234]

In adopting Rule 610(e) the Commission recognized not only that markets occasionally lock or cross, but that locked and crossed markets may reflect market inefficiencies.[235] Locked markets, however, may also reflect the existence of a market participant that is not truly willing to trade at the displayed locking price, but instead chooses to post interest at the locking price to receive a liquidity rebate.[236] And the access fee caps were designed, in part, to address the

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233 *See infra* section VI.B.3. (discussing the temporary profit opportunities from locked and crossed markets). Commenters also stated that in a crossed market, arbitrage opportunities would clear out crosses quickly. *See* Second TTR Roundtable at 57 (Mehmet Kinak, T. Rowe Price), and 59 (Oliver Sung, Cboe Global Markets). *See also* First TTR Roundtable Transcript at 145 (Adam Nunes, Hudson River); *supra* note 220.

234 Some commenters expressed consistent views. *See, e.g.,* Second TTR Roundtable at 55-56 (Brett Redfearn, Panorama Financial Markets Advisory) (supporting rescission of Rule 611 and 610(e), but stating that without the access fee caps there would be too many locked and crossed markets and the NBBO would be further degraded), and at 57 (Mehmet Kinak, T. Rowe Price) (stating support for eliminating locked markets but expressing concern that if there were no access fee caps, and no net pricing, the true market could become distorted, which may cause market participants to intentionally cross the market). As discussed herein, while the Commission is not proposing to eliminate or modify Rule 610(c) at this time, the Commission welcomes comment on this topic, including specifically in the context of the interplay between the access fee caps and the proposed recession of Rules 611 and 610(e).

235 NMS Adopting Release at 37547. The Commission has also stated that "[w]hen the NBBO is crossed for a significant period of time, it raises serious questions regarding whether the quotes continue to provide a reliable benchmark for the statistical measures included in Rule 605." Securities Exchange Act Release No. 105136 (Apr. 1, 2026), 91 FR 17313, at 17317 (Apr. 6, 2026) (Order Granting Limited Exemption Pursuant to Rule 605(b) of Regulation NMS Under the Securities Exchange Act of 1934 from Rule 605 and Modifying and Rescinding Certain Exemptions Granted Pursuant to Rule 605 of Regulation NMS) ("2026 Rule 605(b) Exemption"). The Commission has also outlined procedures for reporting entities to follow during locked and crossed markets, including when orders should be excluded entirely in the event of a persistent crossed market. *See* 2026 Rule 605(b) Exemption at 17317. *See also* Frequently Asked Questions: Rule 605 of Regulation NMS (Apr. 1, 2026) available at https://www.sec.gov/rules-regulations/staff-guidance/trading-markets-frequently-asked-questions/frequently-asked-questions-rule-605-regulation-nms ("Rule 605 FAQs"). The new Rule 605 FAQs will become effective on August 1, 2026, and the responses therein will supersede and replace the previous staff guidance regarding then Rule 11Ac1-5 and Rule 605. *See id.* Similar to the prior guidance, A19 of the new Rule 605 FAQs recognizes that if the NBBO is crossed for a significant period of time, it raises serious questions whether the quotes continue to provide a reliable benchmark for the statistical measures in Rule 605, and the Commission has therefore exempted all orders from the Rule that would require reference to an NBBO that has been crossed for 30 seconds or more (citing the 2026 Rule 605(b) Exemption at section II.A.). A19 also provides procedures for market centers, brokers, or dealers to follow under such circumstances and in light of the exemption. The responses to questions, and any other Commission staff statements, represent the views of the staff. They are not a rule, regulation, or statement of the Commission. Furthermore, the Commission has neither approved nor disapproved their content. These staff statements, like all staff statements, have no legal force or effect: they do not alter or amend applicable law; and they create no new or additional obligations for any person.

236 NMS Adopting Release at 37547.

potential distortions caused by substantial, disparate fees.[237] With the access fee caps, there is a natural market incentive to resolve a crossed market in the form of the arbitrage opportunity for the liquidity taker, in that a liquidity taker could buy (sell) at the lower offer (higher bid) and sell (buy) at the higher bid (lower offer), locking in a risk-free profit. Without such caps, fees and rebates could become so large as to negate the arbitrage opportunity, which would disincentivize market participants from clearing a crossed market.[238]

The Commission believes that the access fee caps should serve to mitigate the risk that fees and rebates could become so large as to negate the arbitrage opportunity, and that the potential overall reductions in costs and complexity in the marketplace from rescinding Rule 610(e) would mitigate any negative impacts of allowing crossed markets. Specifically, the access fee caps should create an opportunity for arbitrage in a crossed market. Given the minimum pricing increments for NMS stocks[239] and the caps on the level of access fees,[240] there would be potential net profit from rapidly resolving the cross (*i.e.*, the fees could never exceed the difference between the crossed bid and ask prices); and the Commission believes that the speed of trading technology in today's equity markets and the economic incentives for arbitrage when a market is crossed will help to ensure that crossed markets will continue to be infrequent and quickly resolved.

The Commission also believes that to the extent crossed markets do occur and resolve quickly due to market forces, the potential for investor confusion is minimal and would be mitigated by the changes in technology, access to market data and investor sophistication discussed above in section III.B.1., and that the potential for investor confusion among less sophisticated investors would likely diminish over time as market participants adjust to the new

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237 *See supra* note 231.

238 Commenters also identified this potential risk. *See*, *e.g.*, Second TTR Roundtable Transcript at 55-59 (discussion of access fees in the context of crossed markets).

239 *See* Rule 612 (establishing the minimum pricing increment for NMS stocks); *supra* note 31.

240 *See* Rule 610(c) (providing limitations on the fees to access certain quotations); *supra* note 31. *See also infra* section IV.B.2. (discussing proposed conforming amendments to Rule 610(c)).

trading environment and adapt their behaviors accordingly.[241] Additionally, SROs would have the flexibility to determine whether to retain their own rules originally designed to comply with the requirements of Rule 610(e) relating to the avoidance of crossed markets.

C. Request for Comment

The Commission generally requests comment from the public on the proposed rescission of Rule 610(e), including its relation to the proposed rescission of Rule 611. More specific requests for comment are set forth below. Responses supported by empirical data are particularly helpful.

14. Is Rule 610(e) necessary in today's equity markets? Are any of the concerns the Commission identified when adopting Rule 610(e) still relevant? Should the Commission maintain any of the requirements of Rule 610(e) rather than rescind the entire rule? For example, should prohibitions on the display of crossed markets be maintained? Why or why not? Are there different concerns for liquid and illiquid securities that the Commission should consider? Should SROs continue to be required to have rules designed to assure the reconciliation of locked or crossed quotations in an NMS stock? Why or why not?
15. Would the availability of liquidity and the quality of the NBBO be impacted by the rescission of Rule 610(e)? If so, how, and how might any such impact be mitigated?
16. Would the rescission of Rule 610(e) lead to investor confusion regarding the status of displayed quotations or whether displayed quotations accurately represent available trading interest? Why or why not? Would the possibility of crossed markets result in the potential for investor confusion? Why or why not, and if yes, how could the potential for such confusion be mitigated? Do investors have access to the tools and

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241 *See infra* section VI.C.2.b. (discussing investor confusion as a potential cost associated with rescission of Rule 610(e)).

market information necessary to understand and navigate equity markets when they are locked or crossed? Why or why not?

17. If Rule 610(e) is rescinded, would there be an increase in frequency or duration of locked or crossed markets? Would locked or crossed markets, when they do occur, resolve quickly? Why or why not? Are there particular concerns associated with crossed markets for symbols that have certain characteristics, such as more illiquid symbols? Why or why not, and if yes, how could such concerns be mitigated?
18. How would the rescission of Rule 610(e) impact execution quality metrics? For example, do commenters have particular concerns regarding the potential impact on their average execution performance statistics, or concerns regarding how to calculate certain metrics for purposes of Rule 605 Reports that are not addressed by Commission staff responses to Frequently Asked Questions or related exemption?[242] If so, what are the concerns and why? How could these concerns be addressed?
19. What are the benefits to allowing the display of locked markets? Would allowing the display of locked markets lead to zero spreads and lower transaction costs for some stocks? Would it otherwise allow market participants to more accurately display their trading interests? If so, how? If not, why not? Are there additional impacts on the quality of markets that would result from the display of locked markets? For example, how would competition between trading centers be impacted? Would rescission of Rule 610(e) impact competition between exchanges and other trading centers, such as ATSs? If so, how?
20. How might a broker-dealer's processes to fulfill its best execution obligations be affected by the rescission of Rule 610(e)?

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242 *See infra* note 235.

21. Would rescinding Rule 610(e) reduce complexity? Why or why not? If so, how? Have the requirements of Rule 610(e) contributed to the proliferation of order types? Are such order types useful in the absence of Rule 610(e)? Why or why not? Do such order types obscure market participant's true trading interests? If so. How?
22. If trading centers were to eliminate order types and modifiers that are currently designed to facilitate compliance with Rule 610(e), would other complexities emerge? If so, what kinds of complexities and why? How would they impact market structure and investors?
23. Would rescission of Rule 610(e) reduce costs for market participants? If so, what costs would be reduced and by how much?
24. Would rescission of Rule 610(e), when taken together with the rescission of Rule 611, result in more displayed liquidity, or instead more non-displayed liquidity? Why or why not?
25. Because SROs would not be required to rescind rules relating to locked and crossed market prohibitions, would SROs continue to provide existing orders and modifiers, as well as other rules to prevent the locking and crossing of quotations internally or more broadly? Why or why not? Are there certain related rules that SROs would retain? If so, which ones and why?
26. Are there any implementation concerns if the Commission were to rescind Rule 610(e)? For example, if Rule 610(e) is rescinded how far out from the date of rescission should the implementation date be? Should implementation be done in phases or tranches (and if yes, please be specific to describe what should be phased and when)? Should the timing for implementation be tied to the timing for implementation rescission of Rule 611, if applicable? If so, in what way?
27. Are there any NMS Plan amendments that would be needed if Rule 610(e) is rescinded? If so, which ones, why, and in what way?

28. Would rescission of Rule 610(e)'s prohibitions result in improved price transparency and/or tighter spreads? Why or why not? Would market participants' ability to pursue their unique trading interests and strategies be improved? Why or why not? If so, how? Would rescission of Rule 610(e)'s prohibitions permit greater competition among orders and/or trading venues? Why or why not? If so, how?

IV. Conforming Amendments to Regulation NMS Definitions and Related Rules

A. Description

Rule 600(b) sets forth the defined terms used in Regulation NMS. Some of the defined terms in Rule 600(b) outline the scope of obligations under, and exceptions to, Rules 611 and 610(e) and do not relate to any other provision of Regulation NMS. Such terms would no longer be necessary to maintain in Rule 600(b) if Rules 611 and 610(e) are rescinded as proposed.

In addition, certain Regulation NMS rules and other Commission rules cross-reference Rule 611 or Rule 610(e) and/or use terms defined in Rule 600(b) that solely relate to Rules 611 and 610(e). Such other Commission rules must be amended if Rules 611, 610(e), and related definitions in Rule 600(b) are rescinded.

B. Proposed Rescissions and Amendments to Related Rules

1. Proposed Rescission of Related Defined Terms in Rule 600(b) of Regulation NMS

In conjunction with the recommended rescission of Rules 611 and 610(e), the Commission proposes to rescind certain defined terms in Rule 600(b) that relate to Rules 611 and 610(e) and would no longer be necessary to maintain in Regulation NMS if such rules are rescinded.[243] First, the Commission proposes to rescind Rule 600(b)(105), which defines the term "trade-through."[244] This defined term identifies the scope of the activity that is restricted

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243 Several commenters indicated changes to Rule 611 should be accompanied by consideration of appropriate changes to defined terms. *See, e.g.,* Second TTR Roundtable at 78-82 (Valerie Bogard, Rosenblatt Securities; Jeff Brown, Texas Stock Exchange; Bill Harts, Long Term Stock Exchange).

244 *See supra* note 85 and accompanying text.

pursuant to Rule 611.[245] If Rule 611 is rescinded, this definition is no longer necessary to retain in Regulation NMS.[246]

Next, the Commission proposes to rescind Rule 600(b)(81), which defines the term "protected bid or protected offer," and Rule 600(b)(82), which defines the term "protected quotation."[247] These terms identify the scope of quotations that are protected by Rule 611 and set forth a category of quotations that are subject to the locked and crossed market prohibitions pursuant to Rule 610(e).[248] If Rules 611 and 610(e) are rescinded, these definitions are no longer necessary to retain in Regulation NMS.[249]

The Commission proposes to rescind Rule 600(b)(54), which defines the term "manual quotations."[250] This term is used in Rule 610(e) to set forth the scope of certain locking and crossing behavior prohibited by the rule.[251] If Rule 610(e) is rescinded, this definition is no longer necessary to retain in Regulation NMS.[252]

The Commission also proposes to rescind Rules 600(b)(6) and (7), which define the terms "automated quotation" and "automated trading center," respectively.[253] These terms are themselves used in Rule 600(b) to define the terms "manual quotation," "protected bid," and "protected offer." The Commission is proposing to rescind the defined terms "manual

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245 *See supra* section II.A.

246 The term "trade-through" is also used in Rule 600(b)(89), which defines the term "regulatory data." The Commission is proposing to amend the definition of "regulatory data" to eliminate references to "trade-through." *See infra* notes 261-266 and accompanying text.

247 *See supra* note 82.

248 *See supra* sections II.A. and III.A. These terms are also currently used in the definitions of "trade-through" and "intermarket sweep order," which definitions are being proposed to be rescinded. See *supra* note 244 and *infra* note 255 and accompanying text.

249 The term "protected quotation" is also currently used in Rule 610(c), which sets forth a cap on access fees imposed by trading centers. The terms "protected bid" and "protected offer" are also currently used in Rules 600(b)(26) and 600(b)(72), which define the terms "core data" and "order size benchmark," respectively. The Commission is proposing to amend such rules to eliminate references to the terms "protected quotation," "protected bid," and "protected offer." *See infra* section IV.B.2.

250 *See supra* note 182 and accompanying text.

251 *See supra* section III.A.

252 The term "manual quotation" is also currently used to define the term "automated trading center" in Rule 600(b)(7). This term is being proposed to be rescinded. *See infra* note 253 and accompanying text.

253 *See supra* notes 87-88.

quotation," "protected bid," and "protected offer."[254] As a result, the definitions of "automated quotation" and "automated trading center" are no longer necessary to retain in Regulation NMS.

Finally, the Commission proposes to rescind Rule 600(b)(47), which defines the term "intermarket sweep order."[255] This term is used to provide an exception to the requirements of Rule 611.[256] If Rule 611 is rescinded, this defined term is no longer necessary to retain in Regulation NMS.[257]

Some of the terms proposed to be rescinded in Regulation NMS, including "protected quotation," "automated quotation," "manual quotation," and "intermarket sweep order," are used in exchange and FINRA rules that were adopted pursuant to the requirements of Rules 611 and 610(e).[258] The Commission believes that, if Rules 611 and 610(e) are rescinded, most, if not all, SROs would seek to amend their rules originally designed for compliance with Rules 611 and 610(e), including related defined terms. However, the Commission is requesting comment on whether there is a reason that such defined terms should be retained or modified, even if Rules 611 and 610(e) are rescinded, as proposed.[259]

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254 *See supra* notes 247 and 252 and accompanying text.

255 *See supra* note 93.

256 *See supra* section II.A.2. This term also is used by exchanges and national securities associations (*i.e.*, FINRA) to provide an exception to their prohibitions against locked and crossed markets. *See, e.g.,* FINRA Rule 6240 and NYSE Rule 7.37, which each provide an exception to the locking and crossing prohibition if the member displaying the locking or crossing quotation simultaneously routed an intermarket sweep order to execute against the full displayed size of the locked or crossed quotation. As discussed below, the Commission believes that, if Rule 610(e) is rescinded, most, if not all, SROs would seek to amend their rules originally designed for compliance with Rule 610(e). *See infra* notes 258-259 and accompanying text.

257 In order to avoid unnecessary confusion throughout the remainder of Regulation NMS, the Commission proposes to insert the word "Reserved" in the place of all defined terms proposed to be rescinded.

258 *See, e.g.*, NYSE Rule 1.1(v) (defining "protected bid," "protected offer", and protected quotation"); NYSE Rule 7.37(a) (Order Execution and Routing); NYSE Rule 7.31(e)(3) (Orders and Modifiers); Nasdaq Rule Equity 1, section 1(a)(12) (defining "protected bid", "protected offer", "protected quotation", and "intermarket sweep order"); Nasdaq Rule Equity 2, section 5(e) (Locked and Crossed Markets). These terms are also used in certain FINRA Rules. *See, e.g.,* FINRA Rules 6282 (Transactions Reported by Members to ADF); 6380A (Transaction Reporting). *See also supra* note 228.

259 *See infra* section IV.C.

2. Proposed Conforming Amendments to Other Rules in Regulation NMS

In conjunction with the proposed rescission of Rules 611 and 610(e) and related defined terms in Rule 600(b), the Commission proposes to amend certain other rules in Regulation NMS that reference the defined terms being proposed to be rescinded. First, Rule 610(c) of Regulation NMS, which sets forth a cap on the highest permitted level of fees a trading center may charge for access to the best quotations of a trading center, currently provides that such access fee cap is applicable to the execution of orders against a "protected quotation" and against any other quotation of a trading center that is the best bid or offer of a national securities exchange or national securities association.[260] The Commission proposes to amend Rule 610(c) to eliminate the reference to "protected quotation." As a result, Rule 610(c), as proposed to be amended, would apply to fees for the execution of an order against any quotation of the trading center that is the best bid or best offer of an exchange or association in an NMS stock.

Next, Regulation NMS includes provisions relating to the collection and dissemination of consolidated market data.[261] The definition of "consolidated market data"[262] includes, among other things, "core data"[263] and "regulatory data."[264] The term "core data" is defined to include, among other things, "protected bids and protected offers,"[265] and the term "regulatory data" is defined to include, among other things, "regulatory messages including…trade-through exempt indicators."[266] The Commission proposes to amend the definition of "core data" in Rule 600(b)(26) to eliminate the reference to "protected bid and protected offer" and to amend the definition of "regulatory data" in Rule 600(b)(89) to eliminate the reference to "trade-through exempt indicators."

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260 *See supra* note 76 and accompanying text for a description of Rule 610(c).

261 *See* Rule 603(b); 17 CFR 242.603(b). See also Rule 614; 17 CFR 242.614.

262 *See* Rule 600(b)(24); 17 CFR 242.600(b)(24).

263 *See* Rule 600(b)(26); 17 CFR 242.600(b)(26).

264 *See* Rule 600(b)(89); 17 CFR 242.600(b)(89).

265 *See* Rule 600(b)(26)(i)(E); 17 CFR 242.600(b)(26)(i)(E).

266 *See* Rule 600(b)(89)(ii)(B); 17 CFR 242.600(b)(89)(ii)(B).

Finally, Rule 605 of Regulation NMS requires market centers, brokers, and dealers to make available standardized, monthly reports of statistical information concerning their order executions in NMS stocks.[267] Such reports must include, among other things, information relating to the cumulative number of shares of the order size benchmark, which is a size improvement benchmark metric.[268] The term "order size benchmark" is defined in Rule 600(b)(72) in relevant part as "the number of shares of the full displayed size of all protected bids at the same price as the national best bid at the time of order receipt, in the case of a market or limit order to sell, or the full displayed size of all protected offers at the same price as the national best offer at the time of order receipt, in the case of a market or limit order to buy."[269] The Commission proposes to revise the definition of "order size benchmark" to remove the concept of "protected bids" and "protected offers," consistent with the proposed rescission of Rule 611 and related definitions. The Commission proposes to replace such references with references to bids and offers disseminated pursuant to an effective national market system plan. As discussed above, a key element of the definition of "protected quotation" is that it is disseminated pursuant to an effective national market system plan.[270] The Commission believes it is important to Rule 605 that the bids and offers used to calculate the order size benchmark are disseminated on the SIPs and readily accessible to reporting entities.[271] As a result, the Commission proposes to retain this element in the definition of "order size benchmark" so that "order size benchmark" is defined in terms of the number of shares of the full displayed size of *all bids or offers disseminated pursuant to an effective national market system plan* at the same price as the NBBO, as applicable, at the time of order receipt.

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267 *See* Rule 605; 17 CFR 242.605.

268 *See* Rule 605(a)(1)(ii)(R); 17 CFR 242.605(a)(1)(ii)(R).

269 *See* Rule 600(b)(72); 17 CFR 242.600(b)(72).

270 *See supra* section II.A.1.

271 *See* Rule 605 Amendments Adopting Release at 26478 (Apr. 15, 2024) ("Reporting entities will be able to capture information about these shares without relying on proprietary depth-of-book feeds because the SIP includes all protected bids and offers.").

Except as otherwise set forth herein, all other provisions of Regulation NMS would be retained and are not being proposed to be amended at this time.

3. Proposed Conforming Amendments to Rules Outside of Regulation NMS

In conjunction with the proposed rescission of Rules 611 and 610(e) and related definitions in Rule 600(b), the Commission proposes to amend certain Commission rules outside of Regulation NMS that reference the Regulation NMS rules and related definitions being proposed to be rescinded.

First, Rule 15c3-5 under the Exchange Act sets forth risk management controls for brokers or dealers with market access.[272] The rule sets forth an exception from most of its requirements where a broker-dealer "routes orders on behalf of an exchange or [ATS] for the purpose of accessing other trading centers with protected quotations in compliance with Rule 611 of Regulation NMS for NMS stocks, or in compliance with a national market system plan for listed options."[273] The Commission proposes to amend this rule to remove the language excepting a broker-dealer routing orders for the purpose of accessing other trading centers with protected quotations in compliance with Rule 611 from the requirements of the rule. As a result, the exception set forth in Rule 15c3-5(b) would apply only to broker-dealers routing orders on behalf of an exchange or ATS for the purpose of accessing other trading centers in compliance with an NMS Plan for listed options *(i.e.*, the Options Order Protection and Locked/Crossed Markets Plan).[274]

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272 17 CFR 240.15c3-5. Specifically, the rule requires brokers or dealers with access to trading securities directly on an exchange or ATS, including those providing sponsored or direct market access to customers or other persons, and broker-dealer operators of an ATS that provide access to trading securities directly on their ATS to a person other than a broker or dealer, to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of this business activity. *See* Rule 15c3-5(b) under the Exchange Act.

273 *See id. See also* Securities Exchange Act Release No. 63241 (Nov. 3, 2010), 75 FR 69792, 69800 (Nov. 15, 2010) (File No. S7-03-10) (Final Rule adopting Risk Management Controls for Brokers or Dealers with Market Access).

274 The Options Order Protection and Locked/Crossed Markets Plan is a Commission-approved NMS Plan that contains trade-through provisions for listed options. *See* Securities Exchange Act Release No. 60405 (July 30, 2009), 74 FR 39362 (Aug. 6, 2009) (Order Approving the National Market System Plan Relating to Options Order Protection and Locked/Crossed Markets Submitted by the Chicago Board Options

Next, Rule 15b9-1 under the Exchange Act sets forth a limited exemption for certain exchange members from the requirements of section 15(b)(8) of the Exchange Act[275] to become a member of a registered national securities association.[276] The rule provides an exemption from the requirements of section 15(b)(8) for Commission-registered broker-dealers that effect off-member-exchange securities transactions where the broker or dealer does not carry customer accounts, is a member of at least one exchange, and effects off-member-exchange securities transactions that: (1) result solely from orders that are routed by an exchange of which the broker or dealer is a member in order to comply with Rule 611 of Regulation NMS or the Options Order Protection and Locked/Crossed Market Plan;[277] or (2) are solely for the purpose of executing the stock leg of a stock-option order.[278] The Commission proposes to amend Rule 15b9-1 to remove the exemption for broker-dealers that effect off-member-exchange securities transactions that result from orders that are routed by an exchange in order to comply with Rule 611. As a result, the exemption from section 15(b)(8) set forth in Rule 15b9-1 would apply only to a broker-dealer that does not carry customer accounts, is a member of at least one exchange, and effects off-member-exchange securities transactions that: (1) result solely from orders that are routed by an exchange of which the broker or dealer is a member in order to comply with the Options Order Protection and Locked/Crossed Market Plan; or (2) are solely for the purpose of executing the stock leg of a stock-option order.

C. Request for Comment

The Commission generally requests comment from the public on the proposed rescission of certain defined terms in Rule 600(b) and the proposed modification of other Commission rules

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Exchange, Incorporated, International Securities Exchange, LLC, The NASDAQ Stock Market LLC, NASDAQ OMX BX, Inc., NASDAQ OMX PHLX, Inc., NYSE Amex LLC, and NYSE Arca, Inc.) ("Options Order Protection and Locked/Crossed Markets Plan"). *See also supra* note 83.

275 15 U.S.C. 78*o*(b)(8).

276 17 CFR 240.15b9-1.

277 *See supra* note 274.

278 *See* Rule 15b9-1 under the Exchange Act.

in connection with the proposed rescission of Rules 611 and 610(e). More specific requests for comment are set forth below. Responses supported by empirical data are particularly helpful.

29. Are the proposed rescissions of the defined terms in Rule 600(b) appropriate? Why or why not? Are there other defined terms set forth in Rule 600(b) that should be rescinded or modified? Are there any terms the Commission proposes to rescind that should be retained or modified? If so, why? For example, should the Commission retain or modify defined terms that are currently used in SRO rules?
30. Are the proposed amendments to other provisions of Regulation NMS to remove references to the rescinded defined terms appropriate? Why or why not? Are there any other amendments to Regulation NMS that are necessary or appropriate if the proposed rescissions of the defined terms in Rule 600(b) are adopted?
31. Are the proposed amendments described above to Commission rules outside of Regulation NMS that reference Rule 611, Rule 610(e), and related definitions appropriate? Why or why not? Are there any other Commission rules outside of Regulation NMS that the Commission should modify if Rule 611, Rule 610(e), and related defined terms are rescinded?
32. If the proposed amendments to Regulation NMS are adopted, should the Commission allow the SROs to determine whether any NMS Plans should be changed to reflect such amendments? Alternatively, should the Commission itself change any NMS Plans pursuant to Rule 608 of Regulation NMS to reflect the proposed amendments to Regulation NMS, should they be adopted? Why or why not?

V. Paperwork Reduction Act

A. Rescission of Rule 611

Rule 611 currently contains one collection of information. The title for this existing collection of information is Order Protection Rule – Rule 611 of Regulation NMS. OMB approved this collection of information and assigned it OMB Control No. 3235-0600.

Specifically, Rule 611 requires a trading center[279] to establish, maintain, and enforce written policies and procedures reasonably designed to prevent trade-throughs on that trading center of protected quotations in NMS stocks, unless a valid exception applies, and, if relying on such an exception, that are reasonably designed to assure compliance with the terms of the exception. The nature and extent of the policies and procedures that a trading center is required to establish to comply with this requirement depends upon the type, size, and nature of the trading center. The purpose of the collection of information has been to help ensure that "trading centers" and their customers, subscribers, members, and employees, as applicable, generally avoid trade-throughs, unless a valid exception is applicable.

Rescission of Rule 611 would eliminate this collection of information and, therefore, would eliminate the associated compliance burdens for trading centers.

If the rescission of Rule 611 is approved, upon publication of the final rule in the Federal Register, the Commission will submit a request to OMB to discontinue OMB Control Number 3235-0600.[280]

B. Request for Comment

33. The Commission believes that this proposal would not impose any new collection of information requirement as defined by the Paperwork Reduction Act of 1995, as amended ("PRA"). The Commission requests comment on (a) whether the proposed rescission of Rules 611 and 610(e), and the related amendments to Regulation NMS definitions and related rules, would create any new, or revise any existing, collection of information pursuant to the PRA and (b) to evaluate the accuracy of the

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279 *See supra* note 81.

280 The Commission estimates that there are currently 305 trading centers subject to Rule 611. This estimate includes 20 exchanges (17 exchanges that trade NMS stocks + three exchanges that are approved but not yet operating) and 33 ATSs that trade NMS stocks. Based on data from CAT for January 2026, the estimate also includes 96 exchange market makers and 225 broker-dealers acting as OTC market maker or executing orders internally by trading as principal or crossing orders as agent. 69 broker-dealers are both exchange market makers and an OTC market maker or broker-dealer internalizing orders. 20 + 33 + 96 + 225 - 69 = 305 trading centers.

Commission's assessment that the proposed rescission of Rule 611 would eliminate the collection of information and its associated compliance burdens for respondents.

Persons submitting comments on the collection of information requirements should direct them to the OMB Desk Officer for the Securities and Exchange Commission, MBX.OMB.OIRA.SEC_desk_officer@omb.eop.gov, and should also send a copy of their comments to Secretary, Securities and Exchange Commission, using any of the methods in the ADDRESSES section, with reference to File Number S7-2026-20. Requests for materials submitted to OMB by the Commission with regard to this collection of information should be in writing, with reference to File Number S7-2026-20 and be submitted to the Securities and Exchange Commission, Office of FOIA/PA Services, 100 F Street NE, Washington, DC 20549-2736. As OMB is required to make a decision concerning the collection of information between 30 and 60 days after publication, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication.

VI. Economic Analysis

A. Introduction

The Commission is mindful of the economic effects, including the benefits and costs, of the proposed amendments.[281] The Commission has considered the economic effects of the proposed amendments and, wherever possible, the Commission has quantified the likely economic effects. The Commission is providing both a qualitative assessment and quantified estimates of the potential economic effects of the proposed amendments where feasible. The Commission has incorporated data and other information to assist it in the analysis of the economic effects of the proposed amendments. However, as explained in more detail below, the

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[281] Section 3(f) of the Exchange Act requires the Commission, whenever it engages in rulemaking and is required to consider or determine whether an action is necessary or appropriate in the public interest, to consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation. Additionally, section 23(a)(2) of the Exchange Act requires the Commission, when making rules under the Exchange Act, to consider the impact such rules will have on competition. Section 23(a)(2) of the Exchange Act prohibits the Commission from adopting any rule that would impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act.

Commission is unable to quantify certain economic effects because 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. 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. Our inability to quantify certain costs, benefits, and effects does not imply that such costs, benefits, or effects are less significant.

In the years since Rules 611 and 610(e) of Regulation NMS were adopted, the structure of the U.S. equity markets has evolved dramatically. Additionally, these rules have contributed to a number of economic consequences for market participants, including regulatory compliance costs, market structure complexity, limitations on order handling and execution choices, exchange proliferation, and fragmentation of liquidity on equity exchanges. Furthermore, the Commission expects that in today's markets the negative impact on investor execution quality from removing these rules would be minimal.[282] For these reasons, which are discussed further below,[283] the Commission is proposing to rescind Rules 611 and 610(e).

B. Economic Baseline

The baseline against which the costs, benefits, and the effects on efficiency, competition, and capital formation of the proposed amendments are measured consists of the current state of the market; the current practices of national securities exchanges, other trading centers, and registered broker-dealers; and the current regulatory framework.[284]

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282 *See infra* section VI.C.1.b, discussing these minimal impacts.

283 *See infra* sections VI.B.2., VI.B.3., and VI.B.4., discussing current costs of these rules, and section VI.C.1.b., discussing the impact of rescinding Rule 611 on execution quality.

284 *See, e.g.*, *Nasdaq v. SEC*, 34 F.4th 1105, 1111–14 (D.C. Cir. 2022). This baseline approach also follows Commission staff guidance on economic analysis for rulemaking. *See* SEC, *Current Guidance on Economic Analysis in SEC Rulemaking* 6 (Mar. 16, 2012), *available at* https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf (''The economic consequences of proposed rules (potential costs and benefits including effects on efficiency, competition, and capital formation) should be measured against a baseline, which is the best assessment of how the world would look in the absence of the proposed action.''); *id.* at 7 (''The baseline includes both the economic attributes of the relevant market and the existing regulatory structure.'').

1. Regulatory Baseline

a. Trading Center and Broker-Dealer Practices for Complying with Rule 611

In the years since the adoption of Rule 611, market participants have developed various practices to comply with its requirements, including practices for determining the best bid and offer on a given exchange, methods for ensuring execution systems comply with Rule 611's prohibitions, and practices for surveillance in accordance with Rule 611(a)(2).[285]

Exchanges have promulgated their own rules to comply with Rule 611, and put in place compliance processes.[286] Each exchange has a methodology for determining its best bid and offer in each NMS stock that takes into account the availability of odd-lot quotes on their exchanges.[287] Specifically, each exchange aggregates all displayed odd-lot quotes, starting with the best priced odd-lot, across multiple prices, until their combined size is equal to or greater than a round lot. Then the exchange disseminates the least aggressive price (*i.e.*, lowest priced bid and highest priced offer) of the aggregated odd-lot quotes, with their aggregated size (rounded down to the nearest round lot) to the SIPs. The SIPs use this information to determine the National Best Bid ("NBB") and National Best Offer ("NBO") for each NMS stock by selecting the highest priced bid and lowest priced offer from among the best bid and offer quotes across all exchanges.[288] The SIPs then disseminate information on the NBB and NBO and each

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285 The requirements of Rule 611 of Regulation NMS, which generally prohibit trading centers from executing orders that trade-through protected quotations, are described above (*see supra* section II.A.). In addition to these restrictions on execution, Rule 611(a)(2) requires a trading center to regularly surveil to ascertain the effectiveness of the policies and procedures to prevent trade-throughs and take prompt action to remedy any deficiencies.

286 *See*, *e.g.*, Nasdaq Rule 4702(a) ("All Order Types and Order Attributes operate in a manner that is reasonably designed to comply with the requirements of Rules 610 and 611 under Regulation NMS"), Nasdaq Rule 4758(a)(1) ("All routing of orders shall comply with Rule 611 of Regulation NMS under the Exchange Act"), *available at* https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/Nasdaq%20Equity%204.

287 Because only round-lot-sized quotes have the potential to be protected, Rule 611 does not cover odd-lot-sized quotes on the automated trading center that might nevertheless be displayed at better prices (*i.e.,* a higher bid price or lower ask price) than the best bid and offer.

288 If multiple exchanges have the same best bid or offer price, then the SIPs select the exchange with the largest size at that price as the NBB or NBO. If multiple exchanges also tie for the largest size, then the SIPs select the quote they received from these exchanges first as the NBB or NBO. *See* Rule 600(b)(60).

exchange's best bid and offer, including whether the best bid and offer qualify as a protected quote under Rule 611.

The Commission understands that, in order to ensure compliance with Rule 611, automated features to prevent trade-throughs are usually incorporated directly into a trading center's matching engine or order execution system. Such features would require a view of prevailing quotations in the market to function. Trading centers may use exchange proprietary market data feeds, the SIPs, or a combination of both, for this purpose.[289] If a trading center receives an order that would (based on its view of the market) result in the trade-though of a protected quote on another trading center, then the order may be routed to the other trading center to execute against the protected quote. Alternatively, it may cancel the order.[290] Trading centers may charge a fee if they route an order and it executes on another trading center.[291]

Exchanges have also promulgated rules for when broker-dealers use the ISO exception to Rule 611.[292] The Commission understands that broker-dealers will generally incorporate automated features to prevent trade-throughs into their smart order router ("SOR"). Similar to trading centers, broker-dealers operating SORs also may use exchange proprietary market data

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289 Some more sophisticated trading centers may subscribe to and aggregate the exchange direct feeds themselves, while other trading centers may pay a third-party market data aggregator to aggregate the exchange direct feeds and provide them with a consolidated view of the market. *See infra* section VI.B.4.c.

290 The action the trading center takes could be based on either its own policies and procedures or customer order instructions. For example, trading centers that do route orders to other venues may give their customers the option, often through an order type or modifier, to specify that their order should not be routed and instead be canceled if it cannot be executed on the trading center. *See, e.g.,* Sida Li et al., *Refusing the Best Price?* 147 J. FIN. ECON. 317 (2023) (discussing use of non-routable orders). For larger orders, a trading center may also send out ISOs to execute against the protected quotes on other venues and then execute the rest of the order, per the exception in Rule 611(b)(6). *See, e.g.,* BIDS ATS Form ATS-N Part III, Item 9 (as of 11/25/2025), *available at* https://www.sec.gov/Archives/edgar/data/1368727/000110465925115861/xslATS-N_X01/primary_doc.xml (discussing the ATS use of ISO orders for executions outside the NBBO).

291 *See*, *e.g.*, N.Y. STOCK EXCH., PRICE LIST 2026, at 11-12 (2026), *available at* https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Price_List.pdf; Nasdaq Equity Rule 7, section 118, *available at* https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/Nasdaq%20Equity%207.

292 *See*, *e.g.*, Nasdaq Rule 4703(j) ("In connection with the trading of securities governed by Regulation NMS, Intermarket Sweep Orders shall be executed exclusively within the System and the entering Participant shall be responsible for compliance with Rules 610 and 611 under Regulation NMS with respect to order protection and locked and crossed markets with respect to such Orders. Orders eligible for execution outside the System shall be processed in compliance with Regulation NMS, including accessing Protected Quotations and resolving locked and crossed markets, as instructed"), *available at* https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/Nasdaq%20Equity%204.

feeds, the SIPs, or a combination of both to obtain the real-time market data necessary to route orders and identify protected quotes.[293]

The Commission understands that some broker-dealers may also send orders marked as ISO even if they are not attempting to sweep through multiple price levels. On the timescales on which market participants react to market changes, it can frequently happen that, at a given instant, different market participants have a different view as to what the NBBO is.[294] It is therefore possible that a broker-dealer's view of the NBBO differs from that of an exchange due to latency in that exchange's reaction to market changes. To prevent this latency from interfering with routing outcomes, the broker-dealer may mark its order as ISO to indicate to the exchange that, by its own view of the market, this order does not trade through protected quotations. Marking an order as ISO allows the exchange that receives the order to execute the order immediately without regard to protected quotations in other markets.

In addition to requiring policies and procedures reasonably designed to prevent trade-throughs, Rule 611 also requires trading centers to regularly surveil to ascertain the effectiveness of the policies and procedures. The Commission understands that the sophistication of these surveillance programs may vary based on the size and expertise of the trading center. Larger, more sophisticated entities may have developed internal processes that use historical or real-time market data to monitor for compliance with Commission rules, including Rule 611,[295] and related FINRA rules, including Rule 5310.[296] These firms may match either all or a subset of their order and trade records with historical market data feeds to detect if any trade-throughs occurred.[297] As the data analysis and tools required to perform these checks would be similar to

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293 *See supra* note 289 and accompanying text.

294 *See infra* note 450 and accompanying text, discussing different sources of latency.

295 Trading centers may also use this real-time monitoring process to detect problems with their matching engine or market data feeds.

296 *See infra* section VI.B.1.c.

297 These trading centers may compare their trades to market data quotes up to one second before the trade occurred in order to check if a trade-through occurred. *See supra* section II.A.2., discussing the "one second window" exception to Rule 611.

what would be required to surveil for a large range of issues, the Commission understands that these firms may perform this analysis as part of a batch process that also examines for other compliance violations, rather than as a standalone process.

Smaller trading centers or smaller broker-dealers routing orders may be more likely to use a third-party service to surveil for their compliance with Commission rules, including Rule 611, and related FINRA rules, including Rule 5310. These firms usually send their order and trade records to a third-party that specializes in compliance monitoring or transaction cost analysis ("TCA") and may offer the examination of trade-through compliance as part of a package of services. The third party then matches the trade and order records with historical market data and examines for compliance with and violations of trading rules, including trade-throughs.

The smallest trading centers and broker-dealers routing orders may manually monitor for compliance with Rule 611 for a small sample of their orders. The Commission understands that these firms do not usually compare their order and trade records to historical market data. Instead, these firms tend to take manual snapshots of what the market looks like for a few of their orders and then review these snapshots for compliance with Rule 611 and other trading rules.

b. Trading Center and Broker-Dealer Practices for Complying with Rule 610(e)

FINRA[298] and the exchanges[299] have promulgated rules for complying with Rule 610(e). Market participants, likewise, have put in place practices to comply with the SRO rules

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298 FINRA has implemented Rule 6240 which requires, with certain exceptions, that FINRA members "shall reasonably avoid displaying, and shall not engage in a pattern or practice of displaying, any quotations that lock or cross a protected quotation." *See* FINRA Rule 6240(b). This rule largely prevents locked and crossed markets on ATSs in NMS stocks. FINRA also has a similar Rule 6437 which applies to OTC equity securities.

299 *See* NYSE Rule 7.37(f)(2) ("the Exchange and members of the Exchange shall reasonably avoid displaying, and shall not engage in a pattern or practice of displaying, any quotations that lock or cross the PBBO"), *available at* https://nyseguide.srorules.com; *see also supra* note 286 (citing Nasdaq Rules 4702(a), 4758(a)(1)).

promulgated to implement with the requirements of Rule 610(e), including rules for ranking and displaying orders, operational practices to ensure that locked or crossed markets are avoided, and operational procedures to address the broader implications of these prohibitions.[300]

The Commission understands that, in practice, exchanges will display odd-lot and round-lot orders that lock or cross a resting odd-lot quote on another exchange, but will not display an odd-lot order that locks or crosses a resting round-lot quote on another exchange, even though such display would not violate the requirements of Rule 610(e), because Rule 610(e) only applies to the display of quotations of round-lot size.[301] Exchanges and national securities associations are allowed to display odd-lot-sized orders that lock or cross another odd-lot or round-lot-sized quotation. In effect, the practice of not displaying an odd-lot quote that locks or crosses a round-lot quote reflects an industry convention to preserve the prominence of resting round-lot quotations.

The Commission understands that, in order to ensure compliance with Rule 610(e), automated features to avoid posting quotes that would lock or cross the market are usually incorporated directly into a trading center's matching engine. When a trading center receives a limit order to display, it compares the price of the limit order to the NBBO that it calculates from real-time market data it obtains from the SIPs or proprietary feeds. If the order would lock or cross the best opposite side quote offered by other trading centers (the NBO for a buy limit order and the NBB for a sell limit order), then the trading center may take one of several actions. If the

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300 The requirements of Rule 610(e) of Regulation NMS, which generally prohibit market centers from posting a displayed round-lot order that would lock or cross a protected quote, are described above (*see supra* section III.A.). The SRO rules which implement these prohibitions include exceptions pursuant to current staff guidance. (*see* https://www.sec.gov/divisions/marketreg/nmsfaq610-11.htm#sec5 at section 5: SRO Lock/Cross Rules.) The ISO exception permits market participants to "ship-and-post" via ISO orders. They can post an order on one side of the market that would lock or cross the market, so long as they execute the quotes on the other side of the market that they are locking/crossing via an intermarket sweep order. For example, if a trader wants to post a bid at $10.00, but there are offers at $9.99 and $10.00, normally the trader would be prohibited from posting the bid at $10.00 because it would cross the $9.99 offer quote and lock the $10.00 offer quote. However, using this exception, the trader could post the bid at $10.00 while using an ISO order to execute against the offers at $9.99 and $10.00, which effectively unlocks/uncrosses the market. The self-help exception applies to 610(e) in the same manner as the self-help exception of Rule 611.

301 *See supra* note 181.

limit order is routable[302] and able to take liquidity,[303] then the trading center may route the order to execute against the NBB or NBO. Alternatively, the trading center may display it at a price one tick away from the locking price. Finally, the exchange may cancel the order. Exchanges typically permit the broker-dealer routing the order to select the treatment it prefers in the event that the order would lock or cross the market. These automated processes help ensure compliance while providing members flexibility in how their orders are handled.

For example, one exchange has both Price-to-Comply and Price-to-Display order types, which are designed to comply with Rule 610(e) in different ways.[304] If the limit price on a Price-to-Comply Order would lock or cross a protected quote, then the order will be displayed one tick lower than the current best offer (for buy orders) or one increment higher than the current best bid (for sell orders). However, the Price-to-Comply Order would also be ranked in the matching engine with a non-displayed price equal to the current best offer (for buy orders) or current best bid (for sell orders). In contrast, for a Price-to-Display order, both the displayed price and the price the order is ranked at in the matching engine would be one tick away from the locked or crossed best bid (for sell orders) or best offer (for buy orders). For Price-to-Comply orders, this exchange also offers a range of options for what will happen to the order once the market unlocks. The order may: 1) remain on the book with its non-displayed price and time priority, but continue to be displayed one tick away from this price (*i.e.*, it would be displayed at the price

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302 An order is "routable" if the order type selected by the market participant who sent the order to the exchange is not an order type for which the exchange has indicated that it will not re-route the order to another trading center.

303 An order would be unable to take liquidity if the order type selected by the market participant who sent the order to the exchange is an order type which indicates that the order is not to be executed if it would be the aggressive order of the trade. An example of an order that is not able to take liquidity would be a "Post-Only" order. Typically, a Post-Only order with a marketable limit price will either be displayed one tick away from the price that would lock the market, or canceled, depending on the broker-dealer's instructions. (*See*, *e.g.*, NASDAQ, POST-ONLY ORDER (2026), *available at* https://nasdaqtrader.com/content/ProductsServices/Trading/postonly_factsheet.pdf, describing the Post-Only order type for Nasdaq).

304 For additional information on Price-to-Comply and Price-to-Display Orders, *see* Nasdaq Texas Rules 4702(b)(1) and 4702(b)(2), *available at* https://listingcenter.nasdaq.com/rulebook/nasdaqtx/rules/Nasdaq%20Texas%20Equity%204. These rules describe further details about the behavior of Price-to-Comply and Price-to-Display order types.

assigned by the price-slide mechanism before the market unlocked); 2) be canceled back to the member; or 3) be automatically displayed at the order's original limit price, but with a new time stamp.

Some exchanges, NMS Stock ATSs, and SDPs have special rules for handling orders and executions when the NBBO is locked or crossed. The Commission understands that most NMS Stock ATSs and SDPs have policies that prevent orders from executing when the NBB and NBO are crossed.[305] Some NMS Stock ATSs and SDPs also have policies to not execute orders when the NBB and NBO are locked.[306] Exchanges and NMS Stock ATSs may also have special rules for handling pegged[307] orders if the NBB and NBO become locked or crossed.[308]

Rule 605 requires trading centers and broker-dealers to classify orders and compute statistics based on the NBB and NBO. However, a crossed NBB and NBO may interfere with order classifications and with the computing of certain statistics. When the NBBO is crossed for a significant period of time, it raises serious questions whether the quotes continue to provide a reliable benchmark for the statistical measures included in the Rule. Therefore, the Commission has exempted all orders from being included in Rule 605 reports if they reference a NBBO that has been crossed for 30 seconds or more.[309] For NBBOs that are crossed for less than 30

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305 *See* ROSENBLATT'S 2025 US EQUITY TRADING GUIDE, *available at* https://www.rblt.com/market-structure-reports/rosenblatts-2025-us-equity-trading-guide (accessed through Market Structure Analysis dataset).

306 Some NMS Stock ATSs or SDPs may execute orders during a locked market or have policies that allow their subscribers the option to specify whether or not their orders will execute during a locked market. *See id.*

307 Exchanges and NMS Stock ATSs offer a number of order types that are pegged to the NBB, NBO, or NBBO midpoint. For example, a midpoint peg order might permit a non-displayed order to rest on the limit order book with a limit price equal to the midpoint of the NBBO. These orders automatically adjust their prices as the NBB and NBO change. Market participants can also specify these pegged orders to have an offset. For example, a market participant can submit a primary peg buy order with an offset of 1 tick, which would result in the order always being priced 1 tick more aggressively than the NBB.

308 For example, some market centers may remove these orders from the limit order book or cancel them while others may not reprice them if the NBB and NBO become locked or crossed. *See, e.g.,* Nasdaq Rule 4702 (Order Types) https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/Nasdaq%20Equity%204; NYSE ARCA Rule 7.31-E (Orders and Modifiers) https://nysearcaguide.srorules.com/rules/b44a1e347ccd1000af3290b11c2ac4f10258.

309 *See* Letter from Annette L. Nazareth, Director, Division, SEC, to Stuart J. Kaswell, Senior Vice President and General Counsel, Securities Industry Association, dated March 12, 2001 ("SIA Exemption Letter"); *see also* 2026 Rule 605(b) Exemption, *supra* note 235.

seconds, staff guidance recommends that the next-in-time uncrossed NBBO be used in place of the crossed NBBO for computing Rule 605 reports.[310]

c. Best Execution

Broker-dealers are subject to a duty of best execution, which requires them to execute customers' trades at the most favorable terms reasonably available under the circumstances. The best execution obligation is independent from the requirements under Rule 611. A broker's duty of best execution derives from common law agency principles and fiduciary obligations, and is incorporated implicitly, through judicial and Commission decisions, in the antifraud provisions of the Federal securities laws.[311] The duty of best execution requires a broker-dealer to execute customers' (either retail or institutional investors) trades at the best reasonably available price, considering a non-exhaustive list of factors that may be relevant to broker-dealers' best execution analysis.[312] These factors may include execution price, the size of the order, speed of execution, the trading characteristics of the security involved, the availability of accurate information affecting choices as to the most favorable market center for execution and the availability of technological aids to process such information, and the operational costs and difficulty associated with achieving an execution in a particular market center.[313] The importance of each factor may differ depending on whether the order is retail or institutional and also due to market conditions and order characteristics.

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310 *See* SEC. & EXCH. COMM'N, DIV. OF MKT. REGUL., STAFF LEGAL BULL. NO. 12R (REVISED), FREQUENTLY ASKED QUESTIONS ABOUT RULE 11AC1-5, Q. 7 (2001), *available at*: https://www.sec.gov/rules-regulations/staff-guidance/staff-legal-bulletins/slb-12r. The guidance document's reference to the "Consolidated BBO" applies to the NBBO. This guidance will be superseded on August 1, 2026. *See* Rule 605 FAQs, *supra* note 235.

311 *See* Order Execution Obligations Adopting release at 48322. The Commission has not adopted its own rule governing a broker-dealer's legal duty of best execution.

312 *See Newton v. Merrill, Lynch, Pierce, Fenner & Smith, Inc.*, 135 F.3d 266, 270 (3d Cir. 1998); *see also Kurz v. Fidelity Mgmt. & Rsch. Co.*, 556 F.3d 639, 640 (7th Cir. 2009).

313 *See* Order Execution and Routing Practice Release at 75418; NMS Adopting Release at 37538 & n. 341. The factors that are important to the best execution decision may vary based on the type of customer, market conditions, and order characteristics. For example, execution price may be an important factor for a marketable retail order but may not be as important for a large, institutional order. *See, e.g.,* First TTR Roundtable Transcript at 236 (Mehmet Kinak, T. Rowe Price) (discussing best execution for institutional orders).

FINRA's best execution rule (FINRA Rule 5310) requires that a member (*i.e.*, a registered broker-dealer) and persons associated with a member use reasonable diligence to ascertain the best market for the subject security and buy or sell in such market so that the resultant price to the customer is as favorable as possible under prevailing market conditions in any transaction for or with a customer or customer of another broker-dealer (*e.g.*, wholesalers handling retail orders).[314] FINRA Rule 5310 applies when the member acts as agent for the account of its customer as well as when it executes a transaction as a principal.[315] FINRA's rule lists a set of non-exclusive factors that will be considered in determining whether a member has used reasonable diligence: (i) the character of the market for the security (*e.g.*, price, volatility, relative liquidity, and pressure on available communications); (ii) the size and type of transaction; (iii) the number of markets checked; (iv) accessibility of the quotation; and (v) the terms and conditions of the order which result in the transaction, as communicated to the member and persons associated with the member.[316]

FINRA's best execution rule and guidance addresses issues associated with payment for order flow. Some retail brokers maintain arrangements involving payment for order flow from wholesalers. Wholesalers internalize a significant portion of retail orders purchased via payment for order flow. FINRA's best execution guidance states that firms that provide payment for order flow for the opportunity to internalize customer orders cannot allow such payments to interfere with their best execution obligations.[317] For example, inducements such as payment for order

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314 *See* FINRA Rule 5310(a)(1).

315 *See* FINRA Rule 5310(e). FINRA Rule 5310 also addresses two situations where a member's best execution obligation is modified or no longer applicable: (i) if a broker-dealer "receives an unsolicited instruction from a customer to route that customer's order to a particular market for execution, the member is not required to make a best execution determination beyond the customer's specific instruction" and (ii) "when another broker-dealer is simply executing a customer order against the member's quote." FINRA Rules 5310.08, 5310.04.

316 *See* FINRA Rule 5310(a)(1).

317 *See* FINRA REGUL. NOTICE NO. 21-23, BEST EXECUTION & PAYMENT FOR ORDER FLOW 4 (2023), https://www.finra.org/rules-guidance/notices/21-23.

flow and internalization may not be taken into account in analyzing market quality or determining where to route a customer order.[318]

FINRA Rule 5310 requires broker-dealers to conduct at least quarterly reviews of the quality of execution they obtain.[319] Introducing brokers perform best execution reviews by evaluating the execution quality achieved by executing brokers to which they route their customers' orders. Introducing brokers may rely on the best execution review processes of their executing brokers and use these to evaluate the execution quality of orders by comparing execution statistics of executing brokers with which the introducing broker has a relationship.[320] Executing brokers review execution quality by comparing execution statistics of executions received given particular execution methods, *e.g.*, routing to a particular market center or internalization. Some brokers utilize independent third-party TCA providers to produce quantitative execution-quality statistics to supplement their execution-quality reviews.

d. Other Relevant Commission Rulemakings

The Commission has adopted new rules that will impact market practices in the baseline for the proposed amendments. However, as discussed in more detail below, some provisions of these rules have not been fully implemented, and so they have not yet affected market practices. As a result, the data used to measure the baseline for the proposed amendments reflect the regulatory structure in place prior to the implementation of some provisions of these rules. This section will discuss the status of the implementation of these rules and provide an assessment of the potential effects that the implementation can have on the baseline estimations.

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318 *Id.* FINRA's guidance stated that "the possibility of obtaining price improvement is a heightened consideration when a broker-dealer receives payment for order flow." *Id.* at 3-4.

319 *See* FINRA Rule 5310.09(a).

320 Broker-dealers (including introducing brokers) that route to clearing or executing brokers on an agency basis may rely on the best execution review of their clearing firm or executing broker-dealers. *See* FINRA Rule 5310.09(c). The clearing firm or executing broker-dealer must fully disclose the statistical results and rationale of the review, and the routing broker-dealer must periodically review how the review is conducted and the results of the review.

We discuss three rules with such partial implementations. First, in 2020, the Commission adopted a new rule and amended existing rules to establish a new infrastructure for consolidated market data ("MDI Rules").[321] Second, in 2024 the Commission adopted amendments to the disclosure requirements of Rule 605 of Regulation NMS.[322] Third, in 2024 the Commission adopted amendments to certain rules under Regulation NMS to add an additional minimum pricing increment for the quoting of certain NMS stocks, reduce the access fee caps for protected quotations of trading centers, increase the transparency of exchange fees and rebates, and accelerate the implementation of rules that will make information about the market's best priced, smaller-sized orders publicly available.[323] Because key components of these rulemakings are not yet operative, their full effects are not reflected in the current baseline.

i. Market Data Infrastructure Rules

Consolidated market data are made widely available to investors through the national market system, a system set forth by Congress in section 11A of the Exchange Act[324] and facilitated by the Commission in Regulation NMS.[325] Market data are collected by exclusive SIPs,[326] which consolidate that information and disseminate an NBBO and last sale information. For quotation information, only the 17 national securities exchanges that currently trade NMS stocks provide quotation information to the SIPs for dissemination in consolidated market data.[327] FINRA has the only SRO display-only facility (the ADF).[328] No broker-dealer, however,

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321 *See* Market Data Infrastructure Adopting Release.

322 *See* Rule 605 Amendments Adopting Release.

323 *See* 2024 Regulation NMS Amendments.

324 *See* 15 U.S.C. 78k-1.

325 17 CFR 242.600 through 242.614.

326 *See* Market Data Infrastructure Adopting Release, 86 FR at 18598-99 (describing that the exclusive SIPs, among other things, disseminate core data, which currently consist of: (1) the price, size, and exchange of the last sale; (2) each exchange's current highest bid and lowest offer and the shares available at those prices; and (3) the NBBO). A securities information processor ("SIP") is defined in section 3(a)(22)(A) of the Exchange Act. *See* 15 U.S.C. 78c(a)(22)(A). Further, an "exclusive processor" (also known as an exclusive SIP) is defined in section 3(a)(22)(B) of the Exchange Act. *See* 15 U.S.C. 78c(a)(22)(B).

327 *See supra* note 36.

328 *See supra* note 26.

currently uses it to display quotations in NMS stocks in consolidated market data.[329] Disseminated quotation information includes each exchange's current highest bid and lowest offer and the shares available at those prices, as well as the NBBO. For transaction information, currently all national securities exchanges that trade NMS stocks, as well as FINRA, provide real-time transaction information to the SIPs for dissemination in consolidated market data. Such information includes the symbol, price, size, and exchange of the transaction, and it includes odd-lot transactions.

Currently, information on all odd-lot orders inside the NBBO and information about quotes that are outside of an exchange's best bid and best offer (*i.e.,* depth of book information) are available only to investors who subscribe to the proprietary data feeds of all exchanges.[330] The same is true for comprehensive odd-lot and depth of book information. Among other things, the MDI Rules update and expand the content of consolidated market data to include: (1) certain odd-lot information;[331] (2) information about certain orders that are outside of an exchange's best bid and best offer (*i.e.*, certain depth of book data);[332] and (3) information about orders that are participating in opening, closing, and other auctions.[333]

The MDI Rules also introduce a decentralized consolidation model under which competing consolidators, rather than the existing exclusive SIPs, will collect, consolidate, and

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329 *See supra* note 90.

330 The exclusive SIPs currently disseminate information on the best odd-lot order to buy and the best odd-lot order to sell ("BOLO"). The best odd-lot order to buy means the highest priced odd-lot order to buy that is priced higher than the national best bid, and the best odd-lot order to sell means the lowest priced odd-lot order to sell that is priced lower than the national best offer. The 2024 Regulation NMS Amendments adopted a requirement for the exclusive SIPs to disseminate information on the BOLO starting in May 2026. *See* 2024 Regulation NMS Amendments at 81676-81. The exclusive SIPs began disseminating BOLO information on April 27, 2026. *See UTP Vendor Alert #2026 – 5: UTP Data Service (UQDF) Updated Specs Related to Dissemination of Odd-Lot data*, NasdaqTrader (Feb. 2, 2026), https://www.nasdaqtrader.com/TraderNews.aspx?id=UTP2026-05. The 2024 Regulation NMS Amendments also adopted a requirement for the exclusive SIPs to disseminate odd-lot information as defined under the MDI Rules starting in May 2026. *See* 2024 Regulation NMS Amendments at 81674-76, 81681. However, on Jan. 15, 2026, the Commission granted an exemptive relief request delaying the requirement for the exclusive SIPs to begin disseminating odd-lot information until May 2028. *See* Securities Exchange Act Release No. 104612 (Jan. 15, 2026), 91 FR 12577 (Jan. 21, 2026).

331 *See* 17 CFR 242.600(b)(69); Market Data Infrastructure Adopting Release at 18613.

332 *See* Market Data Infrastructure Adopting Release at 18602.

333 *See id.* at 18630.

disseminate certain NMS information.[334] These competing consolidators are not required to offer a product containing all elements of consolidated market data, but are able to develop the consolidated market data products that their subscribers demand.[335] This model is intended to promote competition in how consolidated market data products are created and delivered.

The MDI Rules also introduced a four-tiered definition of round lot that is tied to a stock's average closing price during the Evaluation Period.[336] For stocks with prices greater than $250, a round lot is defined as consisting of between 1 and 40 shares, depending on the specific price tier.[337] The MDI round-lot rules were implemented on November 3, 2025.[338] The compliance date for the SIPs to collect, consolidate, and disseminate the odd-lot information required by the MDI Rules is May 1, 2028.[339]

In the Market Data Infrastructure Adopting Release, the Commission established a transition period for implementing the remaining requirements of the MDI Rules.[340] The starting point will be the Commission's approval of the plan amendment(s) required by Rule 614(e) ("MDI Plan Amendments").[341] After approval, the next step will be a 180-day development period, during which competing consolidators can register with the Commission.[342] Based on the times provided in the transition plan for implementation of the MDI Rules, the Commission

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334 *See id.* at 18637.

335 *See id.* at 18603-4, 18671-72.

336 Round lots will be updated every six months, with the round lot determined by the stock's average price with a one-month lag—*i.e.,* a stock's round lot is updated in May of every year using its average stock price in March, and the round lot is updated again in November using its average stock price in September. *See* 2024 Regulation NMS Amendments at 81699-700; 17 CFR 242.600(b)(93)(iv).

337 *See* Market Data Infrastructure Adopting Release at 18602. The Commission adopted a four-tiered definition of round lot: 100 shares for stocks priced $250.00 or less per share and for new NMS stocks, 40 shares for stocks priced $250.01 to $1,000.00 per share, 10 shares for stocks priced $1,000.01 to $10,000.00 per share, and 1 share for stocks priced $10,000.01 or more per share. *See* 17 CFR 242.600(b)(93)(i) through (ii).

338 *See* 2024 Regulation NMS Amendments at 81681.

339 *See supra* note 330.

340 *See* Market Data Infrastructure Adopting Release at 18699-18701.

341 *See id*. at 18699.

342 *See id*. at 18699-18700.

estimated that the full implementation of the MDI Rules will occur at least two years after the Commission's approval of the MDI Plan Amendments.[343]

The Operating Committees of the CTA/CQ Plan and UTP Plan filed the MDI Plan Amendments on November 5, 2021.[344] The Commission disapproved the proposed amendments on September 21, 2022.[345] As a result, the participants in the effective national market system plan(s) will need to develop and file new proposed amendments, as required by Rule 614(e), before the implementation period prescribed by the phased transition plan can commence. Because the implementation of the MDI Rules has been delayed, the end date of the implementation period cannot be estimated with greater certainty.

Given that some provisions of the MDI Rules have not yet been implemented, they have not affected market practice and therefore data that would be required for a quantitative analysis of a baseline that includes the effects of the MDI Rules are not available. It is possible that the baseline (and therefore the economic effects relative to the baseline) could be different once the MDI Rules are implemented. The following discussion reflects the Commission's assessment of the anticipated economic effects of the unimplemented MDI Rules described in the Market Data Infrastructure Adopting Release as they relate to the baseline for the adoption of these amendments.[346]

The MDI Rules may result in a higher number of odd-lot trades, as the inclusion of odd-lot quotes that may be priced better than the current NBBO in consolidated market data may attract more trading interest from market participants that did not have access to this information

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343 *See id*. at 18700-18701.

344 The Operating Committees of CTA Plan and UTP Plan filed proposed amendments on Nov. 5, 2021, which were published for comment in the Federal Register. *See* Securities Exchange Act Release Nos. 93615 (Nov. 19, 2021), 86 FR 67800 (Nov. 29, 2021); 93625 (Nov. 19, 2021), 86 FR 67517 (Nov. 26, 2021); 93620 (Nov. 19, 2021), 86 FR 67541 (Nov. 26, 2021); 93618 (Nov. 19, 2021), 86 FR 67562 (Nov. 26, 2021).

345 *See* Securities Exchange Act Release Nos. 95848 (Sept. 21, 2022), 87 FR 58544 (Sept. 27, 2022); 95849 (Sept. 21, 2022), 87 FR 58592 (Sept. 27, 2022); 95850 (Sept. 21, 2022), 87 FR 58560 (Sept. 27, 2022); 95851 (Sept. 21, 2022), 87 FR 58613 (Sept. 27, 2022).

346 *See* Market Data Infrastructure Adopting Release at 18741-18799.

prior to the MDI Rules.[347] However, the magnitude of this effect depends on the extent to which market participants who rely solely on SIP data and lack information on odd-lot quotes choose to receive the odd-lot information and trade based on it. The Commission states in the Market Data Infrastructure Adopting Release that it believes it is not possible to observe this willingness to trade with existing market data.[348]

The MDI Rules may have implications for broker-dealers' order routing practices. For those market participants that rely solely on SIP data for their routing decisions and that choose to receive the expanded set of consolidated market data, the Commission anticipated that the additional information contained in consolidated market data would allow them to make more informed order routing decisions.[349] This in turn would help facilitate best execution, which would increase execution quality.[350] Broker-dealers may choose to receive market data from competing consolidators, who may offer different consolidated market data products at different prices or at different latencies, or with different amounts of data content.[351] Competing consolidators will be required to disclose information about their consolidated market data products, including the services they will offer, the prices for such services, and performance metrics, which will assist broker-dealers in selecting an appropriate competing consolidator.[352]

The option to receive consolidated market data from a competing consolidator, or produce consolidated market data as a self-aggregator,[353] is expected to form a reasonable

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347 *See id.* at 18754.

348 *See id*.

349 The Commission states in the Market Data Infrastructure Adopting Release that it believes that competition among consolidators will support high quality consolidated market data (*see id*. at 18661). Furthermore, while competing consolidators are not required to offer a product containing all elements of consolidated market data, the Commission states that it believes that one or more competing consolidators will be incentivized to offer a consolidated market product containing all data elements (*see id*. at 18752).

350 *See id.* at 18725.

351 *See id.* at 18606.

352 *See id*.

353 Under the MDI Rules, a "self-aggregator" is a "broker-dealer, exchange, national securities association, or investment adviser registered with the Commission" that will obtain data necessary to construct consolidated market data from exchanges and aggregate it into consolidated market data only for its own use (*see id.* at 18604).

alternative to the use of exchange proprietary data feeds, with potentially lower costs.[354] When this happens, the Commission believes that exchanges may respond by lowering their fees for connectivity and proprietary data feeds.[355]

The MDI Rules may also result in differences in the baseline competitive standing among different trading venues for several reasons. First, the Commission anticipated that adding information on odd-lot quotes priced at or better than the NBBO to expanded core data may cause changes to order flow as market participants take advantage of newly visible quotes.[356] However, the Commission stated that it was uncertain about the magnitude of this effect.[357] To the extent that it occurs, a change in the flow of orders across trading venues may result in differences in the competitive baseline in the market for trading services.

Where implementation of the above-described MDI Rules may affect certain baseline figures, the description of the baseline below notes those effects.

ii. Amendments to Rule 605

The Commission amended Rule 605 on March 6, 2024, and the requirements of that rule are part of the baseline considered here.[358] With certain exceptions, the amendments to Rule 605 have a compliance date of August 1, 2026.[359] The following discussion reflects the

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354 *See id*., section V.C.4.a.

355 *Id*.

356 *See id.* at 18596, 18754.

357 *See id.* at 18754.

358 *See* Rule 605 Amendments Adopting Release.

359 *See* Securities Exchange Act Release No. 104147 (Sept. 30, 2025), 90 FR 47552 (Oct. 2, 2025) ("Rule 605 Amendments Extension"). On August 1, 2026, market centers, brokers, and dealers subject to Rule 605 will need to begin collecting the information for the execution quality reports required under the Rule 605 Amendments. Reporting entities will then need to make their detailed and summary reports covering data from August 2026 publicly available by the end of September 2026. *See* 17 CFR 242.605(a)(6). As an exception, after odd-lot order information sufficient to calculate best available displayed price is made available pursuant to an effective NMS plan, market centers, brokers and dealers will have six months to begin including price improvement statistics relative to best available displayed price in their Rule 605 reports. *See* Rule 605 Amendments Adopting Release at 26497. The 2024 Regulation NMS Amendments set the compliance date for every national securities exchange on which an NMS stock is traded and national securities association to make available to the exclusive SIPs all data necessary to generate odd-lot information, and for the SIPs to collect, consolidate, and disseminate odd-lot information, including the BOLO, to the first business day of May 2026. *See* 2024 Regulation NMS Amendments, 89 FR at 81681. Although the dissemination of odd-lot information was delayed until May 2028, the SIPs began

Commission's assessment of the anticipated economic effects of the amendments to Rule 605 described in the Rule 605 Amendments, as they relate to the baseline for these proposed amendments. Specific interactions between the expected economic effects of the amendments to Rule 605 and those of rules proposed herein will be discussed in detail in a later section.[360]

Rule 605 requires disclosures about execution quality for order executions in NMS stocks.[361] The Rule 605 amendments modified disclosure requirements in several ways. The amendments expanded the scope of reporting entities subject to the rule to include larger broker-dealers,[362] in addition to market centers.[363] The amendments also enhanced the accessibility of the reported execution quality statistics by requiring all reporting entities to make a summary report available.[364]

The Rule 605 Amendments also included amendments to the information required to be reported under Rule 605. Among other requirements, the amendments to Rule 605 added requirements related to the reporting of price improvement statistics relative to the best available displayed price, which incorporates information about the best-priced odd-lot orders.[365] These price improvement statistics will not be required to be reported until six months after odd-lot

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disseminating the BOLO on Apr 27, 2026. *See supra* note 330. Therefore, the compliance date for including price improvement statistics relative to the best available displayed price in Rule 605 reports remains six months after the first business day in May 2026 (*i.e.*, in November 2026).

360 *See infra* section VI.C.1.b.

361 17 CFR 242.605.

362 The term "larger broker-dealer" refers to a broker-dealer that meets or exceeds the "customer account threshold," as defined in Rule 605(a)(7). A larger broker-dealer introduces or carries 100,000 or more customer accounts through which transactions are effected for the purchase or sale of NMS stocks. *See* 17 CFR 242.605(a)(7).

363 Regulation NMS defines the term "market center" to mean any exchange market maker, OTC market maker, ATS, national securities exchange, or national securities association. *See* 17 CFR 242.600(b)(55).

364 *See* Rule 605 Amendments Adopting Release at 26428.

365 *See* 17 CFR 242.600(b)(14) (defining the "best available displayed price" as, with respect to an order to buy, the lower of: the national best offer at the time of order receipt or the price of the best odd-lot order to sell at the time of order receipt as disseminated pursuant to an effective transaction reporting plan or effective national market system plan; and, with respect to an order to sell, the higher of: the national best bid at the time of order receipt or the price of the best odd-lot order to buy at the time of order receipt as disseminated pursuant to an effective transaction reporting plan or effective national market system plan. With respect to a midpoint-or-better limit order, the best available displayed price shall be determined at the time such order becomes executable rather than the time of order receipt) and 17 CFR 242.605(a)(1)(ii)(M) – (Q).

order information needed to calculate the best available displayed price is made available pursuant to an effective national market system plan.[366]

Additionally, the amendments to Rule 605 require the separate reporting of non-marketable limit orders that are priced at the midpoint of the NBBO or better ("midpoint-or-better NMLOs"), and additionally require the reporting of information about the effective spread and the price improvement offered to these orders.[367] An analysis by the Commission in the Rule 605 Amendments indicates that a high percentage of midpoint-or-better NMLO share volume is submitted with IOC designations as compared to other NMLOs. This confirms that many of these orders are submitted by traders with the intention of executing immediately against hidden or odd-lot inside-the-quote liquidity, and that these orders tend to have different execution characteristics than other types of NMLOs.[368] Therefore, the Commission stated that market participants will benefit from an increase in transparency by the separate reporting of these orders, along with the required reporting of certain execution quality statistics that measure the cost of executing immediately, such as effective spreads.[369]

Furthermore, the amendments to Rule 605 require the reporting of information regarding the extent to which orders were executed at prices at or better than the quote for share quantities greater than the displayed size at the quote, *i.e.*, "size improvement." This information includes (1) a benchmark metric that measures the displayed size at the time of order receipt, which can then be compared to the number of submitted shares to determine the extent to which a market center or broker-dealer handled orders that exceeded available displayed depth,[370] and (2) for

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366 The compliance date for including price improvement statistics relative to the best available displayed price in Rule 605 reports is November 2026. *See supra* note 359.

367 *See* 17 CFR 242.600(b)(57) (defining "midpoint-or-better limit orders") and 17 CFR 242.605(a)(1)(ii).

368 *See* Rule 605 Amendments Adopting Release at 26528.

369 *See* Rule 605 Amendments Adopting Release at 26556-26557, 26568.

370 *See* 17 CFR 242.600(b)(72) (defining the "order size benchmark") and 17 CFR 242.605(a)(1)(ii)(R).

orders that are larger than available displayed depth, the number of shares that received size improvement.[371]

The amendments to Rule 605 also modified the definition of order size categories. Previously, order size categories were based on numbers of shares, with orders less than 100 shares excluded. Under the amendments order size categories are now based on a notional dollar value range, along with an indication of whether the category reflects orders that were for an odd-lot, at least a round lot, or less than a share.[372]

In the Rule 605 Amendments, the Commission stated that the amendments to Rule 605 will promote increased transparency of order execution quality, particularly for larger broker-dealers who were not required to disclose execution quality information under preexisting Rule 605, but also for market centers, whose execution quality information will be more relevant and easier to access because of improvements to existing Rule 605 disclosure requirements.[373] The Commission stated in the Rule 605 Amendments Adopting Release that this increase in transparency is expected to increase the extent to which market centers and broker-dealers compete on the basis of execution quality, and produce improvements in execution quality.[374] The Commission also stated that the amendments to Rule 605 will result in initial and ongoing compliance costs, the majority of which will be related to expanding the scope of reporting entities to include larger broker-dealers, but a significant portion of which will result from the

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371 *See* 17 CFR 242.605(a)(1)(ii)(S), requiring the reporting of "the sum of, for each execution of a covered order, the greater of: the total number of shares executed with price improvement plus the total number of shares executed at the quote minus the order size benchmark, or zero." The "total number of shares executed with price improvement plus the total number of shares executed at the quote minus the order size benchmark" ("net size improvement") will only be a strictly positive number for those orders that are both eligible to receive size improvement and actually receive size improvement, and thus is equivalent to a measure of shares that are eligible to and that received size improvement. *See* Rule 605 Amendments Adopting Release at 26428 n.1544.

372 *See* 17 CFR 242.600(b)(18).

373 *See* Rule 605 Amendments Adopting Release at 26543.

374 *See id*. at 26543-26544.

need for market centers to update their systems to process and store the data necessary to prepare the amended reports.[375]

Where implementation of the above-described Rule 605 Amendments may affect certain numbers in the baseline, the description of the baseline below notes those effects.

iii. Changes to Regulation NMS Tick Sizes, Access Fees, and Transparency of Better Priced Orders

In December 2024, the Commission adopted amendments to Regulation NMS Rule 612 affecting minimum pricing increments, or tick sizes, and to Rule 610 which affects the maximum access fee that exchanges can charge to access protected quotations.[376] The Commission also accelerated elements of the MDI rules to accelerate the dissemination of odd-lot information in the SIP data.[377] While not yet implemented, some of the effects associated with these amendments could interact with the analysis of elements of this proposal. The effects of these rules potentially interact with the analysis of the proposed rescission of Rules 611 and 610(e).

The amendments to Rule 612 reduce the minimum pricing increment, or tick size, from $0.01 to $0.005 for some stocks with consistently narrow quoted spreads. They also reduce the access fee cap, *i.e.,* the fee which exchanges charge to access protected quotes, from $0.003 per share to $0.001 per share. Combined, the primary anticipated effect of these rule changes is to reduce transaction costs, via lower quoted and effective spreads. Additionally, it was anticipated that these rules could potentially reduce transaction costs for orders internalized by wholesalers off exchange by improving the baseline reference point that wholesalers provide price improvement against as they compete for order flow. These amendments also effectively make existing Rule 611 stricter by narrowing the price range of permissible execution prices.

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375 *See id.* at 26579-26580.

376 Implementation of the reduction in the tick size and access fee cap has been delayed until November 2026. *See supra* note 76.

377 The dissemination of MDI odd-lot information in the SIP data has been delayed until May 2028. However, the SIPs began disseminating information on the BOLO on Apr 27, 2026. *See supra* note 330.

The amendments adopted in December 2024 also provide for the release of information about odd-lot orders in SIP data. Specifically, the amendments accelerate the implementation of provisions of the MDI Rules that provide for odd-lot information to be disseminated with SIP data.[378] They also require that the SIPs disseminate information on the BOLO, which was implemented on April 27, 2026. The primary economic effect of this aspect of the December 2024 amendments was to provide investors an additional standard benchmark to gauge execution quality, particularly for smaller or odd-lot orders.

These amendments have not yet been fully implemented, and their implementation could affect the baseline analysis in a number of ways. First, the reduction in the minimum pricing increment will create a finer grid of allowable price points and thereby increase the opportunities for markets to lock or cross. Thus, the analysis presented here may understate the prevalence of locked and crossed markets in a world where these amendments are fully implemented. Second, the reduction in the access fee cap will put upward pressure on quoted spreads (because the access fee funds rebates for liquidity provision, and a reduction in the rebate may require liquidity suppliers to quote wider spreads in order to cover their costs) which will reduce the likelihood that markets lock or cross. Additionally, dissemination of odd-lot information in the SIPs may reduce trade-throughs by making market participants more aware of better-priced-odd-lot quotes. Thus, the baseline herein may overstate the prevalence of trade-throughs relative to what might occur once odd-lot information is disseminated in the SIPs.[379]

2. Economic Effects of Current Rule 611

Rule 611 affects how orders are handled and executed in today's equity markets. This section discusses the main economic effects of current Rule 611, including its effects on

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378 *See id* and accompanying text.

379 Although the BOLO was implemented on April 27, 2026, the analysis in this release uses data from before the implementation. Therefore, it may overstate the prevalence of trade-through rates relative to what occurred after the implementation of the BOLO, when market participants would be more aware of the best-priced-odd-lot quotes included in the SIPs. The inclusion of odd-lot information in the SIP beginning in May 2028 may result in a further reduction in odd-lot trade-throughs because market participants would be more aware of odd-lot quotes priced between the BOLO and the NBBO.

institutional and retail order handling and execution, liquidity provision, and other major economic effects of the Rule.

a. Effects on Institutional Orders

Rule 611 can affect how the orders of institutional investors are handled and executed. Institutional investors typically trade in sizes that exceed immediately available liquidity, so their larger "parent" orders are purposefully split into smaller "child" orders and traded gradually to mitigate *slippage*—the adverse movement in prices that occurs while the residual balance is being executed. In practice, brokers employ algorithms that stage these child orders across venues and time intervals, with the goal of minimizing the total transaction cost for the parent order rather than trying to obtain the best available price for every single child order.[380] Brokers and clients evaluate transaction costs for institutional order outcomes at the parent order or portfolio level rather than the child order level.[381] Rule 611 may increase information leakage and the slippage faced by institutional investor parent orders because routing constraints under Rule 611 may reveal trading intentions more quickly or broadly than institutional investors would prefer, thereby affecting the overall execution quality for large orders.

Institutional child orders must execute at, or at prices better than, the protected quotes, or fit within one of Rule 611's exceptions. Price protection provided by Rule 611 may contribute to the increased slippage of institutional orders because of the requirement for child orders to execute against the protected quotes across many exchanges before accessing deeper liquidity in the order book. These child order executions may help alert liquidity providers to the presence of a larger parent order that is in the process of being "worked" by the broker-dealer (i.e., broken up by the broker-dealer into smaller child orders for execution). This may allow liquidity providers to withdraw or revise their quotes before the larger parent order has finished executing, which

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380 *See, e.g.* Tyler Beason & Sunil Wahal, *The Anatomy of Trading Algorithms* (working paper Sept. 27, 2020) *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3497001 (retrieved from SSRN Elsevier database).

381 *See, e.g.,* Andrea Frazzini, et al., *Trading Costs* (working paper Apr. 7, 2018) *available at* https://ssrn.com/abstract=3229719 (retrieved from SSRN Elsevier database).

can increase the execution costs for the remaining unexecuted portion of the parent order.[382] In summary, the requirements of Rule 611 may force institutional orders to interact with small, dispersed displayed sizes prior to reaching larger liquidity pools, thereby increasing the cumulative execution costs for the parent order.

Rule 611 may also limit the options of institutional investors seeking block crosses at prices outside the NBBO.[383] The displayed liquidity at the NBBO is often insufficient to fully execute the size of the block order. A block cross cannot occur at a price outside of the protected quotes unless an exception to Rule 611 applies. In such cases, trading venues may cancel or decline crosses at prices outside protected quotes, or an executing broker may initiate an ISO sweep to remove protected quotes and then complete the block at the desired price. If a trading venue cannot execute a block cross, it may result in a large block order having to either "walk the book" on multiple exchanges to access sufficient depth to execute the order, or, as discussed above, be executed over a longer period of time through a series of child orders, both of which can increase transaction costs, adverse selection risk, and slippage.

However, Rule 611 contains exceptions that aid in the execution of institutional orders, including a benchmark-priced exception.[384] This exception allows institutions to execute orders at prices outside of the protected quotes if the execution price was not based, directly or indirectly, on the quoted price of an NMS stock at the time of execution and if the material terms

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382 The movement of quotes in an adverse direction after a trade occurs (up for buy orders and down for sell orders) is often referred to as "price impact", which is measured as the difference between the midpoint of the NBBO at the time of the trade and the midpoint of the NBBO at a specified time (*e.g.*, one minute or five minutes) after the time of the trade.

383 Rule 611 does not impact block crosses at prices at or inside the NBBO, such as the NBBO midpoint. However, a counterparty may not always be willing to execute a block cross at prices inside the NBBO and instead may require a price concession to execute a large trade, resulting in an execution price outside the NBBO. The price concession to execute the block cross may be less than the cost of executing the trade against the liquidity available on exchanges (if sufficient liquidity is available). *See e.g.*, Donald B. Keim & Ananth Madhavan, *The Upstairs Market for Large-Block Transactions: Analysis and Measurement of Price Effects*, 9 REV. FIN. STUD. 1 (Jan. 1996); *see also* First TTR Roundtable Transcript at 207 (Debbie Toennies, J.P. Morgan), at 255 (Vlad Khandros, OneChronos) (discussing Rule 611 and block trades).

384 *See supra* section II.A.2. for further discussions on the exceptions to Rule 611.

were not reasonably determinable at the time the commitment to execute the order was made.[385] This allows institutional investors to execute large block trades that are based on benchmark prices, such as the time-weighted average price ("TWAP") or VWAP of previous trades, even if these derived prices fall outside the protected quote.

The ISO order exception to Rule 611 also aids in the execution of institutional orders. It enables a broker to use multiple child orders to simultaneously sweep protected quotes across venues and immediately "walk the book" to execute more size at the target venue at prices outside the protected quotes.[386] While ISOs can facilitate access to deeper book liquidity, clusters of ISO child orders may also potentially increase the immediate price impact and slippage for the parent order, which may raise the execution costs compared to if the whole parent order (or a larger portion of it) were able to be executed outside the NBBO.[387]

As discussed in detail below, Rule 611 may be one of the factors contributing to the proliferation of exchanges and the heightened fragmentation of displayed liquidity.[388] This may indirectly affect the execution of institutional orders because, as the fragmentation of displayed liquidity increases, institutional child orders face more venues with small top-of-book sizes, which raises the complexity and cost of routing to meet the requirements of Rule 611. This greater dispersion across venues can make institutional trading intentions easier to detect, which can increase slippage and hurt the overall execution quality of the parent order.

Additionally, as discussed in detail below, Rule 611 may be one of the factors contributing to brokers connecting and purchasing market data from exchanges they would

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385 For further discussions on the benchmark-priced exception for Rule 611 *see* NMS Adopting Release at 37536, and Division of Trading and Markets: Responses to Frequently Asked Questions Concerning Rule 611 and Rule 610 of Regulation NMS questions 3.07 and 3.08 (*available at* https://www.sec.gov/divisions/marketreg/nmsfaq610-11.htm).

386 *See supra* section II.A.2. for further discussions.

387 *See* Sugato Chakravarty, et al., *Clean Sweep: Informed Trading Through Intermarket Sweep Orders*, 47 J. FIN. & QUANTITATIVE ANALYSIS 415 (2012). *See also* Jane Street Letter at 2 (stating that trade-through protection "is impactful for larger-sized equities orders where sweep requirements may result in executions across multiple venues with varying fee structures and latencies, potentially leading to worse overall execution quality than alternative approaches").

388 *See infra* section VI.B.4.g. for further discussion on the fragmentation of displayed liquidity.

otherwise eschew, thereby raising fixed costs for market-data subscriptions, connectivity, and compliance tools.[389] Ultimately, these costs may be indirectly passed through to institutional investors and contribute to higher commission rates or reduced services.

b. Effects on Retail Orders

As a consequence of Rule 611, firms who fill retail orders in a principal capacity cannot do so at a price worse than the NBBO.[390] As discussed below, in today's trading environment, the Commission observes that the vast majority of retail marketable orders are executed inside the NBBO, rather than at the NBBO. Therefore, it seems that there are additional incentives in the current market for NMS stocks besides Rule 611 that are promoting execution quality for retail orders.

Retail brokers route most of their customers' marketable orders to off-exchange wholesalers, who usually internalize the order (*i.e.*, execute the order in a principal capacity). As a consequence, most marketable retail orders do not directly interact with protected quotes and are instead internalized off exchange.[391] Wholesalers usually do not charge retail brokers for this service and often pay them to receive the retail orders, a practice that is commonly referred to as payment for order flow ("PFOF").[392]

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389 *See infra* section VI.B.4.f.

390 In adopting Rule 611, the Commission observed that the great majority of internalized trades are the small trades of individual investors, and that, in 2003, nearly 1 out of every 30 of these trades, of which there were millions, appears to have been executed at a price inferior to an automated and accessible quotation. *See* NMS Adopting Release at 37508.

391 *See*, *e.g.*, Robert Battalio & Robert Jennings, *Wholesaler Execution Quality*, Mgmt. Sci. (articles in advance ed. 2025) ("Battalio & Jennings (2025)") (showing that wholesalers fully internalize 87% (58%) of retail orders (shares) and partially internalize (i.e., execute a portion of the retail order in a principal capacity, as well as executing a portion of the order using liquidity they source from other trading centers) 2% (23%) of retail orders (shares) they receive); Lewis Letter attached to letter from Douglas A. Cifu, Chief Executive Officer, Virtu Financial, Inc., dated Mar. 30, 2023 ("Lewis Letter") at 44-45 (showing that Virtu fully internalized 86% of retail orders they received in December 2020); and Securities Exchange Act Release No. 96495 (Dec. 14, 2022), 88 FR 128 (Jan. 3, 2023) ("OCR Proposing Release") at 192, Table 7 (showing that for individual investor marketable retail orders under $200K, wholesalers execute 90% of the dollar volume in a principal capacity).

392 *See, e.g.*, Thomas Ernst & Chester Spatt, *Payment for Order Flow and the Retail Trading Experience* (Wharton Initiative on Fin. Pol'y & Regul., White Paper 2023), *available at* https://wifpr.wharton.upenn.edu/wp-content/uploads/2023/09/Payment-for-Order-Flow-final.pdf

In practice, wholesalers typically execute the marketable orders of retail investors at better prices than these orders would have received if they were routed to an exchange.[393] Even the majority of those retail marketable orders whose size exceeds the displayed size at the NBBO are likely to be executed by wholesalers at or inside the NBBO. This is in contrast to "walking the book" on exchanges and trading at prices outside the NBBO.[394] Wholesalers may execute a portion of the very largest retail orders at prices outside the NBBO, but research has shown that the wholesaler is usually still executing the order at a better price when compared with the price it would have received if it had executed the order against the aggregate displayed liquidity across all exchanges sufficient to fill the order.[395]

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393 *See*, *e.g.*, Battalio & Jennings (2025) (showing wholesalers execute 84% of the marketable retail order trades they fully internalize (i.e., fill the order completely from the wholesaler's inventory) at prices better than the NBBO); Anne Haubo Dyhrberg et al., *The Retail Execution Quality Landscape*, 168 J. FIN. ECON. 104051 (2025) ("Dyhrberg et al. (2025)") (showing that wholesalers provide price improvement to 82% of the shares they execute and execute 95% of shares at the NBBO or better (based on dollar-volume weighting across stocks)); Lewis Letter at 46 (showing in December 2020 that Virtu executed 78% of the marketable retail orders inside the NBBO and 20% at the NBBO); and OCR Proposing Release at 192, Table 7 (showing that for retail orders under $200,000, wholesalers execute 90% of shares with price improvement).

394 *See* Battalio & Jennings (2025). They estimate the "size improvement" wholesalers provide to marketable retail orders whose size exceeds the aggregate displayed size at the NBBO. For marketable retail orders whose size is greater than the aggregate displayed size at the NBBO, they calculate the percentage of trades that occurred at prices better than the NBBO. They find that wholesalers have a size improvement rate of 80% for orders that they fully internalize (*i.e.*, the order is filled completely from the wholesaler's inventory) and 45% for orders they fully externalize (*i.e.*, the order is filled completely with liquidity sourced from external venues). They note that wholesalers often provide supplemental price improvement to orders they externalize (*i.e.,* the wholesaler adjusts the price of the shares they source externally to provide better prices to the customer at the expense of the wholesaler). They compare the average execution price of the retail order with the VWAP price it would have received if it had "successfully accessed all of the displayed liquidity on each exchange's order book depth, including odd-lots, top of book and depth of book quotes." They find that, on average, wholesalers provide 1.75 cents per share of price improvement relative to this benchmark on orders they fully internalize and 0.17 cents per share on orders they fully externalize. *See also* OCR Proposing Release at 192, Table 7 (showing that wholesalers only execute 1.7% of the shares in marketable retail orders at prices outside the NBBO); Dyhrberg et al. (2025) (showing wholesalers execute 95% of the shares in marketable retail orders at the NBBO or better (based on dollar-volume weighting across stocks)).

395 *See* Battalio & Jennings (2025). For larger orders (the average executed value is $408,000 and 5,450 shares) that the wholesaler partially internalizes (*i.e*., the order is partially filled from the wholesaler's inventory and partially with liquidity sourced from external venues), they find that the average price improvement measured against the NBBO is negative, indicating the majority of shares executed outside the NBBO. However, they also found that wholesalers provided these orders with price improvement of 4.17 cents per share compared to the VWAP benchmark price if they had "walked the book" and executed against the aggregate exchange displayed liquidity. This indicates that the wholesalers executed these larger orders at better prices then those displayed on exchanges, often providing supplemental price improvement to the portion of shares they sourced externally.

This practice of executing retail orders at prices better than the NBBO reflects at least two forces in the market for retail order executions. First, it is a consequence of the lower risk of trading against retail order flow. An important element of the wholesaler business model is the unique risk profile of retail order flow, which typically has lower adverse selection risk than other types of order flow.[396] Because of this, wholesalers can afford to execute these orders at a narrower spread compared to other sources of order flow, such as the order flow faced by a market maker posting quotes on an exchange.

Second, the execution of retail orders by wholesalers at prices better than the NBBO likely reflects some amount of competition among wholesalers providing these execution services to retail brokers. A typical retail broker usually maintains relationships with multiple wholesalers, divides its order flow among them, and then evaluates those wholesalers based on the average aggregate execution quality they provide. The percentage of order flow sent to each of these wholesalers is typically determined by the prior performance of the wholesaler as measured by its average execution quality.[397] Those wholesalers with inferior performance may see their percentage of order flow adjusted lower.[398] This competitive structure may incentivize

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396 Wholesalers and other liquidity providers face adverse selection risk when they accumulate inventory (for example, by providing liquidity to more informed traders) because of the risk of market prices moving away from them before they are able to unwind their positions. Wholesalers and other market makers are usually not privy to the motives or information of the investors with whom they are trading. As such, should the liquidity provider trade with an investor who possesses short-lived price information about the security, it is exposing its inventory to adverse selection risk. Hence, liquidity providers normally choose their trading strategies to minimize their interaction with order flow that has high adverse selection risk. When trading with order flow that has higher adverse selection risk, liquidity providers will charge a higher spread to compensate themselves for taking on this risk.

397 *See* Thomas Ernst et al., *What Does Best Execution Look Like?* (working paper Nov. 30, 2023) *available at* https://microstructure.exchange/papers/BrokerRouting.pdf ("Ernst, Malenko, Spatt and Sun (2023)"). They show that retail brokers use the average effective over quoted ratio (i.e., the average effective spread divided by the average NBBO quoted spread) as one of the main measures to evaluate wholesaler performance and that retail brokers allocate more future order flow to wholesalers that provide better average historical execution quality. They also show that retail brokers vary in how they evaluate wholesaler aggregate execution quality. Some retail brokers evaluate aggregate execution on an individual symbol basis, while others look at aggregate execution quality across all stocks, or groups of stocks. Additionally, retail brokers vary in the length of the historical time period they use to calculate aggregate execution quality, with some firms in their sample using a 30-day historical average and others using a 90-day historical average. Furthermore, retail brokers vary in the frequency at which they reallocate order flow among wholesalers. They show some retail brokers reallocate order flow among wholesalers on a daily basis, while others do so on a monthly basis.

398 *See id.* (discussing how retail brokers adjust their order flow based on wholesaler execution quality).

wholesalers to maximize the average price improvement relative to the NBBO offered to retail marketable orders, which provides an incentive to execute the orders at prices better than the NBBO.[399]

While Rule 611 generally restricts retail trades from being executed at prices inferior to the prevailing NBBO, in practice this restriction does not appear to be of significant consequence. The most Rule 611 can do for a retail order is to require that its execution price be at the prevailing NBBO at the time of trade. Therefore, a retail order being executed at a price better than the NBBO implies the presence of additional incentives, likely unrelated to Rule 611, that led to that superior price for that order. Given the evidence discussed above[400] regarding the frequency of retail executions being priced better than the prevailing NBBO, two such forces currently present in the retail execution market are lower adverse selection risk and the presence of some degree of competition among wholesalers.

However, while retail executions inside the NBBO are common,[401] it is not always the case that a retail order receives meaningful price improvement.[402] When this happens, it could be the case that, but for Rule 611, that retail order would have received a worse execution price. The empirical analysis in Table 7 below shows that, for high-priced stocks, when displayed, unprotected odd-lot quotes are available at better prices inside the NBBO, wholesalers trade-

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399 *See id.* They examine how wholesalers adjust the price improvement they offer as they approach the time period when the retail broker reallocates order flow among wholesalers. They find that wholesalers offer greater price improvement when they are further behind the nearest higher ranked competitor (i.e., they are lower in the execution quality ranking compared to another wholesaler the retail broker routes orders to), but offer less improvement when they are further ahead of their closest worse competitor (i.e., they are further ahead of other wholesalers in the competitive execution quality rankings). Additionally, they examine the effects when a retail broker establishes a relationship with a new wholesaler and find that other wholesalers increase the amount of price improvement they offer when the new wholesaler enters the market. These results indicate that wholesalers respond to competitive pressures by increasing the amount of price improvement they offer in order to attract more retail order flow.

400 *See supra* note 393 and accompanying text.

401 *See id.*

402 *See*, *e.g.*, Battalio & Jennings (2025) (showing that 16% of the marketable retail order trades wholesalers fully internalize (i.e., the order is filled completely from the wholesaler's inventory) do not receive price improvement); Lewis Letter at 46 (showing in December 2020 that Virtu executed 21% of the marketable retail orders it fully internalized without price improvement); and OCR Proposing Release at 192, Table 7 (showing that for marketable retail orders under $200,000, wholesalers executed 10% of shares without price improvement and that they executed 18.6% of shares with less than 0.1 cents of price improvement).

through these odd-lot quotes between 15%-18% of the time. As a result, they internalize the retail order at a worse price than it would have received if it had traded against the odd-lot quotes.[403] This analysis supports the argument that, in some cases when a retail order does not receive price improvement relative to the NBBO, Rule 611 may prevent wholesalers from executing the order at a price worse than the NBBO and contribute to the execution quality received by these retail trades.

In addition, because wholesalers are evaluated based on average execution quality, they may cross-subsidize the price improvement they offer to marketable retail orders. The wholesaler may provide greater price improvement on some individual retail orders while providing less price improvement on other retail orders, in such a way that the wholesaler's overall profit is increased. The manner in which wholesalers cross-subsidize may vary across retail brokers based on how the individual retail broker evaluates aggregate wholesaler execution quality.[404] Given how retail brokers allocate order flow, wholesalers have incentives to earn higher profits and offer less price improvement on retail trades that have less impact on the average aggregate execution quality metrics that retail brokers use to evaluate wholesaler performance. Thus, while Rule 611 may not have an impact on the majority of wholesaler trades, there may be select cases in which Rule 611 does result in a better execution price than would otherwise have been

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403 *See infra* section VI.C.1.c.i, Table 7 and accompanying text. This analysis shows that, for off-exchange retail trade sizes between 5 and 40 shares in high-priced stocks, when odd-lot quotes with sufficient size to fill a retail trade are available at prices inside the NBBO, wholesalers trade-through these better priced odd-lot quotes between 15% to 17% of the time, with the trade-through rate declining as the trade size increases.

404 The method of cross-subsidization could vary both across stocks and types of orders or order sizes. For example, Ernst, Malenko, Spatt and Sun (2023) find that wholesalers increase the price improvement they offer to odd-lot sized orders when a retail broker began placing more emphasis on these types of orders in its wholesaler evaluation criteria. At the same time, the wholesalers decreased the amount of price improvement they offered to large orders. This indicates the wholesalers might have switched to cross-subsidizing improved execution quality in odd-lot orders at the expense of larger orders. *See also* Thomas Ernst et al., *Would Order-By-Order Auctions Be Competitive?*. 80 J. FIN. 1879 (2025) (showing in an extension of their model that wholesalers incur losses when trading small, high-cost stocks, which they compensate with larger profits from trading large, low-cost stocks); and Dyhrberg et al. (2025) (showing that after accounting for inventory costs, wholesalers earn lower profits internalizing smaller stocks compared to S&P 500 stocks; indicating wholesalers may cross-subsidize less liquid stocks). Additionally, based on staff experience, the Commission understands that retail brokers may sometimes direct wholesalers how (e.g. in which symbols or order sizes) to focus their price improvement.

given.[405] This, in turn, may place limits on wholesalers' ability to cross-subsidize and offer additional price improvement to other retail orders.

In contrast to marketable retail orders, the Commission understands that the majority of retail non-marketable limit orders are either directly or indirectly displayed on an exchange and may qualify as a protected quote.[406] Although Rule 611 may potentially benefit these retail orders because trade-through protection may increase their chance of executing, the Commission believes that this benefit may be limited and may not significantly affect the execution rates of retail non-marketable limit orders.[407]

c. Effects on Liquidity Provision

Rule 611 can impact how liquidity is supplied in a number of ways. Rule 611 can help prevent trade-throughs of round-lot sized quotes, which can help incentivize the posting of displayed limit orders, although its overall effects on displayed liquidity are likely limited. Rule 611 may also be one of the factors that contributes to the fragmentation of displayed liquidity, which helps HFTs engage in certain trading strategies, such as latency arbitrage, that may increase trading costs for other market participants. Additionally, Rule 611 may be one of the factors that affects how exchanges set their access fees.

Rule 611 appears to limit trade-throughs, although the magnitude of its effect is uncertain. An analysis by Commission staff compared the trade-through rate during normal market hours with the trade-through rate during the pre-market and after-hours sessions, when

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405 These cases would coincide with those trades where no meaningful price improvement is offered.

406 Retail brokers may first route retail non-marketable limit orders to wholesalers, who then may post their own representative limit order at the same price on an exchange and execute the retail limit order on a riskless principal basis if their representative order executes. *See* Amber Anand, et al., *Retail Limit Orders*, 30 REV. FIN. 459 (2026). Wholesalers maintain connectivity with many exchanges and also have sophisticated SORs. Retail brokers often outsource their order handling to wholesalers, who bundle their market access services with their execution services.

407 *See* First TTR Roundtable Transcript, at 147 (Jeff Starr, Schwab) (stating that Schwab's retail limit orders execute 97% of the time when an execution occurs at the limit price or worse, and that this rate doesn't change if the limit order is a round-lot size or an odd-lot size). *See also infra* section VI.B.2.c for further discussions on the effects of Rule 611 on liquidity supply and the trade-through of limit orders.

Rule 611 does not apply.[408] This analysis found that trade-through rates increased slightly outside of normal trading hours. In a separate analysis discussed below,[409] Commission staff examined the rate at which displayed, unprotected odd-lot quotes on exchanges were traded through. For high-priced stocks, these odd-lot quotes represent substantial notional liquidity yet can be traded-through without violating Rule 611.[410] This analysis found higher trade-through rates for odd-lot quotes than other studies have found for round-lot quotes that were subject to trade-through protection, but also found that odd-lot trade-through rates decreased as the size of the transaction increased, suggesting that trade-through rates of unprotected round lots would be lower than the estimates in the analysis.[411]

To the extent Rule 611 prevents trade-throughs of exchanges' best round-lot sized bids and offers, it may potentially increase the execution probability of a displayed limit order of round-lot size, which in turn could increase the incentive for liquidity suppliers to display a limit

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408 *See* OAR Roundtable Analysis, *supra* note 121. The analysis found the average trade-through rates for corporate stocks and ETPs during regular trading hours were 0.3% and 0.1%, respectively, when a one-second look back was included (*see supra* section II.A.2., discussing the one second exception to Rule 611). The analysis found that the average trade-through rates increased slightly to 0.5% (corporate stocks) and 0.5% (ETPs) during the pre-market session and 0.4% (corporate stocks) and 0.6% (ETPs) during the after-hours session, when Rule 611 does not apply. However, one limitation of this analysis is that the comparison of trade-through rates in the regular market session to the pre-market and after-hours sessions may not shed light onto how trade-through rates would change if Rule 611 is rescinded. It is possible that some market participants and trading centers do not change their behavior and operate as if Rule 611 is still in effect during the pre-market and after-hours sessions. *See, e.g.*, First TTR Roundtable Transcript at 108 (Joe Mecane, Citadel) (discussing how his firm operates as if Rule 611 was in effect during the pre-market and after-hours sessions).

409 *See infra* section VI.C.1.c (discussing Commission staff analysis of trade-through rates of unprotected odd-lot quotes.)

410 As high-priced stocks have become more common and represent a greater share of volume, the amount of order flow covered by Rule 611 has fallen. This is because odd-lot orders and hidden liquidity are particularly prevalent for high-priced stocks. *See* Robert P. Bartlett et al., *The Market Inside the Market: Odd-Lot Quotes*, 38 REV. FIN. STUD. 661 (2025) (discussing displayed odd-lot liquidity on exchanges) and Robert Bartlett & Maureen O'Hara, *Navigating the Murky World of Hidden Liquidity* (Stanford L. & Econ. Olin Working Paper No. 594, Nov. 7, 2024), *available at*: https://ssrn.com/abstract=4988855 (retrieved from SSRN Elsevier Database) (discussing hidden liquidity on exchanges).

411 *See infra* section VI.C.1.c.i. For trades of size 5 to 40 shares, the analysis finds trade-through rates of 1-4% for trades that occur on exchange, and 11-19% for trades off-exchange; the notional value of the trade-throughs—measured by the amount of dollar volume that executed outside the best quote—is 0.03-0.07 basis points for on-exchange trades, and 0.32-0.84 basis points for off-exchange trades. As trade size increases, the estimated trade-through statistics fall, suggesting that the effect of Rule 611 on round lots will be lower than these estimates. When extrapolating these results to round lots in the absence of Rule 611, the primary limitation is that round lots are both protected and set the NBBO; to the extent market participants do not want to trade-through the NBBO even in the absence of Rule 611, the trade-through rates of unprotected round lots will be lower than the rate estimated from unprotected odd-lots.

order of round-lot size at or inside the NBBO. However, the Commission believes that this effect is likely to be limited. Market participants often display unprotected odd-lot orders inside the NBBO, indicating that order protection may not be a significant factor in the size of, or decision to display their order.[412] Additionally, Commission staff analysis below shows that trade-through rates of unprotected quotes fall as trade size increases, indicating that Rule 611 may not significantly affect the trade-through rates of round-lot orders.[413] Therefore, while the results of these analyses suggest that Rule 611 may provide some protection for round-lot liquidity, its overall effect on liquidity provision and displayed liquidity may be limited (particularly given the increasing prevalence of odd-lot trading and unprotected odd-lot quotes inside the NBBO).[414]

As discussed in detail below, Rule 611 may also be one of the factors contributing to the fragmentation of displayed liquidity.[415] This fragmentation disperses displayed liquidity across numerous order books, increasing routing complexity and potentially thinning size at the inside, even if aggregate depth is ample. As discussed further below, Rule 611 also helps HFTs engage in certain trading strategies that lead to the "gaming" of displayed protected quotes and potentially increase trading costs for other market participants, such as by posting fleeting orders as protected quotes designed to attract the routing of marketable orders or engaging in certain latency arbitrage strategies.[416] This fragmentation has also created latency arbitrage opportunities for HFTs due to price differentials across trading venues combined with differences in latency between the SIPs and exchange direct feeds, which has contributed to the speed "arms race" discussed below.[417] However, exchanges have also innovated around protected quotes and

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412 *See* Robert P. Bartlett et al., *The Market Inside the Market: Odd-Lot Quotes*, 38 REV. FIN. STUD. 661 (2025).

413 *See supra* note 411 and *infra* section VI.C.1.c.i.

414 *See* Robert P. Bartlett et al., *supra* note 412.

415 *See infra* section VI.B.4.g.

416 *See infra* section VI.B.4.b. (discussing latency, HFTs and the speed "arms race"), section VI.B.4.g. (discussing the fragmentation of displayed liquidity), and section VI.B.3. (discussing latency arbitrage).

417 *See infra* section VI.B.4.b.

developed speed bumps and specific order types to counteract the effects of faster traders' speed advantage.[418]

Rule 611 also interacts with exchanges' incentives for setting access fees. Maker-taker exchanges[419] often calibrate rebates and access fees near the access fee cap,[420] so that being at the inside (and therefore having a protected quote) becomes economically attractive for liquidity suppliers. However, exchanges have reasons other than Rule 611 to set their access fees near the cap. For example, half of SIP revenue is allocated to exchanges based on percentage of time they are quoting at the NBBO.[421]

d. Other Effects

Rule 611 has a number of additional effects beyond its impact on order handling, execution, and liquidity provision. Rule 611 imposes cost burdens on trading centers and broker-dealers, contributes to market complexity, and limits innovation in trading protocols.

Rule 611 imposes additional costs on trading centers and broker-dealers that operate SORs. Rule 611 requires trading centers to incur ongoing costs to maintain their policies and procedures and to surveil for trade-through violations. The Commission estimates that the current annual ongoing cost for each trading center of maintaining up-to-date policies and procedures related to Rule 611 is $30,996.[422] Similarly, Rule 611 requires broker-dealers that operate SORs to incur ongoing costs to maintain logic to prevent trade-throughs or to utilize one

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418 *See infra* section VI.C.4.b. *See also* First TTR Roundtable Transcript at 72–73 (Dave Lauer, Urvin Finance and We the Investors) (discussing fragmentation and latency arbitrage). *See infra* section VI.B.4.g. (discussing exchange innovation around protected quotes).

419 The predominant exchange fee structure is maker-taker, in which an exchange charges a fee to liquidity takers and pays a rebate to liquidity providers, and the rebate is typically funded through the access fee. *See infra* section VI.B.3 (for details on the maker-taker fee structure).

420 Rule 610's access-fee cap limits what venues can charge for accessing the best displayed bid and offer on an exchange.

421 *See infra* section VI.B.4.d.

422 *See infra* note 577 and accompanying text.

of the exceptions to Rule 611. The Commission estimates that the current annual ongoing cost for each broker-dealer operating a SOR to maintain this logic is $13,140.[423]

The requirements of Rule 611 and Rule 610(e) also make it more complicated and costly for trading centers and broker-dealers to routinely maintain and update the systems for their matching engines and SORs. For example, it might take staff longer to adjust routing algorithms for a new order type, because they may need to write additional code for how the order type will avoid trading through protected quotes on multiple venues. As discussed in further detail below, the Commission estimates that the annual cost of this additional maintenance is between $319,000 and $637,000 for each exchange, between $159,000 and $319,000 for each ATS, between $16,000 and $32,000 for each OTC market maker, and between $16,000 and $319,000 for broker-dealers that operate a SOR (broker-dealers that connect to more exchanges would have higher costs).[424]

Rule 611 contributes to the current level of market complexity. Rule 611 has led to the creation of additional order types and modifiers, such as ISO orders, to help manage compliance with Rule 611 order routing.[425] This has increased the complexity of order routing and execution. Additionally, as discussed in detail below, Rule 611 is one of the factors that has contributed to the fragmentation of displayed liquidity, which also increases market complexity by making it more difficult to route orders and monitor the market.[426] However, overall equity market complexity has been increasing for unrelated reasons as well, including changes in technology, other market structure rules, and economic incentives (such as SIP revenue allocations).

As discussed in detail below, Rule 611 is one of the factors that limits innovation in exchange and ATS trading protocols.[427] It limits these venues to having trading protocols that

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423 *See infra* note 581 and accompanying text.

424 *See infra* section VI.C.3.a. for further discussions on these costs.

425 *See supra* section II.B.2.a. *See also infra* section VI.B.3 (discussing how Rule 610(e) has also led the creation of additional order types).

426 *See infra* section VI.B.4.g.

427 *See infra* section VI.B.4.g.

execute at prices inside or at the protected quotes, unless they fall within one of the exceptions to Rule 611. However, other factors besides Rule 611 (e.g. fair access requirements and limitations on segmentation) may play a larger role in limiting exchange innovation.[428]

3. Economic Effects of Current Rule 610(e)

Current Rule 610(e) prevents markets that lock and cross the NBBO. Academic research into NBBO locked and crossed markets indicates that truly locked and crossed markets occur very seldom and when they do, they are corrected very quickly.[429] Most instances of locked and crossed markets reported in SIP data are due to latency artifacts associated with the geographical distances between the various data centers and the SIP. The SIP must compile data from geographically separate data centers which, due to limitations on transmission speeds and varying geographical distances, arrive at the SIP with different latencies.[430] Thus, a locked or crossed market posted by the SIP usually reflects stale information, and after correcting for this latency, truly locked or crossed markets are rare occurrences. This rarity of locked and crossed markets reflects the effectiveness of exchange protocols to prevent displaying orders that would lock or cross markets.

Staff analysis of locked and crossed markets confirms this finding. This analysis finds that for a sample of high-priced stocks, these stocks spend almost no time with locked or crossed markets. On average, a stock-day in our sample spends 0.3% of the trading day locked, and 0.3% crossed.[431] Locked markets, however, are substantially more prevalent among stocks with tighter

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428 *See infra* section VI.B.5.a. (comparing rules for exchanges and ATSs).

429 *See* Robert H. Battalio et al., *Latency and the Look-Ahead Bias in Trade and Quote Data* (working paper Dec. 11, 2025), *available at* https://ssrn.com/abstract=5907665 (retrieved from SSRN Elsevier Database). *See also* analysis in *infra* section VI.C.2.c.

430 *See* Phil Mackintosh, *Time is Relativity: What Physics Has to Say About Market Infrastructure*, NASDAQ (Mar. 20, 2026, 11:09AM), https://www.nasdaq.com/articles/time-is-relativity-what-physics-has-to-say-about-market-infrastructure-2020-04-09. *See* also *infra* section VI.B.4.b. (discussing the role of latency).

431 A stock-day is the unique pair of a stock symbol and a date. For example, one observation in the sample is TSLA on October 1, 2025; a second observation is COST on October 2, etc.

spreads, and markets that lock or cross odd-lot quotes inside the NBBO, which are not prohibited by 610(e), are also somewhat more common.[432]

Even without a rule prohibiting locked and crossed markets, locked and crossed markets should be rare because they create temporary profit opportunities that will be acted upon very quickly. For instance, if market prices move and a liquidity provider fails to update its quotes quickly enough, then this can result in a locked or crossed market. This situation sets off a race between opportunistic arbitrageurs—who see an opportunity for profit—and the liquidity provider, who will lose money if its stale quote is transacted against at a price that is disadvantageous to it. This race means that locked and crossed markets will likely disappear very quickly as both arbitrageurs and liquidity providers are on alert for such situations. Accordingly, most locked and crossed markets that occur in the SIP data are the results of geographic latencies.[433]

Prohibiting locked or crossed markets has a number of baseline economic effects. First, it leads to wider spreads for some stocks. Prohibiting locked and crossed markets means that the narrowest spread that a stock can quote at is the minimum pricing increment. However, some stocks may have economic fundamentals justifying a narrower spread than the minimum pricing increment. In these cases, a stock could trade efficiently with a zero quoted spread due to the existence of rebates. In the predominant maker-taker system, liquidity demanders pay a fee which is then partially rebated to liquidity providers. Consequently, even in an environment where quoted spreads are zero, the liquidity provider will still earn the rebate. For stocks where this rebate is sufficient compensation for providing liquidity, a zero quoted spread could be the competitive outcome. However, by prohibiting locked markets, these stocks trade at a quoted spread equal to the minimum pricing increment, which increases transaction costs.

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432 *See* analysis in *infra* section VI.C.2.c.

433 *See supra* note 450.

Another economic effect is that prohibiting locked and crossed markets adds to market complexity as market participants must manage orders sent and orders received to ensure that they do not lock or cross markets. Trading centers have developed specialized order types to comply with the prohibition on locked and crossed markets.[434] These order types add to market complexity and may provide an advantage to more sophisticated market participants, such as high tech algorithmic traders with expansive data and processing capacities, who are more capable of managing increased complexity.

Prohibiting locked and crossed markets may also help prevent some investor confusion.[435] It is possible that some market participants, particularly those without direct data feeds to the exchanges, could be confused about the current state of the market if a stock is displaying locked or crossed quotations. Therefore, prohibiting locked and crossed markets could reduce the likelihood of confusion among these investors, which could result in better order routing by these market participants and lower transaction costs. However, there is significant uncertainty regarding the extent to which locked and crossed markets result in investor confusion.

The prohibition on locked and crossed markets also helps facilitate straightforward computation of various Rule 605 statistics that require referencing the NBBO. For example, in the presence of crossed markets, computing the percentage of trades receiving price improvement (relative to the NBBO) would be difficult. This is because crossed markets can indicate that markets are temporarily out of equilibrium. Prior to the prohibition on locked and crossed markets, the Commission posted FAQ guidance on how to handle such instances of

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434 *See supra* section VI.B.1.b. (describing the functionality of some of these order types).

435 *See, e.g.*, Second TTR Roundtable Transcript at 64 (Dmitry Bulkin, Bernstein) ("However, I would say that I can easily imagine a rising number of calls for retail brokers asking questions [in response to increased locked or crossed markets]. So it's going to take time -- take some effort on behalf of retail brokers to educate their clients.") and at 65 (Mehmet Kinak, T. Rowe Price) ("I do think crossed markets could obviously lead to some investor confusion.").

locked and crossed markets.[436] By prohibiting locked and crossed markets, Rule 605 statistics are easier to interpret.

4. Current Exchange Competition, Revenue, Market Data, and Connectivity Services

In the years since Rules 611 and 610(e) were adopted, the NMS stock market has seen a proliferation of new exchanges. Large executing broker-dealers have generally become active on each new exchange as it comes online, often with significant cost. A number of market conditions may contribute to the proliferation of exchanges and fragmentation. These include the SIP revenue allocations, the market power that can come from offering significant liquidity, and the effects of Rule 611 and 610(e). Rules 610(e), and especially Rule 611, impact the transaction costs of different order routing strategies, which may incentivize broker-dealers to connect to more exchanges and submit orders even to small exchanges to which they are connected. Rules 611 and 610(e), along with other factors, may limit exchange innovation because they incentivize the adoption of certain exchange models.

a. Change in the Number and Ownership of Exchanges

The number of exchanges has more than doubled since the adoption of Regulation NMS. Exchange ownership structures have also changed over time, with three exchange families now operating twelve exchanges, as well as many independent exchanges. As the number of exchanges has increased, so has the fragmentation of displayed liquidity.[437] Overall market fragmentation has also increased, as trading is now spread across more on- and off-exchange venues.

At the time of the adoption of Regulation NMS, there were eight exchanges and one national securities association that traded NMS stocks.[438] Six of these exchanges are still present

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436 *See* STAFF LEGAL BULL. NO. 12R, *supra* note 310.

437 *See infra* section VI.B.4.g. (describing fragmentation of displayed liquidity and market fragmentation).

438 *See* NMS Adopting Release at 37576 at n. 730. The eight exchanges were Amex, BSE, CBOE, CHX, NSX, NYSE, Phlx, and PCX, and the national securities association was NASD.

today. Two were absorbed during mergers, and the trading platform that was a national securities association has since become an exchange.[439]

Currently, there are 17 exchanges that trade NMS stocks and three that are approved but not yet operating.[440] This suggests there has been a significant incentive for new entrants since Regulation NMS was adopted. However, approximately half of the 10 new and currently operating exchanges were ATSs or ECNs at the time Reg NMS was adopted but became exchanges as a consequence of other incentives.[441] Nevertheless, it is possible that these ATSs converted to exchanges in response to new incentives created after Regulation NMS was adopted.

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439 *See infra* note 440. The two exchanges that were absorbed during mergers are PCX and CBOE. PCX merged with NYSE and Arca, while CBOE's parent company still exists and currently operates four exchanges after mergers with BATS and Direct Edge: BYX, BZX, EDGA, EDGX.

440 *See supra* note 36. Ownership has changed since the adoption of Regulation NMS. Amex was acquired by NYSE (Euronext) in 2008 and later rebranded to NYSE American. *See* James Chen, *American Stock Exchange History: From AMEX to NYSE American*, INVESTOPEDIA (Sept.11, 2025), https://www.investopedia.com/terms/a/amex.asp. BSE was acquired by Nasdaq in 2007 and later rebranded to Nasdaq BX and now Nasdaq Texas. *See Boston Stock Exchange,* NASDAQ, https://www.nasdaq.com/glossary/b/boston-stock-exchange (last accessed Mar. 24, 2026) and *Data News #2026 – 2 Nasdaq Announces BX Name Change to Nasdaq Texas*, NASDAQTRADER, (Feb. 12, 2026), https://www.nasdaqtrader.com/TraderNews.aspx?id=DN2026-2. CHX was acquired by NYSE's parent company in 2018 and later rebranded to NYSE Chicago and now NYSE Texas. *See* Jesse Pound, *The New York Stock Exchange is Launching an Exchange in Texas*, CNBC (Feb .12, 2025, at 9:37 AM EST), https://www.cnbc.com/2025/02/12/the-new-york-stock-exchange-is-launching-an-exchange-in-texas.html?msockid=13f443750938674a18ca56bd08b86613. NSX was acquired by NYSE's parent company in 2017 and later rebranded to NYSE National. *See* Press Release, ICE Investors, NYSE Finalizes Acquisition of National Stock Exchange (Jan. 31, 2017), *available at* https://ir.theice.com/press/news-details/2017/NYSE-Finalizes-Acquisition-of-National-Stock-Exchange/default.aspx. Phlx was acquired by Nasdaq in 2007 and later renamed to Nasdaq PSX. *See* Press Release, Nasdaq Investor Relations, *NASDAQ to Acquire Philadelphia Stock Exchange* (Nov. 7, 2007), *available at* https://www.nasdaq.com (from main webpage, navigate to investor relations page). PCX was acquired by NYSE in 2006 along with Arca. *See The History of NYSE*, NYSE, https://www.nyse.com/history-of-nyse (last visited Mar. 2, 2026). Cboe acquired BATS in 2016, yielding BYX, BZX, EDGA, and EDGX. *See* Press Release, CBOE Holdings Agrees to Acquire Bats Global Markets (Sept. 26, 2016), *available at* https://ir.cboe.com/news/news-details/2016/CBOE-Holdings-Agrees-to-Acquire-Bats-Global-Markets-09-26-2016/default.aspx. BATS had previously acquired Direct Edge in 2013. See Michael J. De La Merced & Nathaniel Popper, *BATS and Direct Edge to Merge, Taking on Older Rivals*, N.Y. Times (Aug. 26, 2013) (retrieved from Factiva database).

441 The five exchanges are NYSE Arca, Cboe BYX, Cboe BZX, Cboe EDGA, and Cboe EDGX. Archipelago was an ECN, which later became NYSE Arca. *See* Adam Hayes, *Archipelago: What It Is, How It Works*, INVESTOPEDIA (Oct. 17, 2022), https://www.investopedia.com/terms/a/archipelago.asp. BATS was an ATS, which later became BYX and BZX. *See* Will Kenton, *BATS Global Markets: Definition, History, and Cboe Acquisition*, INVESTOPEDIA, (Nov. 16, 2025), https://www.investopedia.com/terms/b/better-alternative-trading-system-bats.asp. Direct Edge was an ECN, which later became EDGA and EDGX. *See* Phil Wahba, *Direct Edge Set to Become 4th U.S. Stock Exchange*, REUTERS (Mar. 12, 2010), https://www.interactivebrokers.ca/en/general/education/directedgeExchange.php.

The fragmentation of displayed liquidity has increased as more exchanges have entered the market and the share of dollar volume traded is now spread across a greater number of exchanges. In the month of January 2026, just over 50% of total dollar volume was traded on exchanges.[442] The three exchanges with the largest dollar volume represent over 30% of all dollar volume.[443] Of the remaining 14 exchanges, 10 have a market share of less than 1%. At the time of adoption of Reg NMS, one exchange had a market share of approximately 80% in NYSE-listed stocks.[444]

Another source of the increased market fragmentation is the fact that approximately half of total dollar volume is now executed off exchange.[445] There are currently 33 ATSs trading NMS stocks,[446] and in the month of January 2026, the three ATSs with the largest trade counts represented over 40% of ATS trade count.[447] Of the remaining ATSs, 4 had a share above 5% of ATS trade count, and 17 had a share below 1%.

b. The Role of Latency

The speed at which a market participant can react to and take action on a trading center in response to changes in the state of the market is important in today's NMS stock market, and this importance has increased dramatically since Regulation NMS was first adopted. This increase in speed was facilitated in part by greater automation in NMS stock trading. Now, latency is measured in single-digit microseconds, and sometimes even in units of hundreds of nanoseconds.

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442 January 2026 is chosen as a recent month for consistency with analysis conducted using CAT. The market share is consistent with other recent months. *See U.S. Equities Market Volume Summary*, CBOE, https://www.cboe.com/us/equities/market_share/ (last visited Apr. 16, 2026).

443 *See U.S. Equities Market Volume Summary*, *supra* note 442.

444 *See* EMSAC Market Structure Memo at 11.

445 *See* 2026 Data Update of the 2015 EMSAC Market Structure Memo, *supra* note 39, at Table 4.

446 *See* Form ATS-N Filings and Information, SEC, available at https://www.sec.gov/about/divisions-offices/division-trading-markets/alternative-trading-systems/form-ats-n-filings-information (last accessed Apr. 28, 2026).

447 *See 10k+ Share Report*, FINRA https://otctransparency.finra.org/otctransparency/AtsIssueData (last visited Mar. 13, 2026).

These developments have influenced market structure in significant ways, affecting both exchange products and market participant routing strategies.

If one's competitors can observe and react to information first, this can be costly.[448] For example, market participants may use market data to anticipate price movements and place limit orders in advance to benefit from such movements. If other market participants do the same, those who react faster will be able to place their quotes on the book first. This results in these earlier quotes being first in the limit order book queue, as most exchange limit order books in the US equity markets are based on a price-displayed-time priority model (*i.e.,* displayed limit orders at the same price are queued in order of time priority).[449] Being last in these queues can expose a limit order to greater risk of adverse selection, making this position undesirable. The only fix for a market participant who consistently loses such races would be to respond more quickly, so that its orders to the exchange matching engine faster than other market participants. The incentives created by these costs of losing such races and the resulting behavior undertaken by market participants to improve their response times are sometimes referred to as the speed "arms race."

To mitigate the risk of losing speed races, market participants must manage the latency in their systems' responses to market events. Latency can be introduced through the processing time of a market participant's system, or the transmission time between systems, especially between exchange matching engines and the participant's SOR systems. The main source of

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448 There is academic literature on the effect of trading speed on revenue, adverse selection, and liquidity. *See, e.g.,* Matthew Baron et al., *Risk and Return in High-Frequency Trading*, 54 J. FIN. & QUANTITATIVE ANALYSIS 993 (2019) (showing that relative latency matters and that ''HFT firms exhibit large, persistent cross-sectional differences in performance, with trading revenues disproportionally accumulating to a few firms''). Furthermore, when HFT firms use their relative latency advantages to trade on news to create short term arbitrage opportunities, they generate adverse selection on slower traders. *See* Bruno Biais *et al., Equilibrium Fast Trading*, 116 J. FIN. ECON. 292 (2015) (arguing that fast trading technology ''provides advance access to value-relevant information, which creates adverse selection, lowering welfare,'' and ''generates a negative externality''); Thierry Foucault et al., *Toxic Arbitrage*, 30 REV. FIN. STUD. 1053 (2017) (providing evidence that ''[a]rbitrage opportunities due to asynchronicities in the adjustment of prices to news are toxic because they expose dealers to the risk of trading with arbitrageurs at stale quotes''). The authors then claim that these arbitrage opportunities associated with higher trading speed impair market liquidity.

449 Displayed limit orders have priority over hidden limit orders (*i.e.,* limit orders that are not displayed to other market participants) at the same price.

transmission latency in the NMS stock market is the geographically diverse locations of the various equity exchanges. Equity exchanges are located at three data centers in Mahwah, Carteret, and Secaucus, New Jersey.[450]

c. Exchange and SIP Products

Exchanges charge for access to the liquidity on their limit order books via fees for connections and colocation, as well as per-transaction access fees. In addition, exchanges offer proprietary data products that provide a real-time view of activity on the exchange. The SIP also offers real-time market data, and is utilized by most market participants, but competitive broker-dealers may find that SIP data are generally not substitutable for the exchanges' proprietary data products when it comes to order execution.

To trade on an exchange or receive market data from an exchange, a market participant must arrange for connections to the exchange's system. As a practical matter, these connections are established in several parts, including the physical connection, logical connection and other colocation services, each of which may incur separate charges. Exchanges offer a variety of types of physical connections to cater to subscribers' varying requirements for latency and bandwidth.[451] Exchanges also offer different types of logical connections, which may differ in

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450 *See* Market Data Infrastructure Adopting Release, at section V.B.2.b. This geographic diversity in data centers is understood by the Commission to be the most significant source of latency for market participants. *See also* Phil Mackintosh, *How Trades Speed Between Venues*, NASDAQ (May 23, 2024, at 5:40 PM EDT), https://www.nasdaq.com (from main webpage, navigate to Market Makers Newsletter page) describing geographic latency with fiber transmission to be on the order of 143-304 microseconds. These various forms of latency have the effect of generating discrepancies in beliefs about the state of the market among various market participants at a single instant in time. *See* Market Data Infrastructure Adopting Release, section V.B.2.f., discussing the nature and causes of these discrepancies and current market practice for dealing with them.

451 For example, MIAX Pearl Equities exchange offers 1 Gb ultra-low latency (ULL) and 10 Gb ULL physical connections. It recommends a 10 Gb connection if consuming its proprietary TOB or DOB data. *See*, *e.g.*, MIAX, EXPRESS NETWORK INTERCONNECT CONNECTIVITY GUIDE (2024), https://www.miaxglobal.com/miax_connectivity_guide.pdf. Nasdaq offers their proprietary TotalView DOB feed with an option for hardware-based delivery on a field-programmable gate array (FPGA) for latency-sensitive market participants. *See*, *e.g.*, NASDAQ, NASDAQ TOTALVIEW-ITCH 5.0, https://www.nasdaqtrader.com/content/technicalsupport/specifications/dataproducts/NQTVITCHspecification.pdf (last visited Jan. 28, 2026).

purpose, such as order entry[452] or market data.[453] If an exchange offers colocation services, these might include cabinet space and other hardware.[454] Some exchange members with a direct connection to an exchange may also offer direct market access or sponsored market access to another market participant.[455] Market participants may also hire third parties to manage their connections.[456]

Modern order routing strategies require a low-latency view of the state of the market across all exchanges so that updates are received as quickly as possible in response to new market events.[457] This need is especially acute for exchanges where a market participant expects to trade frequently. To meet this requirement, exchanges sell a variety of real-time proprietary market data feeds. These feeds differ in their content and latency, and therefore in their use cases. The data in top-of-book ("TOB") products is generally limited to the highest bid and lowest offer and last sale price.[458] The data in depth-of-book ("DOB") products provide more content, such as odd-lot quotations, orders at prices above and below the best prices to varying

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452 *See*, *e.g.*, NASDAQ, PROTOCOL QUICK REFERENCE (2025), *available at* https://www.nasdaqtrader.com/content/ProductsServices/TRADING/Protocols_quickref.pdf. Drop copy ports are used by market participants for real-time monitoring of their trading activity. *See*, *e.g.*, CME GROUP, FAQ: DROP COPY (2025), *available at* https://www.cmegroup.com/solutions/market-access/globex/trade-on-globex/faq-drop-copy.html#title-one (last accessed Jan. 16, 2026).

453 *See*, *e.g.*, CBOE, CBOE TITANIUM US EQUITIES/OPTIONS MULTICAST DEPTH OF BOOK (PITCH) SPECIFICATION, VERSION 2.41.65 (2026) https://cdn.cboe.com/resources/membership/US_EQUITIES_OPTIONS_MULTICAST_PITCH_SPECIFICATION.pdf (last accessed Jan. 28, 2026); Nasdaq TotalView-ITCH 5.0, *supra* note 451.

454 *See* Nasdaq Rule General 8 https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/Nasdaq%20General%208.

455 Generally, direct market access refers to an arrangement whereby a member permits a customer to use the member's trading systems to send orders directly to a trading center, and sponsored access refers to an arrangement whereby a member permits a customer to send orders directly to an exchange while bypassing the member's trading system. *See* Securities Exchange Act Release No. 63241 (Nov. 3, 2010), 75 FR 69792 at 69793 (Nov. 15, 2010) ("Rule 15c3-5 Adopting Release") at 69793.

456 Co-location services may be offered by third parties at third party data centers. These third parties may effectively host the market participant and handle connections, including ports and cross-connects in colocation. *See*, *e.g.*, CBOE, CBOE TITANIUM U.S. EQUITIES/OPTIONS CONNECTIVITY MANUAL VERSION 10.4.26 (2026), at 3 (describing ways to connect), 39 (listing extranet providers) https://cdn.cboe.com/resources/membership/US_Equities_Options_Connectivity_Manual.pdf.

457 *See supra* section VI.B.4.b (describing the need for low latency data).

458 Examples of proprietary TOB products include NYSE BBO (*see* https://www.nyse.com/market-data/real-time/bbo), NASDAQ Basic (*see* https://www.nasdaq.com/solutions/data/equities/nasdaq-basic), and Cboe One Feed (*see* https://markets.cboe.com/us/equities/market_data_services/cboe_one).

levels of depth, and information about auctions.[459] There are also third-party vendors that provide market data derived from exchange data feeds which may be consolidated.[460]

Sophisticated market participants consider DOB data necessary for competitive order routing strategies.[461] The added information and potential latency advantages of such data may create a meaningful improvement in the performance of order routing algorithms that are able to use this sort of view of the market.

The cost of proprietary DOB data and connectivity can vary by exchange and can sometimes be substantial. For example, the monthly non-display fee charged by one exchange for its proprietary DOB data is $22,400.[462] Another exchange charges a monthly non-display fee of $2,000 for its proprietary DOB data.[463] The monthly non-display fees are just one component of most exchanges' market data fee schedule, and do not include the fees for connectivity. Connectivity fees can also be quite substantial. For example, the monthly fee charged by one exchange for a 10 Gb connection is $18,500.[464]

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459 Examples of proprietary DOB products include CBOE One Premium (*see* https://www.cboe.com/market_data_services/us/equities/cboe_one/), which includes five levels of aggregated depth, NYSE Integrated (*see* https://www.nyse.com/data-products/catalog/integrated-feed), Nasdaq Total View (*see* https://www.nasdaq.com/solutions/data/equities/nasdaq-totalview), and CBOE Depth (*see* https://www.cboe.com/market_data_services/us/equities/) which include complete depth of book.

460 *See*, *e.g.*, *The World's Top Vendors Provide Cboe Market Data*, CBOE, https://www.cboe.com/market_data_services/vendors/ (last visited Jan. 29, 2026) and *Market Data Vendors*, NASDAQ, https://www.nasdaq.com (subpage https://data.nasdaq.com/market-data-vendors) (last visited Jan. 29, 2026). Note that market participants still pay the associated market data fees to the exchanges.

461 *See*, *e.g.*, Market Data Infrastructure Adopting Release, section V.B.2.c.

462 *See* NYSE, NYSE PROPRIETARY MARKET DATA PRICING GUIDE (2025), *available at* https://www.nyse.com/publicdocs/nyse/data/NYSE_Market_Data_Pricing.pdf.

463 *See* CBOE, CBOE U.S. EQUITIES FEE SCHEDULES, EDGX EQUITIES (2026) https://www.cboe.com/us/equities/membership/fee_schedule/edgx/. Currently, only one exchange, NYSE Texas makes proprietary data available but does not charge for it. *See*, *e.g.*, FEE SCHEDULE OF NYSE TEXAS, INC. (2026), *available* at https://www.nyse.com/publicdocs/nyse/markets/nyse-texas/NYSE_Texas_Fee_Schedule.pdf.

464 Some exchange connectivity fees have an initial fee and an ongoing monthly fee. The initial cost of a fiber connection at Nasdaq is $1,650 for a ULL connection or $1,100 for a regular connection and the monthly ongoing cost for a 10 Gb ULL connection is $18,500. *See* Nasdaq Rule General 8, *supra* note 454. The initial cost of a dedicated cabinet at NYSE is $5,000 and a monthly fee of $1,200 would be charged per the first 8 kilowatts (kW). *See* NYSE, CONNECTIVITY FEE SCHEDULE (2026), *available at* https://www.nyse.com/publicdocs/nyse/Wireless_Connectivity_Fees_and_Charges.pdf.

The Commission estimates that the total annual cost to purchase DOB market data from all exchanges is about $1.6 million.[465] The Commission estimates that the total annual cost to purchase a connection to all exchanges is about $2.6 million.[466] It is the Commission's understanding that broker-dealers that connect to all (or almost all) exchanges would likely have two use cases for proprietary data feeds and thus would pay data fees for each use case. Thus, we estimate that a broker-dealer that connects to all exchanges spends approximately $5.7 million on market data and connectivity fees per year.[467]

Another source of real-time market data is the SIP, which sells market data that contains the top of book of each exchange, and last sale information, as well as administrative and market status messages. The Commission understands that most market participants who execute orders purchase a non-display subscription to the SIP. The SIP's administrative and market status messages are important to market participants, and the SIP can also serve as a backup in the event that a market participant's exchange proprietary feed goes down. The SIP might also serve as a sufficient view of the activity on small exchanges where a market participant does not expect to trade frequently.

However, the Commission understands that sophisticated market participants typically do not regard the SIP as a substitute for purchasing DOB data from the vast majority of exchanges.

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465 In 2019, IEX estimated that consuming market data from the Nasdaq, NYSE, and Cboe exchange families costs approximately $1,151,772 per year. *See* Letter from Brad Katsuyama, CEO, Investors Exchange LLC, to Brent J. Fields, Secretary, Commission (Jan. 29, 2019) ("Letter from IEX 2019"). We updated this analysis. First, we, added the yearly market data fees of $255,480 charged by the exchanges that have entered since 2019: IEX, MEMX, MIAX Pearl, LTSE, and 24X. Second, since 2019, the Nasdaq, NYSE, and Cboe exchange families have had some fee increases. We estimate the cost of consuming market data from the Nasdaq, NYSE, and Cboe exchange families is approximately $1,333,248 per year. Thus, ($255,480) + ($1,333,248) = $1,588,728.

466 In 2019, IEX estimated that purchasing physical and logical connections from the Nasdaq, NYSE, and Cboe exchange families' costs approximately $1,230,000 per year. *See* Letter from IEX 2019. We updated this analysis. First, we, added the yearly connectivity fees of $1,025,400 charged by the exchanges that have entered since 2019, IEX, MEMX, MIAX Pearl, LTSE, and 24X. Second, since 2019, the Nasdaq, NYSE, and Cboe exchange families have had some fee increases. We estimate the cost of purchasing connectivity to the Nasdaq, NYSE, and Cboe exchange families is approximately $1,546,944 per year. Thus, ($1,025,400) + ($1,546,944) = $2,572,344.

467 *See supra* notes 465 and 466. The total cost is thus (cost of market data x 2) + (cost of connectivity). For the new exchanges, we have ($255,480 x 2) + ($1,025,400) = $1,536,360. For the existing exchanges, we have ($1,333,248 x 2) + ($1,546,944) = $4,213,440. Thus, ($1,536,360) + ($4,213,440) = $5,749,800.

The lack of odd-lot, depth and auction information may make the SIP insufficient for the needs of sophisticated order routing strategies.[468] In addition, proprietary DOB feeds generally have significantly lower latency (i.e., are faster) than the SIP.[469]

The SIP is less expensive than purchasing proprietary market data from all exchanges by a substantial amount. For example, the monthly non-display fee for data charged by the CTA/CQ SIP, is $2,000 for Network A and $1,000 for Network B.[470]

In the fourth quarter of 2025, there were approximately 4-6 million non-professional subscribers and 300,000 professional subscribers across the UTP and CTA/CQ SIPS.[471] There were also approximately 400 non-display vendors.

Market participants have estimated the total costs to onboard a new exchange at $1 million on the execution side and $500,000 on the clearing side.[472] Additionally, market participants have estimated the ongoing maintenance costs to be about $200,000 a year.[473] The Commission estimated that the total annual cost to connect to and intake market data from all exchanges is approximately $5.7 million per broker-dealer.[474] The cost to connect to an exchange may be lower for some market participants if they utilize a third-party vendor, but the cost to

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468 *See*, *e.g.*, Market Data Infrastructure Adopting Release, section V.B.2.c.

469 *See*, *e.g.*, *Real Time Data*, NYSE, https://www.nyse.com/market-data/real-time (last visited Jan. 22, 2026) (describing order-by-order feed, NYSE Integrated, as a "high-performance" product). Consolidated market data feeds sold by market data aggregators also tend to be lower latency than the SIP. This is due to both faster aggregation times and the unique geographic latency profile of SIP data. *See* Equity Market Structure Roundtables, Oct. 25–26, 2018: Roundtable on Market Data and Market Access, SEC, *available at* https://www.sec.gov/spotlight/equity-market-structure-roundtables (''Market Data Roundtable''), Day One Transcript at 126–29 (Mark Skalabrin, Redline Trading Solutions).

470 *See* CTA Plan, Schedule of Market Data Charges (Jan. 1, 2015), available at https://www.ctaplan.com/publicdocs/ctaplan/notifications/trader-update/Schedule%20Of%20Market%20Data%20Charges%20-%20January%201,%202015.pdf.

471 *See* UTP Q4 202*5, available at* https://www.utpplan.com/DOC/UTP_2025_Q4_Stats_with_Processor_Stats.pdf; CTA Q4 2025, *available at* https://www.ctaplan.com/publicdocs/ctaplan/Q4_2025_CTA_Subscribers_Metrics_Report.pdf. It is the Commission's understanding that there is an overlap in subscribers across the exclusive SIPs.

472 *See* First TTR Roundtable Transcript at 68-69 (Pankil Patel, Bank of America) (This market participant said these costs include "third party sourcing, procurement, technology, testing, hardware, CAD integration, [and] billing").

473 *See* First TTR Roundtable Transcript at 68-69 (Pankil Patel, Bank of America).

474 *See supra* note 467. *See* also FIA PTG Paper at 1 (stating that "major firms [spend] millions annually just on market data and connectivity fees").

intake market data from an exchange may not necessarily be lower if they utilize a third-party vendor because the structure of fees is such that the original market data fees are passed through.[475] The cost to connect to and intake market data from an exchange may also be higher for other market participants if they utilize co-location services offered by the exchanges, or if they require more connections or market data use cases than estimated.

Some market participants who are not particularly sensitive to latency, such as retail or non-professional investors and wealth managers who access market data in a displayed format, may use proprietary TOB data or the SIP.[476] To satisfy obligations under Rule 603 (*i.e.*, the "Vendor Display Rule"), which requires broker-dealers to show a consolidated display of market data in a context in which a trading or order routing decision can be made, broker-dealers rely on SIP data for this purpose.[477] Many retail investors use SIP data for trading decisions.

d. SIP Revenue Allocation

Currently, part of the SIP data revenue is used to pay for the cost of maintenance and administration of the SIP and the remainder is distributed to SRO members based on trading and quoting activity.[478] The trade and quote revenue distributed to exchanges from the exclusive SIP revenues totaled more than $300 million in 2024.[479] For some smaller exchanges, this can be a substantial revenue source.[480] Obtaining a share of the SIP revenue may represent a meaningful

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475 *See also* First TTR Roundtable Transcript at 158 (Allison Bishop, Proof Trading).

476 *See* Letter from Matthew J. Billings, Managing Director, Market Data Strategy, TD Ameritrade, (Oct. 24, 2018) (''TD Ameritrade Letter 2018''), *available a*t https://www.sec.gov/comments/4-729/4729-4560068-176205.pdf at 5-8.

477 *See* Vendor Display Rule, Rule 603 of Regulation NMS. *See* also TD Ameritrade Letter 2018 at 4-8.

478 *See* Notice of Filing of a National Market System Plan Regarding Consolidated Equity Market Data, Securities Exchange Act Release No. 90096 (Oct. 6, 2020), 85 FR 64565 (Oct. 13, 2020) at Exhibit D.

479 *See* CTA 2024-Q4, *available at* https://www.ctaplan.com/publicdocs/ctaplan/Q4_2024_CTA_Quarterly_Revenue_Disclosure.pdf ; UTP PLAN ADMIN., REVENUE EARNED BY FEE TYPE, 2024-Q4, *available at* https://www.utpplan.com/DOC/UTP_Revenue_Disclosure_Q42024.pdf (last accessed Mar. 12, 2026).

480 For example, SIP revenue accounted for close to 60% of LTSE's total revenue in 2024. *See* LTSE Form 1, *available at* https://www.sec.gov/Archives/edgar/vprr/2500/25000224.pdf (last accessed Mar. 3, 2026). On the other hand, SIP revenue only accounted for just over 3% of MEMX's total revenue in 2024. Market data and connectivity accounted for about 4% and 5%, respectively. Note that the vast majority of the market data revenue is from SIP revenue. *See* MEMX Form 1, *available at*

incentive for new entrants to start an exchange.[481] This incentive may contribute both to the rate of new entries in the equity exchange market and to new exchanges adopting fee schedules that encourage posting liquidity.

e. The Value of Access to Exchange Liquidity

Despite the large and increasing number of exchanges for trading NMS stocks, the Commission believes there are signs that exchanges, especially large ones, possess some market power over their data and connectivity products. It is likely that this ability to obtain revenue from proprietary data and connectivity sales, even with modest market share, has contributed to exchange proliferation since the adoption of Regulation NMS.[482]

Many broker-dealers view proprietary data and connectivity services as necessary to be a competitive executing broker-dealer. As a result, they purchase these services from many, if not all, exchanges. This pattern of establishing connections to most exchanges has increased over time. The Commission has released data from a sample period consisting of the week of December 5, 2016. During that week, broker-dealers that connected to at least all but two exchanges accounted for 76.6% of exchange-directed message volume, and broker-dealers that connected to at least all but three exchanges accounted for 91.6%.[483] At that time, the Commission characterized the demand for connectivity services of exchanges as "less elastic," and said this was consistent "…with the stated view that in order to avoid a competitive disadvantage, market participants have little choice but to purchase direct connectivity services from multiple SROs."[484]

Currently, the percentage of exchange-directed message volume accounted for by broker-dealers who connected to at least all but two exchanges is 66%, and the percentage of exchange-

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https://www.sec.gov/Archives/edgar/vprr/2500/25000228.pdf (last accessed Mar. 3, 2026). *See* also CTA Quarterly Revenue Disclosure and UTP Quarterly Revenue Disclosure, *supra* note 479.

481 *See, e.g.,* Cboe Letter II at 3.

482 *See infra* section VI.B.4.f (discussing the role of Regulation NMS itself in this trend).

483 *See* Market Data Infrastructure Adopting Release, at 18740, n.1794.

484 *See* Market Data Infrastructure Adopting Release at 18740.

directed message volume accounted for by broker-dealers connected to at least all but three exchanges is 93.4%.[485] However, today's numbers are based on the current number of active exchanges, which stands at 17. At the time of the 2016 study, there were only 13 exchanges. To hold the number of exchanges constant, one should look at the percentage of exchange-directed message volume handled by broker-dealers connected to at least 11 exchanges and at least 10 exchanges. Currently, those percentages are 95.1% and 95.4%, respectively.[486]

Executed dollar volume is a better measure than message volume because message volume includes cancellation and other messages.[487] The percentage of exchange-directed executed dollar volume from broker-dealers connected to at least all but two exchanges is 78.4%, and the percentage of exchange-directed executed dollar volume handled by broker-dealers connected to at least all but three exchanges is 92.3%.[488] Holding the number of exchanges constant since 2016, the percentage of exchange-directed executed dollar volume handled by broker-dealers connected to at least 11 exchanges is 95.6%.[489]

This appears to reflect a trend in which the vast bulk of activity in the NMS stock market is handled by broker-dealers who determine it is necessary to connect to most if not all equity exchanges, suggesting that the competitive pressure on broker-dealers to connect to most exchanges, as identified by the Commission in 2020, remains persistent, and may be increasing.

Table 1 Executing Dollar Volume by Number of Broker Connections to Exchanges		
	All	Customer Only

485 This analysis was completed using CAT data for the month of January 2026. A broker-dealer is defined by its firm Central Registration Depository numeric identifier (CRD). A broker-dealer that submits the order to the exchange is the executing broker-dealer. An executing connection is where a broker-dealer submitted an order directly to an exchange. The number of connections may be larger to the extent that there are market participants with a connection that do not have any orders or trades during the sample period. Certain CRDs may be affiliates.

486 This analysis was completed using CAT data for the month of January 2026.

487 Cancellation messages may be a substantial proportion of total message volume. *See* Market Structure Data Downloads, Conditional Cancel and Trade Distributions, available at https://www.sec.gov/data-research/market-structure-data.

488 This analysis was completed using CAT data for the month of January 2026.

489 This analysis was completed using CAT data for the month of January 2026.

No. of Exchange Connections	No. of Brokers	% Shares Traded	% Dollar Volume	No. of Brokers	% Shares Traded	% Dollar Volume
17	18	65.6%	59.3%	17	68%	62.7%
16	5	10.7%	13%	5	13%	19.1%
15	6	5.6%	6%	3	7.2%	8.6%
14	7	9.1%	13.9%	2	0.7%	1.4%
11-13	8	3.8%	3.4%	8	6.8%	5.9%
3 to 10	57	4.2%	2.7%	41	3.6%	2%
2	28	0.3%	0.2%	25	0.5%	0.1%
1	84	0.6%	1.5%	72	0.2%	0.2%
0	858	0	0	822	0	0

This table uses CAT data from January 2026 to show information on the number of exchanges different broker-dealers connect to (*infra* Table 3 shows information on the number of ATSs these broker-dealers connect to). It also shows the percentages of exchange executed dollar and share volume that these broker-dealers accounted for. The "All" category reflects exchange trading volume from orders that originate from either a customer or proprietary account and the "Customer Only" category only reflects exchange trading volume from orders that originate from a customer account. The sample for the "All" category consists of 1,071 broker-dealers that either originated or executed an order from a proprietary or customer account on an exchange or ATS in January 2026 (both exchanges and ATSs are included in constructing the sample of broker-dealers to make this table and *infra* Table 3 comparable). The sample for the "Customer Only" category consists of 995 broker-dealers that either originated or executed an order from a customer account on an exchange or ATS in January 2026.

Broker-dealers are categorized by the number of executing connections found. A broker-dealer is defined by its firm Central Registration Depository numeric identifier ("CRD"). An executing connection is where a broker-dealer submitted an order directly to an exchange. The number of connections may be understated if some market participants maintain connections but do not have any orders or trades during the sample period. The potential for undercounting connections may be larger on exchanges with lower volume.

Originating broker-dealer clients are categorized as customer accounts (individual, institutional, foreign, or agency average price accounts) or proprietary accounts (market making, employee, error, or other proprietary accounts). The category "All" reflects orders originating from all account types, whereas "Customer Only" reflects orders from customer accounts only.

For the "All" sample, in January 2026, 213 broker-dealer CRDs submitted an order to an exchange, 186 submitted an order to an ATS, and 277 submitted an order to either an exchange or an ATS. Each order is traced to its origin where an originating broker-dealer received the order from a client. 1,041 broker-dealer CRDs originated an order that went to an exchange, 1,031 originated an order that went to an ATS, and 1,060 originated an order that went to either an exchange or an ATS. The originating broker-dealer may be the same or different from the executing broker-dealer. The executing broker-dealer submits the order to the exchange or ATS. 1,050 broker-dealer CRDs either originated or executed an order that went to an exchange, 1,037 broker-dealer CRDs either originated or executed an order that went to an ATS, and 1,071 broker-dealer CRDs either originated or executed an order that went to an exchange or ATS.

For the "Customer Only" sample, in January 2026, 173 broker-dealers submitted a customer order to an exchange, 151 submitted a customer order to an ATS, and 229 submitted a customer order to an exchange or ATS; 959 broker-dealer CRDs originated a customer order that went to an exchange, 957 originated a customer order to an ATS, and 978 originated a customer order to either an exchange or an ATS. In total, 974 broker-dealers either originated or executed a customer order that went to an exchange, 967 broker-dealers either originated or executed a customer order that went to an ATS, and 995 broker-dealers either originated or executed a customer order that went to an exchange or ATS.

Table 2 Executing Volume by Number of Broker Connections and Memberships to Exchanges

No. of Exchange Memberships	No. of Exchange Connections	All			Customer		
		No. of Brokers	% Shares Traded	% Dollar Volume	No. of Brokers	% Shares Traded	% Dollar Volume
17	17	18	65.6%	59.3%	17	68%	62.7%
17	15 or 16	5	10.7%	12.9%	5	13%	18.9%

15 or 16	15 or 16	6	5.6%	6.1%	3	7.2%	8.7%
14 to 16	14 or fewer	11	11.6%	16.4%	7	2.9%	4.8%
1 to 13	1 to 13	173	6.5%	5.2%	141	8.9%	4.9%
1 or more	0	136	0	0	176	0	0
0	0	746	0	0	716	0	0

This table uses CAT data from January 2026 to show information on the number of exchanges different broker-dealers are members of and how many of these exchanges they connect to. It also shows the percentages of exchange executed dollar and share volume that these broker-dealers accounted for. The "All" category reflects exchange trading volume from orders that originate from either a customer or proprietary account and the "Customer Only" category only reflects exchange trading volume from orders that originate from a customer account. The sample for the "All" category consists of 1,095 broker-dealers that were members of an exchange and/or originated or executed an order from a proprietary or customer account on an exchange or ATS in January 2026 (*i.e.*, it includes the 1,071 broker-dealers in the sample in *supra* Table 1 plus 24 broker-dealers that are members of an exchange but did not originate or execute an order on an exchange or ATS). The sample for the "Customer Only" category consists of 1,065 broker-dealers that were members of an exchange and/or originated or executed an order from a customer account on an exchange or ATS in January 2026 (*i.e.*, it includes the 995 broker-dealers in the sample in *supra* Table 1 plus 70 broker-dealers that are members of an exchange but did not originate or execute a customer order on an exchange or ATS).

This table uses the same methodology as described above in *supra* Table 1 (discussing originating broker-dealers, executing broker-dealers, customer account types, and the number of broker-dealer connections observed broken down by venue, broker-dealer, and account types). A broker-dealer is defined by its firm CRD. Broker-dealers are categorized by their number of executing connections to exchanges. Broker-dealers are also categorized by the number of exchanges where they maintained a membership in January 2026 according to CAT industry member reference data.

Broker-dealers with fewer connections also tend to outsource more of their exchange-directed order flow to other broker-dealers for execution. For example, broker-dealers connecting to all exchanges outsourced only 2.9% of their exchange dollar volume, compared to broker-dealers connecting to 15 exchanges who outsourced 9.4% and broker-dealers connecting to two exchanges who outsourced 91.1%.[490] This shows that broker-dealers who connect to only

[490] For customer exchange-directed order flow, the numbers are 5.5%, 2.5%, and 94.7%, respectively. Outsourcing percentages are measured at order origination. Broker-dealers that do not originate orders, such as exchange routing brokers, are not included in these percentages. This analysis was conducted using CAT data from January 2026. Each order is traced to its origin where an originating broker-dealer received the order from a client. The originating broker-dealer may be the same or different from the executing broker-dealer. Originating broker-dealer clients are categorized as customer accounts (individual, institutional, foreign, or agency average price accounts) or proprietary accounts (market making, employee, error, or other proprietary accounts) based on their account type. For the Consolidated Audit Trail, account type definitions are available in Appendix G to the CAT Reporting Technical Specifications for Industry Members (https://catnmsplan.com), for the field name "accountHolderType." Account types represent the beneficial owner of the account for which an order was received or originated, or to which the shares or

two exchanges do not use those connections for routing a significant number of their orders, and instead rely heavily on outsourcing to get orders executed.

In addition to this evidence, the market for exchange data[491] and connections has experienced repeated fee increases, even as new entrants entered the market.[492] This is consistent with exchanges possessing pricing power. More recently, the market has seen a number of new exchanges start charging fees for connections and data.[493] A new exchange is observed to gain a sizeable number of members in the first month of operation.[494] While not all members may have a connection to an exchange,[495] this is suggestive of broker-dealers' incentives to immediately connect to new exchanges. As Table 1 shows, exchange-directed order flow is routed by largely the same group of broker-dealers that connect to all or almost all exchanges, so these fees represent an increase in overall connectivity and data expense for these broker-dealers. This may demonstrate a further ability of suppliers in the market to raise prices on this customer group. These fee increases, or new fees, have come over a period of time in which there have been new

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contracts are allocated. Possible types are: Institutional Customer, Employee, Foreign, Individual Customer, Market Making, Firm Agency Average Price, Other Proprietary, and Error. An Institutional Customer account is defined by FINRA Rule 4512(c) as a bank, investment adviser, or any other person with total assets of at least $50 million. An Individual Customer account means an account that does not meet the definition of an "institution" and is also not a proprietary account. Therefore, the CAT account type "Individual Customer" includes natural persons as well as corporate entities that do not meet the definitions for other account types

491 The data presented in Table 1 reflects evidence of a connection between the broker-dealer and the exchange but does not characterize the type or number of connections purchased. It is not necessary that a broker-dealer purchase market data of any type in order to produce a record of order entry such as the records used to produce Table 1, but the Commission believes it is typical for a broker-dealer to purchase message-by-message market data from all exchanges on which it trades.

492 *See supra* section VI.B.4.a (discussing new entrants to the exchange market). *See* Market Data Infrastructure Adopting Release at 18738 (discussing commenter calculations of fee increases and revenue increases). *See also* Eric Budish, et al., *A Theory of Stock Exchange Competition and Innovation: Will the Market Fix the Market?*, 132 J. POL. ECON. 1065 (2024) (estimating that in 2015 exchanges earned $555.4-$623.0M in market data revenue and $436.8-$484.8M in connectivity revenue). *See* also *infra* note 511.

493 *See supra* section VI.B.4.c (estimating exchange fees). Some new exchanges may not charge fees for market data or connectivity at first. *See* First TTR Roundtable Transcript at 86-87 (Chris Solgan, MIAX Exchange Group) (describing initial waivers of data and connectivity fees for new exchanges).

494 In analysis completed using CAT data for the month of October 2025, the new exchange was observed to have 25 members.

495 *See supra* Table 2.

entrants in the market, suggesting that the presence of additional exchanges has not lowered demand for these connections and data.

Taken together, this evidence suggests that access to one exchange's limit order book is not a strong substitute for access to another exchange's limit order book. There may be several reasons for this.

Most fundamentally, access to two different exchanges does not give access to the same thing. The limit order against which broker-dealers hope to fill the orders of their customers are unique to the exchange on which they are posted, and execution cannot be conditioned on the events of a different exchange.[496] For example, suppose there are 100 shares available to buy on Exchange A and 100 shares available to buy on Exchange B and no other liquidity available. A broker-dealer who wishes to buy 200 shares cannot substitute access to the shares on Exchange A with access to the shares on Exchange B. At that point in time, each exchange is only capable of giving it 100 shares, and to fill a 200 share order, the broker-dealer must possess connections to both, which effectively means purchasing connectivity and data services to both.[497]

This distinction ends up being of substantial practical significance, because the parent orders that a broker-dealer is likely to receive from an institutional customer are typically much larger than even the total number of shares available at the top of every exchange in the market combined. Therefore, it is highly unlikely that an institutional broker-dealer can fill a single order by taking shares from only a single exchange. Instead, a broker-dealer will have to combine the liquidity available on all exchanges, often multiple times over, to fill a single parent

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496 There are certain order types, such as midpoint peg orders, in which the price that the order executes at depends on the NBBO, which may be set by another exchange.

497 In practice, market participants may use a third-party broker-dealer to route orders to exchanges to which they do not possess connections. Such third-party broker-dealers can include brokage services offered by the exchanges, which will route orders to the protected quote if the exchange does not have the protected quote. A commission of some kind would typically be paid for such services. Since this practice effectively amounts to outsourcing part of the order routing function, broker-dealers who wish to offer order routing services may find it difficult to add value to their customers while relying on such services.

order. This effectively means that the broker-dealer cannot substitute one exchange for another; it will generally need access to all relevant exchanges to be competitive.[498]

Market makers and other proprietary traders face a similar phenomenon. Market makers offer to fill orders by sourcing shares at a discount to the price at which they sell them. Throughout the trading day, a quote on any exchange might become cheap relative to changing market conditions. Market makers who can rapidly hit this quote will have a cheaper source of liquidity than market makers who are constrained to a subset of the exchanges, and will have no choice but to post wider, and therefore less competitive, quotes.

While exchanges might not face close substitutes for data and connectivity products, conditional on a market participant being connected to the exchanges, the exchanges are potentially close substitutes for order routing. If a broker-dealer has paid the subscription costs for data and connections, it faces notable similarities in the functioning of exchange limit order books across different exchanges, particularly with a given fee model type (*e.g.,* maker-taker, inverted,[499] *etc.*). The competition among exchanges that this substitutability induces may be reflected in the fees typically charged to a market participant who has already paid for connections and chooses to route a limit order to a particular exchange. These fees are in fact, typically negative; that is, the exchange pays a rebate to the poster of a limit order that is traded against by a marketable order.

The fact that exchanges face more competition for attracting limit orders than they do for data and connections is consistent with academic research on markets with multi-sided platforms. A multi-sided platform is a firm which sells two or more methods of accessing a network, in which participation on one side or the other creates cross-network externalities.[500]

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498 Evaluations by broker-dealers regarding the appropriate venues to be connected to may also be part of their review of compliance with requirements of best execution obligations.

499 In an "inverted" pricing model, the exchange charges a fee to the provider of liquidity and pays a rebate to the taker of liquidity.

500 *See* Marc Rysman, *The Economics of Two-Sided Markets*, 23 J. ECON. PERSPECTIVES 125, 127 n.2 (2009) ("Rysman (2009)") (citing disagreement about whether cross-network externalities are a necessary part of

Exchanges serve as two-sided platforms, with trading activity on one side and data and connections on the other.[501] The lack of substitutability and the need to obtain access to liquidity on every exchange induces behavior known in the platform theory literature as "multi-homing," which refers to a market where the consumers acquire access to every platform.[502] On the other hand, since a limit order can only be posted to one exchange at a time, participation on the trading side of the exchange platform exhibits "single-homing," that is, participation at the point of posting a limit order is constrained to only one venue at a time. [503]

A platform with multi-homing participants on one side and single homing participants on the other is called a "competitive bottleneck" platform. The platforms in a competitive bottleneck market control access to the participants on the single homing side (limit orders) by charging

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the definition of a platform). Rochet and Tirole (2006) define a platform as "one in which the volume of transactions between end-users depends on the structure and not only on the overall level of the fees." *See* Jean-Charles Rochet & Jean Tirole, *Two-Sided Markets: A Progress Report*, 37 RAND J. ECON. 645, 646 (2006). This would include markets with a fixed membership fee and a membership externality. The fixed nature of the fee means there would be no network externality, as the decision to be a member happens before the size of the platform (*i.e.*, the number of members on each side) is known. There may also be disagreement about specific markets being platforms. *See* Rysman (2009) at 126, n.1 (citing contrasting views about whether a specific market – grocery stores – is a platform). *See also* Mark Armstrong, *Competition in Two-Sided Markets*, 37 RAND J. ECON. 668 (2006) ("Armstrong (2006)")). Platforms exhibit cross-network externalities when a user's utility depends on the number of users on the other side. Cross-network externalities can also be referred to as cross-group or indirect network effects, also called cross- or indirect network externalities. *See* Rysman (2009) at 127.

501 There is evidence for positive and negative externalities between trading and proprietary market data. One academic paper finds evidence for a positive network externality from more data to trading: not only do users that subscribe to data on a given exchange trade more on that exchange, but also more trading by these users leads to more trading by users who don't subscribe to data on that exchange. *See* Terrence Hendershott et al., *Stock Exchanges as Platforms for Data and Trading*, 75 J. FIN. MKT. 100986 (2025) ("Hendershott, Rysman, and Schwabe (2025)"). Another academic paper finds a decrease in an exchange's share of trading volume following an increase in the exchange's data fees, which is also consistent with a positive externality. *See* Jonathan Brogaard et al., *Competition and Exchange Data Fees* (working paper Oct. 10, 2024) *available at* https://papers.ssrn.com/abstract_id=3703431 (retrieved from SSRN Elsevier database) ("Brogaard, Brugler, and Rösch (2024)"). However, the traders who purchase data can also exert negative externalities on traders who do not purchase data as the data can help traders to be more informed. *See* Brogaard, Brugler, and Rösch (2024) (*citing* David Easley et al., *Differential Access to Price Information in Financial Markets*, 51 J. Fin. Quantitative Analysis 1071 (2016). *See also* Vincent Glode et al., *Arms Sales in Financial Markets* (Jacobs Levy Equity Mgmt. Ctr. Quantitative Fin. Rsch. Paper May 30, 2025), *available at* https://ssrn.com/abstract=4146808 (retrieved from SSRN Elsevier database); Konstantin Sokolov, et al., *Who Benefits from Securities Exchange Innovation?* (working paper May 15, 2024) *available at* https://papers.ssrn.com/abstract_id=4260872 (retrieved from SSRN Elsevier database). The positive externalities are likely to be larger, because few traders do not purchase data. Other elements of the exchange business, such as listings, can also fit into this platform model, but are not relevant to this discussion.

502 *See* Armstrong (2006) at 669.

503 *See* Armstrong (2006) at 669.

fees to the multi homing side (the connections and data). Economic theory has shown that in such markets, platforms compete to attract users on the single homing side and exert monopoly power on the multi homing side in the form of high prices.[504]

f. The Role of Rules 611 and 610(e) in the Value of Access to Exchange Liquidity

The Commission discusses above how, in the current equity market, exchanges possess some market power in the sale of data and connectivity services, and that this may have contributed to the proliferation of exchanges over years since Regulation NMS was implemented.[505] The Commission believes that Rules 611 and 610(e) also play a role in creating this market power. [506]

Rule 611 creates an "interference cost" for not connecting to every trading center which may have a protected quote. To see this, suppose that a broker-dealer is connected to all exchanges, and a new exchange enters the market. If the broker-dealer chooses not to connect to this exchange, then every time this new exchange has the protected quote, the broker-dealer must either utilize another broker-dealer who is connected to that exchange to hit this quote,[507] or wait until this quote disappears before resuming trading. When this happens, it slows down trading and increases the risk of missed liquidity opportunities, thus raising transaction costs. The Commission believes that, while these interruptions triggered by this new exchange having the protected quote will be infrequent throughout the trading day, they will be meaningful enough to

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504 *See* Armstrong (2006). In platform markets, and especially in platform markets with competitive bottleneck configurations, "it does not make sense to speak of the competitiveness of 'the market'. There are two markets." *See* Armstrong (2006) at 689.

505 *See supra* section VI.B.4.e.

506 Some commenters stated that Rule 611 has led to exchange proliferation. *See, e.g.*, J. Angel Letter at 1, 16; Robinhood Letter at 2-5. Some commenters also stated that Rule 611 requires broker-dealers to connect to all exchanges. *See, e.g.*, Robinhood Letter at 2, 5; First TTR Roundtable Transcript at 68-69 (Pankil Patel, Bank of America).

507 The routing services offered by broker-dealer exchanges might be used for this purpose. The Commission believes that utilizing a broker-dealer to handle such routing may not result in performance that matches the performance of a SOR that handles all routes itself, because the technology and response of the third-party broker-dealer is not integrated and coordinated with the decisions being made by the SOR as well as it might be if it were all handled by a single system.

raise transaction costs to a measurable degree. This meaningful interruption creates an interference cost for not connecting to the new exchange, and this cost could be larger than the cost of connecting.[508] The Commission observes that the broker-dealers that account for the majority of executed dollar volume appear to connect to all exchanges, consistent with this interference cost being a cost they are unwilling to bear. In addition, the Commission believes that as a new exchange gains more market share, this interference cost increases, because the exchange has the best quote more often and thus interferes with broker-dealers' routing more often. This may increase the percentage of exchange-directed dollar volume routed by broker-dealers connecting to all exchanges.[509]

Rule 610(e) is likely also creating an interference cost, though it is likely smaller than the interference cost associated with Rule 611. If a market participant wishes to post a quote that will lock the market, and it is not connected to the exchange which has the quote it will lock, it will have to wait until someone else either cancels or trades against that quotation. Alternatively, the participant can submit the order, in which case the exchange will either route the order to the exchange with the best quote or post the order but "slide" the order's price so that it does not lock the market.[510] This may interfere with the market participant's routing strategy, leading to increased transaction costs.

This interference cost from Rules 611 and 610(e) contributes to the incentive to connect to as many exchanges as possible. In addition, even if a broker-dealer chooses not to connect to an exchange, it will still need to either subscribe to the exchange's market data or to the SIP and update its SOR to comply with Rule 611 and 610(e) (*e.g.,* for routing ISOs). Because the

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508 *See supra* section VI.B.4.c. (discussing the startup costs incurred by broker-dealers to integrate a new exchange into its routing system, including data and connection fees).

509 If broker-dealers choose to not connect to a new exchange, they may choose to use an executing broker-dealer in order to reach the quotes on the new exchange.

510 A "hide not slide" order type allows an order that would lock the market to be hidden while it would lock the markets, rather than sliding the price. Then, the order becomes visible once it would no longer lock the market. *See supra* section VI.B.1.b (discussing exchange order types to avoid locking and crossing markets).

interference cost has the effect of reducing the elasticity of demand for exchange connections, it may also enable exchanges to charge higher prices for data and connections, creating an "interference premium" in prices.[511]

There are reasons to believe that the demand for ATS connections is more elastic than the demand for exchange connections. One reason is that ATSs represent a market for trading services that do not command an interference cost, as no ATS currently has a protected quote.[512] Another reason is that most ATSs are not subject to the fair access requirements and may thus have more flexibility in determining their business models.[513] It may be that some broker-dealers regularly disconnect from ATSs[514] and take longer to connect to a new ATS or do not connect at all.[515]

The Commission observes a corresponding difference in the pattern of broker-dealer trading by the number of connections to ATSs compared to the pattern of broker-dealer trading by the number of connections to exchanges. As shown in Table 3, the majority of the ATS-directed dollar volume is from broker-dealers that connect to approximately half of ATSs, compared to the majority of the exchange-directed dollar volume being from broker-dealers that connect to all or almost all exchanges.[516] Also, while broker-dealers with fewer ATS connections

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511 While new exchanges may not initially charge fees for market data and connectivity (*see infra* note 729), they often begin charging fees after gaining a small market share. For example, one exchange had a market share of 0.1% in February 2026 and charges market data fees. *See U.S. Equities Market Volume Summary*, *supra* note 443; *see also* 24X, 24X MARKET DATA FEES (2026), *available at* https://equities.24exchange.com/api/media/file/24X%20Market%20Data%20Fees-2.pdf.

512 One ATS currently has a proposal to gain trade-through protection for its quotes. *See* IntelligentCross Letter at 1.

513 *See* First TTR Roundtable Transcript at 249-253 (Andrew Smith, Virtu Financial) (stating that ATSs have "lower barriers and more flexibility than exchanges").

514 *See* First TTR Roundtable Transcript at 253-256 (Vlad Khandros, OneChronos).

515 *See* First TTR Roundtable Transcript at 216-218 (Vlad Khandros, OneChronos). This commenter also states that it may take longer for market participants to connect to a new ATS because they first need to connect to a new exchange.

516 *See infra* Table 3. There are 33 ATSs, but the maximum number of connections observed is 25. Some ATSs do not permit broker-dealers to trade on them at all and instead restricts participation to investors or requires use of a particular executing broker-dealer. *See supra* Table 1 (showing the pattern of broker-dealer exchange-directed executing dollar volume by number of exchange connections).

do tend to outsource more of their ATS-directed order flow to other broker-dealers for execution, they do so less than broker-dealers with fewer exchange connections.[517]

This comparison to the ATS market is imperfect for a number of reasons. ATSs typically offer a different trading experience from the experience available on a national securities exchange. ATSs typically do not offer displayed quotations, which limits the information leakage in both posting a quote and in trading against quotes on an ATS. It may also be the case that market participants expect to find various pegged orders, such as midpoint quotes, available on an ATS with a frequency that differs from their expectations for exchange trading. ATS quotes may also be segmented, with the goal of reducing the adverse selection risk of posting a quote on the ATS compared to posting a quote on an exchange. Most ATSs are not subject to fair access restrictions and can potentially limit their subscribers.[518]

Nevertheless, the comparison is informative in considering the impact of Rules 611 and 610(e) on the market. Rather than the majority of ATS-directed order flow being executed by a few broker-dealers that connect to all or almost all ATSs, which is the case for exchange-directed order flow, ATS-directed order flow is more evenly dispersed as broker-dealers do not tend to connect to all ATSs and handle more of their own order flow.

Table 3 Executing Volume by Number of Broker Connections to ATSs

No. of ATS Connections	All			Customer		
	No. of Brokers	% Shares Traded	% Dollar Volume	No. of Brokers	% Shares Traded	% Dollar Volume
20 or more	6	28%	24.2%	4	17.3%	14.5%
15 to 19	25	57.5%	57.3%	21	58.9%	62.8%
10 to 14	12	7.4%	11.3%	10	14.7%	14.7%

517 For example, broker-dealers connecting to over 20 ATSs outsourced only 10.8% of their ATS-directed dollar volume, broker-dealers connecting to 15 to 19 ATSs outsourced 4.2%, broker-dealers connecting to 10 to 14 ATSs outsourced 8.5%, and broker-dealers connecting to 1 to 9 ATSs outsourced 41.4%. This analysis was conducted using CAT data from January 2026. *See supra* note 490 and corresponding text (discussing the pattern of broker-dealer outsourcing by number of exchange connections).

518 *See infra* note 516.

1 to 9	143	7.2%	7.1%	116	9.2%	7.9%
0	885	0	0	844	0	0

This table uses CAT data from January 2026 to show information on the number of ATSs different broker-dealers connect to (*supra* Table 1 shows information on the number of exchanges these broker-dealers connect to). It also shows the percentages of ATS executed dollar and share volume that these broker-dealers accounted for. The "All" category reflects ATS trading volume from orders that originate from either a customer or proprietary account and the "Customer Only" category only reflects ATS trading volume from orders that originate from a customer account. The sample for the "All" category consists of 1,071 broker-dealers that either originated or executed an order from a proprietary or customer account on an exchange or ATS in January 2026 (both exchanges and ATSs are included in constructing the sample of broker-dealers to make this table and *supra* Table 1 comparable). The sample for the "Customer Only" category consists of 995 broker-dealers that either originated or executed an order from a customer account on an exchange or ATS in January 2026.

This table uses the same methodology as described above in *supra* Table 1 (discussing originating broker-dealers, executing broker-dealers, customer account types, and the number broker-dealer connections observed broken down by venue, broker-dealer , and account types). A broker-dealer is defined by its firm CRD. Broker-dealers are categorized by their number of executing connections to ATSs, which is where a broker-dealer submitted an order directly to an ATS. The number of connections may be understated if some market participants maintain connections but do not have any orders or trades during the sample period. The potential for undercounting connections may be larger on ATSs with lower volume.

g. Fragmentation of Displayed Liquidity, Market Fragmentation, and Innovation

Market fragmentation was a concern when Regulation NMS was adopted.[519] At the time, market fragmentation was primarily due to a lack of electronic trading and interlinkages between trading venues, which have changed since the adoption of Regulation NMS.[520] Fragmentation now, both among displayed liquidity and the entire market (including off-exchange trading), is primarily due to a proliferation of trading venues as well as the share of trading being more split among venues. Rule 611 and 610(e) played a role in both types of fragmentation via exchange proliferation.[521] This section outlines the additional factors besides the proliferation of trading venues that contribute to each type of fragmentation. This section also discusses how Rule 611 may have contributed to less innovation, particularly in trading protocols.

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519 *See supra* note 145.

520 *See supra* section II.B.3.a.

521 *See supra* section VI.B.4.f. (discussing how Rule 611 and 610(e) contributed to exchange proliferation).

One potential way to capture fragmentation is using the Herfindahl-Hirschman Index ("HHI").[522] For example, suppose there are five exchanges with the following market shares: 80%, 5%, 5%, 5%, and 5%. The HHI in this case would be 0.35.[523] If the five exchanges instead each have a market share of 20%, the HHI would be 0.8.[524] Displayed liquidity is more fragmented in the second scenario than the first scenario because the HHI is larger in the second scenario. Staff of the Office of Analytics and Research, Division of Trading and Markets calculated the HHI for Nasdaq- and NYSE-listed stocks in January 2026,[525] which allows for comparison to previous HHIs calculated for February 2005 and February 2014.[526] Compared to February 2005, the January 2026 HHI is higher for Nasdaq- and NYSE-listed stocks, meaning that market fragmentation has increased.[527] However, compared to February 2014, the January 2026 HHI for NYSE-listed stocks is lower.[528] Since 2014, there have been several new exchanges.[529]

One concern when using the HHI to measure displayed liquidity fragmentation is that the changes to the HHI from new exchanges with small market share can be minimal. Revisiting the second scenario discussed above where the five exchanges each have a market share of 20%, now assume there are two new exchanges for a total of seven with the market shares now as

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522 The HHI is widely used to measure market concentration. The HHI for displayed liquidity fragmentation can be calculated as "1 minus the sum of the squared market shares of lit venues. Under this metric, a fully centralized market would have a fragmentation level of 0 and the maximum level of fragmentation would be just less than 1." *See* EMSAC Memo at 9, n. 18.

523 1 - (0.8^2 + 0.05^2 + 0.05^2 + 0.05^2 + 0.05^2) = 0.35.

524 1 - (0.2^2 + 0.2^2 + 0.2^2 + 0.2^2 + 0.2^2) = 0.8078.

525 *See* 2026 Data Update of the 2015 EMSAC Market Structure Memo, *supra* note 39, at Table 3.

526 *See* EMSAC Memo at 11.

527 *See* 2026 Data Update of the 2015 EMSAC Market Structure Memo, *supra* note 39, at Table 3. The HHI for Nasdaq-listed stocks is higher by (HHI in January 2026) – (HHI in February 2005) = (0.766) – (0.718) = 0.048. The HHI for NYSE-listed stocks is higher by (0.750) – (0.176) = 0.574.

528 *See* 2026 Data Update of the 2015 EMSAC Market Structure Memo, *supra* note 39, at Table 3. The change in the HHI for Nasdaq-listed stocks is (HHI in January 2026) – (HHI in February 2014) = (0.766) – (0.754) = 0.012 and the change in the HHI for NYSE-listed stocks is (0.750) – (0.816) = -0.066.

529 *See supra* section VI.B.4.a and *see* EMSAC Memo at 10-11.

follows: 20%, 20%, 20%, 19%, 19%, 1%, and 1%. In this case, the HHI would be 0.81.[530] Compared to the initial HHI of 0.80 without these two new exchanges, liquidity is more fragmented, but the change in HHI is relatively small. Thus, while it is useful to examine the HHI,[531] it is important to also note the number of venues to which a broker-dealer must connect.

Rule 611 and other features of Regulation NMS such as the SIP revenue allocation formula that incentivized displayed liquidity have also contributed to the increased fragmentation in displayed liquidity. Rule 611 strengthened the primacy of displayed prices and incentivized liquidity suppliers to post displayed orders on all exchanges that they are connected to.[532] Because most of the dollar volume on exchanges is executed by broker-dealers that are connected to many, if not all exchanges,[533] this increases the probability that a limit order is posted and executed on a small exchange, increasing fragmentation of displayed liquidity. Other features of Regulation NMS that incentivize displayed liquidity, particularly the SIP revenue allocation formula, have also played a role. For example, most new exchanges have adopted fee schedules that directly incentivize liquidity posting by liquidity makers. Such a fee schedule may be beneficial for a new, small exchange to gain revenue because of the SIP revenue allocation formula, which rewards quoting as well as trading.[534] The SIP revenue allocation formula may also contribute to exchange families continuing to operate multiple exchanges with similar liquidity posting incentives.

Factors that have contributed to both types of fragmentation, in addition to trading venue proliferation, include advances in technology, the electronification of trading, and lower

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530 1 – (0.2^2 + 0.2^2 + 0.2^2 + 0.19^2 + 0.19^2 + 0.1^2 + 0.1^2) = 0.81.

531 *See* 2026 Data Update of the 2015 EMSAC Market Structure Memo, *supra* note 39, at Table 3.

532 This includes inverted exchanges, where liquidity posting is not directly incentivized through rebates as on a maker-taker exchange. Posting quotes on inverted exchanges may be important to the order routing strategies for certain market participants and for certain types of orders.

533 *See supra* section VI.B.4.f.

534 This fee schedule may allow a new, small exchange to gain a larger share of dollar volume quicker as broker-dealers who connect initially are directly incentivized to submit orders. This may incentivize more broker-dealers to connect, due to the increasing "interference cost", who are also incentivized to submit orders. *See supra* section VI.B.4.f.

transaction costs. Advances in technology and the electronification of trading have made it easier to connect to and route orders to many trading venues. Lower transaction costs may have also contributed to both types of fragmentation because they increase the profitability of trading strategies that utilize latency arbitrage between trading venues.[535]

Other factors that may have contributed to market fragmentation include the segmentation of order flow and business model competition.[536] For example, the majority of retail investor order flow is internalized by wholesalers, meaning that it is executed off exchange.[537] Also, ATSs offer alternatives to the traditional matching priority, which is based on price and time, and have recently been gaining market share.[538] Business model competition may also contribute to displayed liquidity fragmentation. [539]

While there have been some innovations to counteract the increased adverse selection risk from faster traders, such as speed bumps,[540] and order types such as midpoint peg orders and hidden orders, there has otherwise been minimal differentiation between exchanges.[541] As previously mentioned, [542] market participants face notable similarities in the functioning of exchange limit order books across different exchanges, particularly with a given fee model type. Rules 611 and 610(e), along with other effects, created an incentive for the proliferation of new exchanges with particular styles and thus may have limited innovation.

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535 *See supra* section VI.B.4.b. (discussing the role of latency).

536 *See* also *infra* section VI.B.5.a (discussing the ability of ATSs to segment order flow).

537 *See supra* section VI.B.2.b. *See also supra* section VI. B.2.a.

538 *See* ROSENBLATT'S 2025 US EQUITY TRADING GUIDE, *supra* note 305.

539 While segmentation of order flow may contribute to the fragmentation of displayed liquidity, the effect is likely small due to the limited ability of exchanges to segment order flow. *See infra* section VI.B.5.a (discussing the limited ability of exchanges to segment order flow).

540 *See supra* section VI.B.4.b (discussing the role of latency). A speed bump intentionally slows down the time it takes an order to reach the exchange. See The SEC Approves The Investors Exchange Speed Bump, Mark D Schorr, The Hedge Fund Journal, Issue 116, available at https://thehedgefundjournal.com/the-sec-approves-the-investors-exchange-speed-bump/. *See supra* sections VI.B.2.a and VI.B.2.c (describing the effects of faster traders).

541 *See infra* section VI.B.5.a (comparing rules for exchanges and ATSs).

542 *See supra* section VI.B.4.e.

Other factors that may have limited exchange innovation are their fair access requirements and limitations on their ability to segment order flow.[543] In contrast to exchanges, most ATSs do not meet the volume threshold for fair access requirements to apply.[544] Additionally, most ATSs have one or more methods of segmenting customer order flow.[545] It is possible that the lack of limitations on segmenting orders and the lack of costs associated with evaluating new matching mechanisms against fair access requirements have contributed to lower innovation costs for ATSs when compared with exchanges.

5. Competition in the Market for Trading Services and Broker Execution Services

a. Trading Services

National securities exchanges and off-exchange market centers (*e.g.*, ATSs[546], FINRA members, and OTC market makers (including wholesalers and SDPs)) compete in the market for NMS stock trading services. National securities exchanges and off-exchange market centers are subject to different regulatory requirements.

National securities exchanges fall within the definition of an exchange in section 3(a)(1) of the Exchange Act and are required to register under section 6 of the Exchange Act. As SROs, national securities exchanges set standards of conduct for their members, administer examinations for compliance with these standards, coordinate with other SROs with respect to the dissemination of consolidated market data, and generally take responsibility for enforcing their own rules and the provisions of the Exchange Act and the rules and regulations thereunder. The Exchange Act requires that national securities exchanges establish rules that generally: (1) are designed to prevent fraud and manipulation, promote just and equitable principles of trade,

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543 *See* 15 U.S.C. 78f(b)(5), which states that the rules of the exchange are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers, or to regulate by virtue of any authority conferred by this chapter matters not related to the purposes of this chapter or the administration of the exchange. *See also infra* section VI.B.5.a (discussing differences between exchanges and ATSs).

544 *See* 17 CFR 242.301(b)(5).

545 Differences in how they segment customer order flow is one way in which ATSs innovate and differentiate themselves from other trading centers.

546 The operators of ATSs are required to register as broker-dealers under the requirements of Regulation ATS.

and protect investors and the public interest;[547] (2) provide for the equitable allocation of reasonable dues, fees, and other charges;[548] (3) do not permit unfair discrimination;[549] (4) do not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act;[550] and (5), with limited exceptions, allow any broker-dealer to become a member.[551] National securities exchanges must file proposed rule changes with the Commission under section 19(b) of the Exchange Act, which are made available for public comment,[552] and are subject to Commission approval.[553] Rule 610 of Regulation NMS prohibits national securities exchanges from imposing unfairly discriminatory terms on non-members in obtaining access to exchange quotations through the services of an exchange member.[554] National securities exchanges are limited in their ability to segment order flow.[555] All national securities exchanges are "lit" market centers, meaning they publicly display quotations for NMS stocks in consolidated market data. The highest-priced bids and lowest-priced offers for round lots on national securities exchanges are included in the consolidated market data feeds disseminated by centralized SIPs.

NMS Stock ATSs fall within the definition of an exchange under section 3(a)(1) of the Exchange Act but are exempted from registering as an exchange if they meet the definition of an ATS,[556] register as broker-dealers,[557] and otherwise comply with Regulation ATS under the

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547 Section 6(b)(5) of the Exchange Act.

548 Section 6(b)(4) of the Exchange Act.

549 Section 6(b)(5) of the Exchange Act.

550 Section 6(b)(8) of the Exchange Act.

551 Section 6(b)(2) of the Exchange Act.

552 *See* 15 U.S.C. 78s(b)(1).

553 *See* 15 U.S.C. 78s(b)

554 *See* 17 CFR 242.610(a).

555 Retail liquidity programs (RLPs) provide an on-exchange means of order segmentation. The RLPs offered by many exchanges are specifically set up to segment the marketable order flow of individual investors, allowing liquidity suppliers to interact with this order flow without the risk that their orders will trade against the marketable orders of other market participants that may impose greater adverse selection risk.

556 *See* 17 CFR 242.300(a).

557 *See* 17 CFR 242.301(b)(1).

Exchange Act. NMS Stock ATSs are also required to file and publicly disclose Form ATS-N.[558] The majority of NMS Stock ATSs segment trading interest into categories, classifications, tiers, or levels and some allow subscribers to designate their trading interest to interact or not interact with certain trading interest in the NMS Stock ATS (*e.g.*, private rooms). Rule 301(b)(3) of Regulation ATS requires an NMS Stock ATS that displays orders to any person and has 5% or more of the aggregate average daily share volume reported in an NMS stock during four of the preceding six calendar months to comply with certain order display and execution access obligations.[559] No NMS Stock ATS currently displays quotations in NMS stocks in consolidated market data.[560] The market centers that do not display quotations are known as "dark" trading centers or "dark pools."

Under Rule 301(b)(5) of Regulation ATS, an NMS Stock ATS is required to provide fair access to its services if it has 5% or more of the average daily volume with respect to an NMS stock during four of the preceding six calendar months. As of November 30, 2025, one NMS

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558 *See* 17 CFR 242.304. The Commission reviews initial Form ATS-N filings and must declare them effective before an NMS Stock ATS can begin operating. When an NMS Stocks ATS wants to make a material change to its operations, it is required to file a material amendment at least 30 days prior to the date of implementation. Material amendments to Form ATS-N are also subject to a Commission review period and can be declared ineffective. An NMS Stock ATS must have an effective Form ATS-N on file with the Commission to operate.

559 *See* 17 CFR 242.301(b)(3). An ATS that meets these criteria must comply with Rule 301(b)(3)(ii), which requires the ATS to provide to a national securities exchange or national securities association (each an SRO), for inclusion in the quotation data made available by the SRO to vendors, the prices and sizes of its orders at the highest buy price and lowest sell price for that NMS stock that are displayed to more than one subscriber. *See* 17 CFR 242.301(b)(3)(ii). An ATS that meets the volume threshold also is required to comply with Rule 301(b)(3)(iii), which sets forth certain access standards regarding the orders that the ATS is required to provide to an SRO pursuant to Rule 301(b)(3)(ii). *See* 17 CFR 242.301(b)(3)(iii). Under Rule 301(b)(4), an ATS must not charge any fee to broker-dealers that access the ATS through a national securities exchange or national securities association that is inconsistent with the equivalent access to the ATS that is required under Rule 301(b)(3)(iii). *See* 17 CFR 242.301(b)(4). In addition, if the national securities exchange or national securities association to which an ATS provides the prices and sizes of orders under Rules 301(b)(3)(ii) and 301(b)(3)(iii) establishes rules designed to assure consistency with standards for access to quotations displayed on such national securities exchange, or the market operated by such national securities association, the ATS shall not charge any fee to members that is contrary to, that is not disclosed in the manner required by, or that is inconsistent with any standard of equivalent access established by such rules. *See id.*

560 Some ATSs display quotations to their subscribers or make their quotes available through market data vendors.

Stock ATS discloses on its Form ATS-N that it is subject to these fair access requirements for securities that are available for trading on its platform.

OTC market makers, which also include wholesalers and SDPs, are dealers that hold themselves out as being willing to buy and sell an NMS Stock to market participants for its own account on a regular or continuous basis, other than on a national securities exchange.[561] A wholesaler commonly refers to an OTC market maker that seeks to attract orders from broker-dealers (often called retail brokers) who service individual investors, and wholesalers internalize the majority of marketable orders from these individual investors. Some OTC market makers, such as wholesalers, operate SDPs through which they execute marketable institutional orders in NMS stocks against their own inventory. Broker-dealers that do not display quotations in consolidated market data and that trade outside of an ATS, such as wholesalers, are not subject to any fair access requirements under the Exchange Act or Commission rules (*i.e.,* wholesalers do not display or otherwise reveal the prices at which they are willing to execute individual investor orders internally). While they are subject to Commission and SRO requirements as broker-dealers, wholesalers are not prohibited from restricting access to their trading mechanisms or to the investor orders they internalize.

Trading services for NMS stocks are highly fragmented among different types of market centers. In January 2026, NMS stocks were traded on 17 national securities exchanges and on off-exchange market centers, including 33 NMS Stock ATSs and other FINRA members.[562] In January 2026, a total of over 388 billion shares (over $20 trillion notional) were traded in NMS stocks.[563] National securities exchanges executed approximately 50.1% of total share volume in NMS stocks (and 55.5% of total notional volume), while off-exchange market centers, including

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561 *See* 17 CFR 242.600(b)(75).

562 Other FINRA members include wholesalers that internalize the majority of individual investor marketable orders.

563 This estimate is based on January 2026. *See U.S. Equities Market Volume Summary*, *supra* note 442.

ATSs and wholesalers, executed approximately 49.9% of total share volume (and 44.5% of total notional volume).[564]

b. Broker Execution Services

As of Q4 of 2025, there were 3,277 registered broker-dealers based on FOCUS Report Form X-17A-5 Schedule II, representing a decline of approximately 25% compared to 2015, when there were 4,450 registered broker-dealers.[565] This reflects increased concentration in the broker-dealer industry over the last decade. These broker-dealers service individual and/or institutional investors in the market for NMS stocks, and include both carrying broker-dealers that maintain custody of customer funds and securities and introducing broker-dealers that accept customer orders and introduce their customers to a carrying broker-dealer that will hold the customers' securities and cash. The Commission estimates that there are approximately 164 broker-dealers that carry at least one customer account trading in NMS stocks, and 1,092 broker-dealers that introduce at least one customer trading in NMS stocks.

The Commission understands that the structure of the market for brokerage services can be broadly separated into two distinct markets: brokerage services for individual investors and brokerage services for institutional investors. In January 2026, there were approximately 806 registered broker-dealers that originated orders on behalf of individual investors in the market for NMS stocks.[566] Unlike institutional investors, individual investors generally use a single broker to handle their orders. Retail brokers can be broadly divided into "discount" and "full-service"

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564 This estimate is based on January 2026. *See U.S. Equities Market Volume Summary*, *supra* note 442.

565 *See U.S. Securities and Exchange Commission Fiscal Year 2015 Congressional Budget Justification*, *available at* https://www.sec.gov/about/reports/secfy15congbudgjust.pdf. *See* also Norges Bank comment letter ''Re: Notice of Proposed Rule on Market Data Infrastructure, Securities Exchange Act Release No. 88216 (Feb. 14, 2020) (File No. S7–03–20)'', dated July 15, 2020, at 3, available at https://www.sec.gov/comments/s7-03-20/s70320-7422691-219826.pdf and First TTR Transcript at 74-5 (Dave Lauer, Urvin Finance and We the Investors).

566 This analysis was completed using CAT data for the month of January 2026. A registered broker-dealer is defined by its firm Central Registration Depository numeric identifier (CRD). Brokers counted are those that reported at least one order identified as account type "Individual Customer". This includes individual investors and accounts that do not meet the definition of "institution" in FINRA Rule 4512(c) and not a proprietary account. *See* CAT REPORTING TECHNICAL SPECIFICATIONS FOR PLAN PARTICIPANTS: 7/29/2022 Version 4.1.0 r15, *available at* https://catnmsplan.com/sites/default/files/2022-07/07.29.2022-CAT-Reporting-Technical-Specifications-for-Participants-4.1.0-r15.pdf ("CAT Reporting Version 4.1.0 r15").

brokers. Competition among discount brokers, in particular, has recently resulted in many new entrants and a decline in commissions to zero or near zero. Instead of earning commissions on transactions, these discount brokers earn revenue through other means, including, among other products and services, interest on margin accounts and from lending securities, and broker-wholesaler arrangements involving PFOF paid by the wholesaler to the retail broker. Discount broker-dealers can distinguish themselves by the accessibility and functionality of their trading platform, which can be geared towards less experienced or more sophisticated retail investors, and by providing more extensive customer service as well as tools for research and education on financial markets.

In January 2026, there were approximately 595 registered broker-dealers that originated institutional orders in the market for NMS stocks.[567] A distinguishing feature of institutional brokerage services is that a significant portion of institutional investor orders are generally "not held" orders. For not held orders, broker-dealers have time and price discretion in executing the order, which institutional investors rely on to minimize price impact and for other reasons. Due to the large size of institutional trading interests, broker-dealers often split these orders, frequently using SORs. Specifically, a broker-dealer or its SOR will split a "parent" order into multiple "child" orders, with the goal of executing the child orders in a way that achieves the best execution for the parent order. The Commission understands that some investors, particularly some institutional investors, are likely to use multiple broker-dealers.

Broker-dealers compete on many dimensions, including the execution quality. They may seek to improve their competitive position by, for example, adding connections and subscriptions to exchanges and ATSs, and by investing in the speed and quality of their routing technology.[568]

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567 This analysis was completed using CAT data for the month of January 2026. A registered broker-dealer is defined by its firm Central Registration Depository numeric identifier (CRD). Brokers counted are those that reported at least one order identified as account type "Institutional Customer" as defined by FINRA Rule 4512(c). *See* CAT Reporting Version 4.1.0 r15.

568 When making routing decisions, some broker-dealers may face conflicts of interest that arise when their interests are not aligned with their customers' interest in receiving better execution quality. These conflicts

The majority of trading on ATSs and exchanges comes from the trades where the executing broker and originating broker are the same.[569] In January 2026, 82.2% of ATS dollar volume and 82.0% of exchange dollar volume came from trades for which the executing broker and originating broker were the same. Furthermore, a relatively small number of brokers originate and execute orders, while a larger number originate orders but do not execute. In January 2026, of the 1,060 broker-dealers that originated orders to an exchange or ATS, 275 of them both originated and executed orders, whereas 785 only originated orders and did not execute.[570]

There are several factors that have potentially contributed to the increased concentration in the executing broker-dealer industry in particular. One factor is that data and connectivity costs, which can be significant, have risen as new exchanges begin charging data and connectivity fees and existing exchanges increase their data and connectivity fees.[571] This contributes to the high fixed costs for broker-dealers.[572] Another factor is that other sources of revenue for broker-dealers, such as commissions, have declined. Finally, as broker-dealers compete in other dimensions, such as execution quality or by offering additional services bundled with execution, high-volume broker-dealers may be better positioned competitively compared to smaller broker-dealers. This is because high-volume broker-dealers tend to connect

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of interest could result, for example, from broker-dealer affiliations with market centers. Similarly, the presence of liquidity fees and rebates at some market centers may incentivize broker-dealers to make routing decisions based on where they can receive the highest rebate (or pay the lowest fee), rather than where they can receive better execution quality on behalf of their customer. Another potential conflict of interest, particularly regarding individual investor order flow, includes the receipt of PFOF, which may incentivize broker-dealers to route orders to wholesalers as a result of the terms of the PFOF arrangements.

569 This analysis was completed using CAT data for the month of January 2026. A connection is found when an order is identified that was sent from a broker-dealer firm to an ATS or exchange. A broker is defined by its firm Central Registration Depository numeric identifier (CRD). A broker that submits the order to the ATS or exchange is the executing broker. Each order is traced to its origin where an originating broker received the order from a client. For each order, the originating broker may be the same or different from the executing broker.

570 *See supra* Table 1 (discussing CAT analysis of the number of broker-dealers that originate and execute orders on exchanges and ATSs).

571 *See infra* section VI.B.4.c.

572 *See supra* section VI.C.4.b.i. (describing broker-dealer fixed costs). *See* also First TTR Transcript at 172-3 (Adam Nunes, Hudson River Trading).

to all or almost all exchanges and invest in the most sophisticated technology that allows them to minimize transaction costs and execution quality.[573]

C. Benefits and Costs

This section separately discusses the benefits and costs of rescinding Rule 611 and Rule 610(e), as well as additional economic effects from rescinding both rules together.

1. Rescinding Rule 611

a. Benefits

As explained in detail below, rescinding Rule 611[574] is expected to reduce market complexity, which will result in cost savings for trading centers and broker dealers by reducing compliance costs and ongoing maintenance associated with maintaining order execution systems and SORs. It may also lower the market data and connectivity costs of some market participants, although the magnitude of this effect is uncertain. Rescinding Rule 611 is also expected to result in improvements in the execution quality of larger institutional orders. Furthermore, rescinding Rule 611 may also reduce displayed fragmentation and potentially increase innovation in trading protocols for both exchanges and ATSs.

Rescinding Rule 611 is expected to lower ongoing compliance and surveillance costs for trading centers related to maintaining policies and procedures associated with Rule 611.[575] Rule 611 requires trading centers to support ISO logic, and a thick layer of exception handling to avoid trade-throughs, each of which cascades into surveillance alerting, exception review, and supervisory controls.[576] Rescinding Rule 611 would allow firms to retire ISO order types and

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573 High-volume broker-dealers may also be able to take advantage of lower transaction pricing because exchanges offer volume-based discounts. *See* Securities Exchange Act Release No. 98766 (Oct. 18, 2023), 88 FR 76282 (Nov. 6, 2023) ("Volume-Based Exchange Transaction Pricing for NMS Stocks") at 76313.

574 In order for these effects to be realized, a majority of national securities exchanges for NMS stocks will have to rescind their own rules to prevent trade-throughs. The Commission expects this to happen because doing so will relieve the exchange of costly maintenance requirements described in this section. In addition, not rescinding these rules may put them at a competitive disadvantage compared to other exchanges that do.

575 *See supra* section VI.B.2.d (discussing compliance costs related to Rule 611).

576 *See, e.g.*, Robinhood Letter at 5; J. Angel Letter; First TTR Roundtable Transcript at 90 (Julie Andress, Securities Traders Association and KeyBanc Capital Markets) (discussing trade-through compliance).

simplify surveillance programs. The Commission estimates that each trading center currently incurs $30,996 in annual ongoing compliance costs related to maintaining policies and procedures to comply with Rule 611.[577] Rescinding Rule 611 would result in trading centers saving an estimated aggregate total of $9.45 million dollars in annual compliance costs.[578] In addition to these annual compliance cost savings, trading centers are also expected to experience additional cost savings from the rescission of Rule 611 and 610(e) related to reductions in the burdens associated with regularly maintaining and updating their execution systems. These additional cost savings are discussed below in section VI.D.3.a.

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577 The Commission, in its most recent PRA renewal, estimated that each respondent (i.e., trading center) would require an average of approximately 60 hours annually to ensure that the policies and procedures established are up-to-date and remain in compliance with the Commission's rule: two hours per month of internal legal time and three hours per month of internal compliance time (2 hours x 12 month + 3 hours x 12 months = 60 hours annually). *See* Extension Without Change of a Currently Approved Collection: Order Protection Rule - Rule 611 of Regulation NMS; ICR Reference No. 202005-3235-016; OMB Control No. 3235-0600 (Aug, 22, 2023), *available at* https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=202304-3235-011. The estimated monetized annual hour burden is as follows: ($744 for an attorney x 2 hours x 12 months) + ($365 for a financial examiner (i.e., compliance) x 3 hours x 12 months) = $30,996. To calculate the occupational hourly rates used in this release, the Commission uses occupational mean hourly wage data from the Occupational Employment and Wage Statistics (OEWS) program of the Bureau of Labor Statistics (BLS) for "Securities, Commodity Contracts, and Other Financial Investments and Related Activities" (NAICS 523). *See Occupational Employment and Wage Statistics*, U.S. Bureau of Labor Statistics, https://www.bls.gov/oes/; *see also Standard Occupational Classification*, U.S. Bureau of Labor Statistics, https://www.bls.gov/soc/ (describing occupational classification system used by BLS); Exec. Off. of the President, Off. of Mgmt. & Budget, North American Industry Classification System (2022), *available at* https://www.census.gov/naics/reference_files_tools/2022_NAICS_Manual.pdf (describing the industry classification system used by BLS and other agencies). The mean hourly wage for each occupation is adjusted for changes in the seasonally adjusted employment cost index for private wages and salaries between the data reference period and when the data are released by BLS. *See Employment Cost Index*, U.S. Bureau of Labor Statistics, https://www.bls.gov/eci/. The adjusted mean hourly wage is then multiplied by a factor that accounts for nonwage costs borne by employers, such as bonuses, benefits, and overhead. This factor is calculated as an average over the 10 most recently available years of data of the ratio of the Bureau of Economic Analysis's annual gross output data for NAICS 523 to total annual wages across all occupations for NAICS 523 in the OEWS data. *See Gross Output by Industry*, U.S. Bureau of Economic Analysis, https://www.bea.gov/data/industries/gross-output-by-industry; *Occupational Employment and Wage Statistics*, U.S. Bureau of Labor Statistics, *supra*. The final product is the occupational hourly rate. *See generally* Updated Methodology for Calculating Occupational Hourly Rates (Dec. 19, 2025), *available at* https://www.sec.gov/files/method-occupational-hourly-rates.pdf.

578 The Commission estimates that there are currently 305 trading centers subject to Rule 611. This estimate includes 20 exchanges (17 exchanges that trade NMS stocks + three exchanges that are approved but not yet operating) and 33 ATSs that trade NMS stocks. Based on data from the consolidated audit trail for January 2026, the estimate also includes 96 exchange market makers and 225 broker-dealers acting as OTC market maker or executing orders internally by trading as principal or crossing orders as agent. 69 broker-dealers are both exchange market makers and an OTC market maker or broker-dealer internalizing orders. Accordingly, the Commission estimates that rescission of Rule 611 would eliminate 305 trading centers x 60 hours annually = 18,300 annual burden hours that would be associated with complying with Rule 611. The total estimated monetized annual hour burden is 305 trading centers x $30,996 = $9,453,780.

Broker-dealers that run SORs would also experience compliance cost savings from rescinding Rule 611.[579] Broker-dealers would no longer need to maintain logic to prevent trade-throughs, utilize exceptions to Rule 611 (such as conducting an ISO sweep of protected quotes), or maintain policies and procedures to detect and surveil for trade-throughs in their order handling. For example, some firms may no longer need to collect snapshot information of protected quotes at the time they submit an order to demonstrate compliance with the usage of ISO orders for Rule 611 exceptions.[580] Each broker-dealer that runs an SOR is estimated to save $13,140 annually by no longer maintaining policies and procedures related to Rule 611.[581] Rescinding Rule 611 would result in broker-dealers operating SORs saving an estimated aggregate total of $2.8 million in annual compliance costs.[582] In addition to these annual compliance cost savings, broker-dealers that operate SORs are also expected to experience additional cost savings from the rescission of Rule 611 and 610(e) related to reductions in the burdens associated with regularly maintaining and updating their order routing systems. These additional cost savings are discussed below in section VI.C.3.a.

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579 *See supra* section VI.B.2.d (discussing compliance costs related to Rule 611).

580 *See, e.g.*, First TTR Roundtable Transcript at 171-173 (Adam Nunes, Hudson River Trading) (discussing that systems necessary to demonstrate compliance with Rule 611 are associated with a lot of overhead); First TTR Roundtable Transcript at 232 (Daniel Gerhardstein, FIA Principal Traders Group and Jump Trading Group) (stating that industry participants and exchanges operate and maintain elaborate systems solely for trade-through compliance).

581 The Commission estimates that each broker-dealer with an SOR currently requires an average of approximately 36 hours annually to ensure that the policies and procedures established are up-to-date and remain in compliance with the Commission's rule: three hours per month of internal compliance time (3 hours x 12 months = 36 hours annually). The estimated monetized annual hour burden is as follows: ($365 for a financial examiner (i.e., compliance) x 3 hours x 12 months) = $13,140. See supra note 577 for discussion on how the hourly burden are monetized.

582 The Commission estimates that there are 213 broker-dealers that operate a SOR. This number is estimated by counting the number of unique CRDs that submitted an order directly to an exchange in January 2026. See Table 1 for additional information. Accordingly, the Commission estimates that rescission of Rule 611 would eliminate 213 broker-dealers x 36 hours annually = 7,668 annual burden hours that would be associated with broker-dealers complying with Rule 611. The total estimated monetized annual hour burden is 213 broker-dealers with SORs x $13,140 = $2,798,820. There will be overlap between the broker-dealers that operate a SOR and the broker-dealers that are an exchange market maker or OTC market maker (estimated in *supra* note 578). For these broker-dealers, the Commission believes that the cost savings from no longer updating their policies and procedures that are related to being a trading center and their cost savings from no longer updating their policies and procedures that are related to operating a SOR will be additive (i.e., they will save on both costs).

However, the compliance cost savings for trading centers and broker-dealers that are discussed above may be limited to the extent that the certain costs related to Rule 611 overlap with the costs related to other Commission or SRO Rules. For example, some firms may collect quote snapshots or other market surveillance data for compliance with multiple rules. They may still collect this information for other compliance or evaluation purposes if Rule 611 is rescinded. Additionally, some broker-dealers may outsource their compliance procedures and surveillance to third party vendors. To the extent that Rule 611 is integrated into the same systems that the vendor uses to evaluate for compliance with other rules, the rescission of Rule 611 may not result in the vendor reducing their prices or cost savings for these broker-dealers.

Rescinding Rule 611 could result in institutional investors experiencing improved execution quality for their large orders.[583] Without trade-through restrictions, trading venues could better facilitate block crosses at economically efficient prices. Rescinding Rule 611 would also allow institutional investors more flexibility to route child orders, allowing them to avoid trading at exchanges that may increase their information leakage. This would allow institutional brokers to work parent orders with fewer compliance-driven routes, thereby reducing slippage. Clusters of ISO child orders used to clear protected quotes may result in greater price impact. Rescinding Rule 611 would therefore give brokers more flexibility to stage child orders to minimize the parent order's total cost consistent with institutional benchmarks, such as the VWAP or TWAP. This would likely lead to an increase in the trade-through rates of displayed quotes, because institutional investors would be better able to select which quotes they want to interact with to reduce their price impact. The Commission is unable to estimate the magnitude of improvements in institutional execution quality or the increase in institutional trade-through rates if Rule 611 is rescinded, because it would depend on the latent demand for institutional

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583 *See supra* section VI.B.2.a (discussing how Rule 611 affects institutional order handling and executions). Any improvements in the execution quality of institutional orders would represent a transfer from the market participants that currently benefit from the increased slippage caused by trade-through restrictions (e.g. liquidity providers that are alerted to the execution of a large parent order) to the institutional investors that place the orders.

investors to execute at prices outside the protected quotes, which the Commission is unable to estimate.

As explained in detail below, rescinding Rule 611 may allow some broker-dealers to access and maintain connectivity to fewer exchanges, which could result in reduced market data and connectivity expenditures for some broker-dealers. [584] However, this effect may be limited.

As discussed in detail below, rescinding Rule 611 (along with Rule 610(e)) may also reduce market complexity by eliminating certain orders types (e.g., ISO orders) and simplifying algorithmic routing and trading strategies, because trading centers and broker-dealers will no longer need to check if they are trading through protected quotes.[585] This reduction in market complexity is expected to result in ongoing cost savings for trading centers and broker-dealers that operate SORs by simplifying the maintenance and updates to their execution and SOR systems. These ongoing cost savings, together with those from rescinding Rule 610(e), are described below in section VI.C.3.a.

As discussed in detail below, rescinding Rule 611 (and Rule 610(e)) could increase competition among executing brokers, which may result in improved services (e.g., faster connections, improved algorithms) or reduced costs for the introducing brokers and market participants that utilize their services.[586] However this effect could be limited by economies of scale in the executing broker-dealer industry.

Rescinding Rule 611 could lessen exchange fragmentation. As discussed in detail below,[587] rescinding Rule 611 would eliminate the "interference cost" broker-dealers face when

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584 *See infra* section VI.C.3.c.i. for further discussion on broker-dealers disconnecting from exchanges if Rules 611 and Rule 610(e) are rescinded. *See also supra* section VI.B.4.f (discussing how Rule 611 and Rule 610(e) increase broker-dealer connectivity and market data costs).

585 *See infra* section VI.C.3.a for further discussion on how rescinding Rule 611 and Rule 610(e) will reduce market complexity. *See also supra* section II.B.2.a. and VI.B.2.d for further discussions on how Rule 611 potentially contributes to increased market complexity.

586 *See infra* section VI.D.2.d (discussing how rescinding Rule 611 and Rule 610(e) will increase competition between execution brokers). *See also supra* section VI.B.5.b (describing how executing brokers currently compete).

587 *See infra* section VI.C.3.c.i. (discussing broker-dealers disconnect from exchanges).

not connecting to an exchange. Therefore, a broker-dealer may disconnect from an exchange or not connect to a new exchange if the cost of disconnecting is less than or the cost of connecting is greater than the benefits of the additional execution quality that connecting to the exchange provides. This may reduce displayed fragmentation as broker-dealers concentrate their orders on more liquid venues with better execution quality.[588]

Rescinding Rule 611 could foster innovation in trading protocols and venue design—for both exchanges and ATSs. Currently, Rule 611's restrictions on the trade-through of protected quotes may limit the trading protocols that exchanges and ATSs can offer. Rescinding Rule 611 would allow exchanges and ATSs more flexibility to experiment and try new mechanisms, such as alternative matching, priority, and auction constructs. These innovations may deliver better outcomes for specific trading needs (e.g., institutional block mechanisms or time-staged response markets). However, innovation in exchange trading protocols may still be limited by other constraints, such as fair access restrictions and restrictions on order segmentation, which may not apply to most ATSs.[589]

b. Costs

This section discusses the costs associated with rescinding Rule 611. Rescinding Rule 611 is likely to impose one-time implementation costs on trading centers and broker-dealers that operate SORs to update their systems and remove policies and procedures designed to prevent trade-throughs and ensure compliance with Rule 611 exceptions. It could also result in more order flow being routed off exchange, potentially reducing exchange revenues and displayed liquidity, although the magnitude of this effect is likely to be limited. Based on data regarding wholesaler price improvement practices, the Commission does not expect significant changes in retail order execution quality if Rule 611 is rescinded.

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588 *See infra* section VI.C.3.c.i. (discussing broker-dealers routing to exchanges with better execution quality).

589 *See supra* section VI.B.5.a (discussing differences between how exchanges and ATS are regulated).

The one-time implementation costs associated with rescinding Rule 611 include expenses related to legal personnel updating policies and procedures as well as software engineering and IT costs for updating and configuring systems related to trade execution, order handling and surveillance. These updates will be made in combination with changes related to the rescission of Rule 610(e), and these combined implementation costs are discussed below in section VI.C.3.b.

Additionally, some broker-dealers may choose to incur additional costs to update their best execution policies and procedures to account for the rescission of Rule 611.[590] To the extent Rule 611 provided a best execution backstop, if rescinded, some broker-dealers may determine they need to update their best execution policies and procedures relating to order routing choices and attain the "most favorable terms reasonably available" when liquidity is fragmented across multiple venues and it is possible to execute orders at prices inferior to some displayed prices.[591] For a broker-dealer that does choose to update its internal policies and procedures, the Commission estimates that it would incur a one-time cost of approximately $40,100.[592] Due to the diversity of broker-dealer business models and operations, it is difficult for the Commission to reasonably estimate how many broker-dealers would choose to update their best execution policies and procedures if Rule 611 is rescinded. However, the Commission believes that the number of broker-dealers that will choose to update their best execution policies and procedures is likely to be less than the total number of broker-dealers that submitted customer orders to an exchange (i.e., less than 173) simply because, given the diversity of execution strategies, some

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590 *See supra* section VI.B.1.c. (discussing best execution rules). *See also supra* section II.B.3 (discussing the evolution of U.S. equity markets and the effect of Rule 611 as best execution backstop).

591 It is possible that these broker-dealers might update their best execution review process as part of updating their policies and procedures.

592 The Commission estimates that each broker-dealer that chooses to update its best execution policies and procedures would, on average, need 54 hours to do so: 48 hours of legal time and 6 hours of review by a Chief Compliance Officer. The estimated monetized one-time burden is as follows: ($744 for an attorney x 48 hours) + ($731 for a financial manager (i.e., Chief Compliance Officer) x 6 hours) = $40,098. *See supra* note 577 for details on how hourly rates are calculated. If a broker-dealer also made changes to their SOR as a result of the rescission of Rule 611, those costs would be included in the implementation costs discussed in *infra* section VI.C.3.b.

broker-dealers may view it as optimal to not change their routing strategies.[593] If all broker-dealers that submitted customer orders to an exchange chose to update their best execution policies and procedures, the Commission estimates that the total one-time cost would be approximately $6.94 million.[594]

Rescinding Rule 611 could cause more order flow to be executed off exchange, which could reduce exchange revenue and may also reduce displayed liquidity. If there is no trade-through protection, then there would be no obligation to interact with displayed exchange quotes before executing at inferior prices in dark venues. The loss of this obligation combined with the potential flexibility for executing orders at off-exchange venues (e.g., reduced adverse selection from the segmentation of order flow and better control of counter-party risk), may cause more broker-dealers to route orders to off-exchange venues.[595] This could, in turn, increase the trade-through of displayed quotes on exchanges.[596] If more orders are routed off exchange, exchange transaction volume, and related revenue from transaction fees and the SIP, could decline.[597] Additionally, more marketable orders routed off exchange may reduce the incentive to post limit orders on exchanges, decreasing overall displayed liquidity. However, as discussed in detail below, any reduction in displayed liquidity is likely to be limited.[598]

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593 The Commission estimates that there are 173 broker-dealers that submitted a customer order to an exchange. This number is estimated by counting the number of unique CRDs that submitted a customer order directly to an exchange in January 2026. See Table 1 for additional information.

594 The Commission estimates rescinding Rule 611 would result in a total one-time burden of 173 broker-dealers x 54 hours = 9,342 hours for broker-dealers to update their best execution policies and procedure. The total estimated one-time monetized hour burden is 173 broker-dealers x $40,100 = $6,937,300. However, the Commission acknowledges uncertainty regarding this estimate and has requested comment on it.

595 In particular, broker-dealers may be more likely to route a larger portion of institutional investor orders off exchange if Rule 611 is rescinded in order to reduce the overall slippage of some parent orders. *See supra* section VI.C.1.a discussing on the effect of rescinding Rule 611 on institutional orders).

596 Commission analysis shows that trade-through rates of unprotected odd-lot quotes are higher for off-exchange transactions than for similar sized transactions occurring on exchange. *See infra* section VI.C.1.c.

597 It may also reduce the revenue some smaller and new exchanges receive from connectivity and market data. *See infra* section VI.C.3.ii (discussing how exchange market data and connectivity is affected by rescinding Rule 611 and Rule 610(e)).

598 *See infra* note 600 and related text.

The Commission is unable to reasonably estimate the magnitude of order flow that could move off exchange if Rule 611 is rescinded because it would depend on the latent demand to execute at prices outside the protected quotes, which the Commission is unable to estimate. However, there are a number of reasons why the amount of order flow that migrates off exchange may be limited. First, most marketable retail orders are already executed off exchange, so this order flow would not migrate. Second, broker-dealers would still have a commercial incentive to maximize execution quality, which may incentivize them not to trade off exchange if there are better-priced quotes displayed on exchanges. Therefore, to the extent that there is not a significant reduction in displayed liquidity, there might not be a significant reduction in the share of marketable orders that are routed to exchanges for execution. Third, the implementation of the MDI displayed odd-lot information in the SIP may improve the visibility of better priced quotes on exchanges and help offset any marketable order flow that might have migrated off exchange. Finally, to the extent that the rescission of Rule 611 helps improve innovation in exchange trading protocols, such innovation might help partially counteract the potential migration of order flow off exchange.[599]

Rescinding Rule 611 could reduce the total amount of displayed liquidity on exchanges. However, any such effects are not expected to be significant.[600] If rescinding Rule 611 leads to more order flow being routed off exchange, trade-through rates of displayed round-lot quotes on exchanges could increase. Higher trade-through rates could lower the expected probability of execution for displayed limit orders, reducing the incentive to post and update best-priced displayed orders on exchanges. In theory, this may prompt liquidity providers to quote less aggressively, reduce the displayed size of their order, or even hide their order or move their trading interest off exchange. This could widen NBBO quoted spreads and thin displayed depth—raising transaction costs for liquidity takers (*i.e.,* higher effective spreads) and

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599 *See supra* section VI.C.1.a (discussing potential for increase in exchange innovation).

600 *See also supra* section VI.B.2.c (discussing how Rule 611 affects displayed liquidity).

opportunity costs for non-marketable limit order posters whose orders no longer enjoy trade-through protection.[601]

However, to the extent it does occur, the Commission does not expect any decline in the aggregate amount of displayed liquidity to be significant, for several reasons. First, as discussed above, the migration of order flow off exchange may be limited. Second, market participants often display unprotected odd-lot orders inside the NBBO, indicating that order protection does not have a significant impact on the price or size at which they display their order.[602] Third, the Commission analysis below shows that trade-through rates of unprotected quotes fall as trade size increases—a large trade benefits more from executing at the best price per share—implying that rescinding Rule 611 may not have a significant impact on lit liquidity for orders that are equal to or greater than the round-lot size.[603] Additionally, a separate analysis shows that trade-through rates in the pre-market and after-hours sessions—when quotes are not protected—are estimated to be similar to trade-through rates of protected quotes during the regular trading session.[604] These analyses indicate that the removal of order protection may not significantly decrease the probability that a displayed round-lot sized quote at the NBBO is traded through, which would result in little change in the incentives to display the order. Finally, the implementation of the MDI rule to display odd-lot orders inside the NBBO in the SIP may increase the incentives to display limit orders at or inside the NBBO. These orders would not have been protected under Rule 611 and the increased transparency from including them in the

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601 To the extent it occurs, any reduction in displayed depth is likely to vary across stocks, with larger reductions in smaller-cap, lower-volume stocks. A widening of the NBBO or a reduction in displayed depth could also increase volatility and reduce price efficiency, since pre-trade transparency from displayed quotes plays a significant role in the price discovery process. *See* Amy Edwards et al., *The Effect of Hidden Liquidity: Evidence from an Exogenous Shock* (working paper Dec. 19, 2024), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5064340 (retrieved from SSRN Elsevier database).

602 *See* Robert P. Bartlett et al., *The Market Inside the Market: Odd-Lot Quotes*, 38 REV. FIN. STUD. 661 (2025).

603 *See infra* Table 5 and surrounding discussion. That analysis shows that off-exchange trade-through rates decline from 19.1% for trades of five shares to 11.5% for trades of 40 shares.

604 *See supra* note 408 and surrounding discussion (also see footnote discussion of potential limitations of the analysis).

SIP may increase their probability of execution, which would increase the incentives to display aggressively-priced orders. However, this effect may be limited because a majority of the trading volume on exchanges may come from broker-dealers that use exchange proprietary DOB feeds that already have access to this odd-lot information.[605]

Rescinding Rule 611 may have minor impacts on stocks that will receive a smaller tick size.[606] First, rescinding the trade-through prohibition could reduce the anticipated benefit of lower transaction costs from narrower spreads due to the reduction in the tick size. This is because a narrower spread can restrict the prices at which market participants transact. Thus, without the trade-through prohibition, more trade-throughs of the narrower spreads could occur, leading to less favorable trading terms for investors. However, this effect is expected to be limited as broker-dealers would still be subject to best execution obligations, which would not disappear with the rescission of Rule 611.

Rescinding Rule 611 is not expected to significantly impact average execution quality for marketable retail orders, although some individual orders may receive worse prices.[607] As discussed above, retail brokers typically evaluate wholesalers based on average execution quality relative to the NBBO, and allocate more order flow to those with higher average execution quality.[608] Because wholesalers often internalize marketable retail orders at prices significantly better than the NBBO, their average execution quality is not constrained by the protected

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605 *See supra* section VI.B.4.c (discussing SIP and proprietary data feeds) and section VI.B.1.d.i. (discussing the MDI amendments).

606 *See supra* section VI.B.1.iii (discussing the anticipated economic effects when the amendments to Rule 612 adopted in the 2024 Regulation NMS Amendment are implemented).

607 In turn, some marketable retail orders may experience better prices if there is an increase in cross-subsidization by wholesalers. For additional discussions, *see infra* note 615 and accompanying discussion.

608 *See supra* section VI.B.2.b.

quote.[609] Therefore, competition among wholesalers makes it unlikely that the average execution quality of retail marketable orders would significantly change if Rule 611 is rescinded.[610]

However, Commission staff analysis also shows that when wholesalers internalize marketable retail orders, they sometimes trade through displayed odd-lot quotes available at better prices and in sufficient quantity to fill the order, resulting in higher transaction costs for these orders.[611] If Rule 611 is rescinded, wholesalers may begin to trade through displayed round-lot quotes that were previously protected and are of sufficient size to fill the order, resulting in worse prices for these orders.[612]

However, there are several reasons why this effect may be limited. First, wholesalers may be less likely to trade through a round-lot quote that sets the NBBO compared to a smaller odd-lot quote.[613] Because retail brokers often benchmark wholesalers by their average execution quality measured against the NBBO, this creates competitive pressure that may make wholesalers less likely to trade through a round-lot quote that sets the NBBO. Second, wholesalers usually execute larger retail orders with price improvement relative to the prices they would have received if the order had executed against the aggregated displayed liquidity

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609 *See id.*

610 In addition, when the new Rule 605 reports are implemented, they may increase competition among retail brokers based on average execution quality, because retail investors will be better able to compare the execution quality across brokers. *See* Rule 605 Amendments Adopting Release at 26544. This, in turn, may cause retail brokers to require better average execution quality from wholesalers to receive their retail orders, which would further enhance the competitive incentives for wholesalers to not reduce the average execution quality they provide if Rule 611 is rescinded.

611 *See infra* section VI.C.1.c. (discussing off-exchange trade-throughs of odd-lot quotes).

612 Separately, it is also possible that wholesalers may sometimes start to trade through round-lot quotes when the retail order is larger than the displayed size, but it may not result in higher transactions costs for the order. As discussed above, for larger retail orders, wholesalers currently may execute the order outside the NBBO but provide price improvement compared to if the order had walked up the book against the aggregated displayed liquidity available on exchanges. When this occurs, the wholesaler may submit an order in a principal capacity to execute against the protected quotes on exchanges, to comply with Rule 611. If Rule 611 is rescinded, it is possible that wholesalers may no longer submit these principal orders to execute against the exchange quotes, which would result in an increase in trade-throughs, but may not result in increased transaction costs for the marketable retail orders. It is also possible that wholesalers may still choose to execute against the exchange quotes in these circumstances to help manage their inventory. *See supra* section VI.B.2.b (discussing size improvement wholesalers provide to larger retail orders).

613 The analysis in Table 5 below shows that the off-exchange trade-through rate decreases as the trade size increases. Therefore, off-exchange trade-through rates for unprotected 100 share round-lot quotes may be lower than the trade-through rates for 40 share trades observed in the table. *See infra* section VI.C.1.c.

across all exchange order books; *i.e.,* they provide a better price compared to if the limit order had "walked-the-book" on exchanges.[614] This indicates that the displayed size at the protected quotes is not usually a binding constraint on the execution quality that wholesalers provide (*i.e.,* they tend to also provide price improvement relative to unprotected displayed quotes they could have traded through).

Third, when the new Rule 605 reports are implemented, they will include statistics on the size improvement relative to aggregated depth at the NBBO, as well as the percentage of shares of marketable orders that a retail broker executes outside the NBBO. If retail investors value these additional dimensions of execution quality, competition among retail brokers may lead them to evaluate wholesalers on these metrics as well, which could limit the extent to which wholesalers execute large retail orders at prices worse than the NBBO.

If wholesalers begin trading through round-lot quotes after Rule 611 is rescinded, some larger marketable retail orders may receive worse prices.[615] This would transfer value from the retail investors to the wholesalers, who would earn higher profits.

Wholesalers may pass some of these increased profits to other retail investors by cross-subsidizing additional price improvement to smaller orders. Wholesalers may do this because they would still face competitive pressure to maintain average execution quality measured against the NBBO to attract retail order flow. To offset the worse execution quality associated with trade-throughs of round-lot quotes, the wholesaler would have to provide additional price improvement to other retail orders. However, if the retail broker benchmark does not perfectly reflect wholesaler profits, wholesalers may still retain some of the increased transaction costs

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614 *See supra* section VI.B.2.b. Additionally, some retail brokers may produce exception reports if a wholesaler executes an order at a price outside of the VWAP price the order would have received if it had walked the consolidated displayed limit order book. *See* Ernst, Malenko, Spatt and Sun (2023).

615 The magnitude of any increase in transaction costs resulting from trade-throughs of round-lot quotes may not be large. For example, the analysis in Table 5 below shows that off-exchange trade-throughs of 40 share odd-lot quotes increases transactions costs by 0.32 bps (or 5.0% of the 6.34 bps effective spread). The increase in transaction costs declines with the trade size, which indicates the increased transaction costs for trading through a 100 share round-lot quote may be lower. *See infra* section VI.C.1.c.

from larger marketable retail orders as profit, even if their average execution benchmark remains unchanged.

Rescinding Rule 611 may also increase the likelihood that retail non-marketable limit orders are traded through, although the Commission does not expect this effect to be significant. As discussed above,[616] most retail non-marketable limit orders are indirectly displayed on an exchange, where they may currently qualify as protected quotes. If rescinding Rule 611 increases trade-through rates of displayed orders on exchanges, it would also increase trade-through rates for nonmarketable retail orders. However, as discussed above, there are reasons to believe that trade-through rates for displayed limit orders may not significantly increase if Rule 611 is rescinded. Therefore, rescinding Rule 611 may not significantly increase trade-through rates for displayed retail non-marketable limit orders.

If there is an increase in retail marketable orders executed outside the NBBO or retail non-marketable limit orders traded through, it could lead to investor confusion. This could create additional costs for retail brokers to respond to more customer complaints, increase investor education, or update their systems. For example, retail brokers may incur higher costs for call centers, chat support, and content development to explain trade-throughs, reconcile price discrepancies, and adjust user interfaces.

c. Empirical Analysis

i. Odd-Lot Quote Trade-Through Analysis

This section presents the Commission's empirical analysis of the prevalence and economic determinants of trade-throughs. A primary challenge in empirically evaluating the effect of the amendments is that Rule 611 requires trading centers to have policies and procedures to prevent trade-throughs. This trade-through prohibition causes observed trade-throughs to be less frequent than they would be under market forces alone. Further, trade-throughs that violate Rule 611(e.g., by mistake) are likely to differ systematically from

616 *See supra* section VI.B.2.b.

intentional trade-throughs that would occur without Rule 611. An empirical analysis therefore requires a setting where Rule 611 does not prohibit trade-throughs; behavior in this setting can serve as a counterfactual for broader market behavior if Rule 611 is rescinded.

The Commission therefore focuses on trade-throughs of odd-lot quotes inside the NBBO for high-priced stocks. This setting is a useful laboratory for multiple reasons. First, Rule 611 only applies to round-lot quotes; odd-lot quotes inside the NBBO are not protected and market participants are free to trade through them. Second, odd-lot trades are prevalent, comprising over half of trades since 2021;[617] this allows for a large sample of trades that can be benchmarked against the prevailing odd-lot quotes to determine if the trade could have been executed at a better price. Third, odd-lot quotes can represent substantial notional liquidity for high-priced stocks and can emulate the liquidity of round lots for less expensive stocks.[618] Fourth, odd-lot quotes and trades occur during the core trading session when conditions are the same as with round-lot quotes and trades. This setting therefore provides a relatively clean laboratory for market behavior in the absence of Rule 611.

The results of the Commission's analysis are summarized here. The analysis finds that 1-5% of trades on an exchange trade through a better-priced quote on another exchange. The cost of these trade-throughs, measured as the fraction of notional executed outside the best quote, ranges from 0.03 to 0.13 basis points.[619] This cost is small relative to effective spreads—which are over 6 basis points—and suggests that market participants trading on an exchange generally execute at the best available prices, even without an explicit requirement. Trade-through rates are higher for off-exchange executions, ranging from 11-19% for trades of 5 to 40 shares, with costs

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617 *See* Bartlett et al., *supra* note 412.

618 *See id*; *See also* First TTR Roundtable Transcript at 77-78 (Maureen O'Hara, Cornell, SC Johnson Graduate School of Management). A high price per share offsets the fact that odd-lots represent fewer shares; to illustrate, a 30-share odd-lot quote for a stock priced at $100 per share represents as much notional liquidity as a protected quote for a stock priced at $30 per share.

619 More specifically, the cost of a trade-through is calculated using the difference between the execution price and the price of the best odd-lot quote of sufficient size to cover the trade. This cost is bounded by the protected quote—that is, when an odd-lot quote inside the NBBO is traded through, the execution price will generally not be outside of the NBBO.

ranging from 0.32 to 0.84 basis points. This suggests that there is demand for trade-throughs off exchange, and this demand may extend to round lots if Rule 611 is rescinded. The analysis also finds that trade-through rates decline with trade size. Therefore, to the extent that off-exchange trade-throughs reduce the incentive to provide lit liquidity, this effect is expected to be small for limit orders of meaningful size, such as those that set the NBBO. Finally, the analysis finds similar trade-through rates for retail trades executed by wholesalers and trades executed on ATSs, alleviating concerns that retail execution quality will be particularly sensitive to the rescission of Rule 611.

There is a fundamental limit in extrapolating these results to round lots if Rule 611is rescinded: round lots are protected and set the NBBO, while odd-lot quotes are neither protected nor set the NBBO. If market participants avoid trading through the NBBO even without Rule 611, the observed trade-through rates of odd-lot quotes may overstate those for round lots if Rule 611 is rescinded. For example, off-exchange trading protocols are often benchmarked to protected quotes and ignore odd-lot quotes, which may contribute to the observed off-exchange trade-through rates. Additionally, these empirical results are based on a subset of high-priced stocks with spreads wide enough to allow odd-lot quotes inside the NBBO.[620] The behavior of these stocks may differ systematically from that of stocks with low prices and tight spreads. These caveats indicate that the estimated trade-through rates should be interpreted with caution, as they may differ from those for round lots if Rule 611 is rescinded. Nevertheless, the Commission believes that analyzing trade-throughs of odd-lot quotes inside the NBBO for high priced stocks provides an economically meaningful environment to study market behavior without a trade-through prohibition.

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620 The subsample used in the analysis is economically significant. For October of 2025, this subsample includes approximately 880 stocks per day (out of a total of approximately 11,600 traded stocks). Many of the high-priced stocks in this subsample are among the most active of all stocks, with the subsample typically comprising 30-40% of total daily dollar volume for regular-way trades. The economic significance of the subsample indicates that market participants are accustomed to trading in environments where the best quote is often unprotected.

A detailed discussion of the methodology and results of the Commission's analysis is below.

The analysis starts by constructing a sample of stock-days with room inside the NBBO for odd-lot quotes of meaningful liquidity.[621] The sample construction has the following steps. First, all stock-days for the fourth quarter of 2025 are collected from the TAQ Masterfile. Second, stock-days are excluded if their VWAP is less than $100,[622] their round lot is less than 100,[623] or their time-weighted average NBBO quoted spread ("NBBO TWAQS") is less than $0.04 during October.[624] Third, to avoid data errors in exchange proprietary feeds, December 16th is excluded, as are 34 stock-days with a negative time-weighted quoted spread of the best displayed prices ("BDP TWAQS").[625] The result is a sample of 45,647 stock-days.

Summary statistics are presented in Table 4. The sample captures a wide range of trading activity: stock-days at the 5th percentile have less than 100 trades, while the 95th percentile has over 88,000 trades. Similarly, the first ventile has a dollar volume under $0.5 million, while the

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621 *See supra note* 431 for the definition of a stock-day.

622 The VWAP is the volume-weighted average price for the stock-day. It is computed using regular-way trades from the SIP by dividing the notional value of the trades (*i.e.,* trade price multiplied by trade size) by the total number of shares that transacted.

623 As a result of the round-lot amendments that took effect on November 3, this filter implies that stocks with prices typically over $250 per share are only in the sample during October. The new round lots for these stocks resulted in tighter NBBO spreads, thus reducing the space for odd-lot quotes inside the NBBO.

624 In order for there to be odd-lot quotes inside both sides of the NBBO, the NBBO spread needs to be at least $0.03. The time-weighted average quoted spread is calculated from the SIP quotes. The data in this analysis precedes the implementation of the 2024 Regulation NMS Amendments. Once implemented, stocks that generally maintain an NBBO TWAQS less than $0.015 will trade with a reduced minimum pricing increment; because this analysis conditions on an NBBO TWAQS greater than $0.04, the results of this analysis are unlikely to be affected by the reduction in the minimum pricing increment. Additionally, once implemented, the 2024 Regulation NMS Amendments reduce the access fee cap for all stocks; because the change in the access fee cap affects all quotations, it is unlikely to affect the incentives to trade through a particular quote and is therefore unlikely to affect the results of this analysis. The data in this analysis also precedes the dissemination of top-of-book odd-lot quotations by the SIPs, which was implemented on Monday, April 27, 2026. Market participants may be less likely to trade through odd-lot quotes once it is easier and cheaper to see the top-of-book odd-lot quotations; to the extent that most trades are executed by market participants who see odd-lot quotations in the proprietary feeds, the dissemination of odd-lot quotations by the SIPs is unlikely to have a large impact on the results of this analysis.

625 December 16th is dropped due to a data quality issue with an exchange proprietary feed, which resulted in missing quotes for half of the day. The best displayed prices are the lowest lit offer and the highest lit bid across all 16 proprietary feeds, regardless of the size of the quote. The BDP TWAQS is the time-weighted value of the spread between these best displayed prices; if this is negative, then it is likely due to an error on one of the feeds.

twentieth ventile is above $850 million. The sample covers over $11 trillion in notional volume for the quarter.[626]

Turning toward quoted spreads, the sample contains NBBO TWAQS ranging from $0.05 to over $2, with a median of $0.316 and a mean of $0.661. Importantly, the distribution of the BDP TWAQS is substantially lower than the distribution of the NBBO TWAQS. That is, at each percentile, the BDP TWAQS is lower than the NBBO TWAQS, indicating that there are often odd-lots inside the NBBO. At the 5th percentile, the BDP TWAQS is about 25% lower than the NBBO TWAQS, while at the 95th percentile the BDP TWAQS is less than half of the NBBO TWAQS. The depth at the BDP exhibits a similar pattern: the time-weighted depth at the bid and offer is less than 100 at the median of the distribution, which implies that the typical stock-day in the sample spends most of the day with less than one round lot at the BDP. Finally, trade-weighted effective spreads—a measure of trading costs—range from $0.023 to $0.707 per share from the 5th to 95th percentiles; in percentage terms, the effective spread averages 11.7 basis points relative to the midpoint of the trade.[627]

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626 The total notional is computed by multiplying the average notional by the number of stock-days in the sample: $249.2 million x 45,647.

627 The effective spread is measured as twice the absolute difference between the trade execution price and the midpoint of the NBBO at the time of the trade. For each stock-day, this measure is averaged across trades; equally weighting trades (as opposed to weighting by shares or the notional value of the trade) gives relatively more weight to small trades and therefore makes the measure more reflective of the trading cost of small odd-lots.

Table 4: Summary statistics for analysis of trade-through rates

Variable	Stock-days	Mean	P5	P25	P50	P75	P95
VWAP	45,647	$195	$103	$122	$153	$204	$397
Number of trades	45,647	26,522	84	3,426	12,074	27,261	88,176
Dollar-volume (millions)	45,647	$249.2	$0.5	$14.1	$62.4	$186.0	$851.8
Market Cap. (millions)	45,640	$53,074	$182	$2,372	$8,410	$28,676	$179,947
NBBO TWAQS	45,647	$0.661	$0.056	$0.152	$0.316	$0.698	$2.193
BDP TWAQS	45,647	$0.338	$0.041	$0.103	$0.199	$0.377	$0.990
BDP TW depth at bid	45,647	154	28	54	87	155	511
BDP TW depth at offer	45,647	171	26	51	85	160	620
Effective spread	45,647	$0.228	$0.023	$0.059	$0.113	$0.222	$0.707
Effective spread (%)	45,647	0.117%	0.016%	0.039%	0.069%	0.127%	0.330%

This table displays summary statistics for the sample constructed for the analysis of trade-throughs. The sample consists of all stock-days (unique stock-date pairs) in the TAQ Masterfile for the fourth quarter of 2025, subject to the following filters: (1) stock-days with a volume-weighted average price ("VWAP") under $100 are excluded to focus on odd-lots; (2) stock-days are excluded if the round-lot is less than $0.04 during October to allow for room inside the NBBO; (3) December 16th is excluded due to a data quality issue with an exchange proprietary feed; (4) 34 stock-days with a negative "BDP TWAQS" are excluded due to likely data errors; and (5) stock-days without any trades are excluded.

Trade data is from the SIP and include regular-way trades (i.e., trades with a sale condition of "Regular Trade," "Intermarket Sweep Order", or "Odd Lot Trade"). Market capitalization is calculated as shares outstanding (from the TAQ Masterfile) multiplied by VWAP. The NBBO TWAQS is the time-weighted average quoted spread during market hours using the SIP round-lot quotes. BDP TWAQS is the time-weighted average quoted spread during market hours using the best-priced bid and ask, regardless of quote size, constructed from 16 exchange proprietary feeds. BDW TW depth at bid (offer) is the time-weighted average depth at the best priced bid (offer), measured in shares; when multiple venues quote at the best price, the maximum quote size is used. Effective spread is computed as twice the absolute difference between the trade price and the NBBO midpoint at the time of the trade, averaged equally across regular trades for each stock-day. The effective spread is measured both in dollars and as a percent of the NBBO midpoint.

For each variable, the table reports the number of stock-days with non-missing values, the mean, and the 5th, 25th, 50th, 75th, and 95th percentiles.

Conceptually, a trade-through occurs when a liquidity demander leaves money on the table by not sending the order to a venue with a better-priced quote. To operationalize this concept, an empirical analysis of trade-throughs must specify the conditions under which the liquidity demander could have reasonably executed at the better price. The following analysis sets two conditions. First, the trade quantity must be no larger than the size of the better-priced quote. Second, the better-priced quote must be sufficiently persistent that the liquidity demander

could have seen it and executed against it. If these conditions hold, then a liquidity demander could have received—even if only after the fact—a better price by sending the order to a different venue.

Regarding the first condition, if the trade size is larger than the better-priced quote, then the liquidity demander would not have been able to execute the entire order at the better-priced quote. Instead, they would either incur the cost of a partially filled order or execute the remaining shares at a potentially worse price elsewhere. Commenters have noted that execution quality should be benchmarked to the size of the order.[628] Accordingly, this analysis benchmarks trades against quotes that are large enough to fully accommodate the trade.

To implement this first condition, the analysis takes the following approach. First, the analysis focuses on trades of a range of sizes: 1, 5, 10, 20, 40, and 100. Trades of these sizes are relatively frequent.[629] For each trade size, quotes are drawn from the proprietary order book data covering the sixteen exchanges that operated throughout the fourth quarter of 2025.[630] The order book data provides, for each exchange, the number of shares offered at each of ten price levels on both the buy and sell sides (*i.e.*, ten levels of buy orders, and ten of sell orders).[631] For each size and venue, the analysis constructs BBO-like quotes—analogous to the best bid and offer for

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628 In the context of best execution for retail orders, one commenter stated, "since the odd lots don't show up in the NBBO, measuring [best execution] against the NBBO really doesn't make sense. What we really ought to do is measure [best execution] against the actual displayed liquidity that is in the lit markets." *See* First TTR Roundtable Transcript at 188 (Jim Angel, Georgetown University). In the context of institutional best execution, one commenter stated that, "wholesalers are being held accountable to the order receipt time depth of book quote." *See* First TTR Roundtable Transcript at 275 (Robert Battalio, University of Notre Dame).

629 *See* Michael Coccia et al., *Is Smaller Better? Examining the Decrease in Trade Sizes in Financial Markets* 30-31 (working paper July 16, 2025), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5358460 (retrieved from SSRN Elsevier Database).

630 The analysis excludes quotes from 24X National Exchange, LLC, on which trading commenced on October 14th, 2025. Volume on this exchange—whether measured by shares, trades, or notional—generally accounted for less than 0.1% of aggregate volume on the days it operated during 2025. *See US Equities Historical Market Volume Data*, CBOE, https://www.cboe.com/us/equities/market_statistics/historical_market_volume/ (last visited April 16, 2026). To the extent that better-priced odd-lot quotes persist on this exchange, the analysis may understate trade-through rates.

631 A price level is a price with a resting order. A price without a resting order does not count toward the ten level limit—e.g. if an exchange has an offer to sell a share at $100.01 and the next offer to sell is at $100.10, then those offers would constitute only two levels instead of ten.

a round-lot quote—by identifying the lowest price at which a market sell order of that size would execute (for bids) and the highest price at which a market buy order would execute (for offers), assuming the order walks the book and does not interact with hidden liquidity. For example, a 10-share bid on an exchange is the lowest price that a 10-share market sell order would execute against (assuming the sell order walks the book and does not interact with hidden liquidity); similarly, the 10-share offer is the highest price that a 10-share market buy order would execute against. This procedure creates BBO-like quotes for each trade size; trade execution prices are then compared to the correspondingly sized quote to determine if the trade could have executed at a better price at another venue.[632]

Turning to the second condition, if the relevant (correspondingly sized) quote is not sufficiently persistent, then it will not be used to determine whether there was a trade-through. It might not be feasible, for example, for a liquidity demander to execute against a quote that "flickers." The trade-through analysis considers the following factors when determining whether it is feasible for a liquidity demander to execute against a quote.

First, the quote needs to persist long enough for the message to travel from the exchange to the liquidity demander. For example, if a broker is in Secaucus, NJ, and an exchange is in Mahwah, NJ, a quote message traveling at the speed of light would take approximately 113 microseconds to arrive after it was released from the exchange's matching engine—setting a lower bound on travel time.[633]

Second, after receiving the quote message, the broker needs time to process and act on it, and then the broker's response must travel back to the exchange.

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632 The analysis excludes trades that occur when the best correspondingly sized quotes cross each other. For example, a 10-share trade is excluded when the best 10-share offer is lower than the best 10-share bid. When the market is crossed, every execution price is either below the best bid or above the best offer; it is therefore unclear how to evaluate the execution quality of such a trade. *See supra note 235*.

633 The locations are approximately 21 miles apart, and the speed of light is 186,000 miles per second. Light therefore requires 0.000113 seconds (21 miles / 186,000(miles/second)) to traverse the distance.

Third, there are limits to how closely market participants can synchronize their clocks, which means messages from different venues might be reported out of order. For example, a trade might be reported on one venue before a quote update is reported on another venue, even though the quote update occurred first. Exchanges employ a methodology to ensure that their timestamps are accurate within 100 microseconds.[634]

Fourth, a broker may send marketable orders to multiple venues simultaneously, but differences in transit times (e.g., between Mahwah and Carteret, NJ) can create the appearance of a trade-through. For example, if venue A has a worse quoted price than venue B but the broker's order reaches venue A first, it may appear as if the trade on venue A traded through a better-priced quote on venue B, even though both quotes were accessed nearly simultaneously.

Fifth, from the perspective of the liquidity supplier, if a quote is traded-through but then canceled or subsequently executed by another order, the supplier is not worse off because of the trade-through.[635]

In sum, these five factors necessitate that a better-priced quote persist for a window of time around the execution in order for the trade to be classified as a trade-through: the first two factors require that the quote exist before the trade, while the latter three require it to exist after the reported time of execution.

To implement this condition of quote persistence, the analysis takes the following approach. First, each trading day is divided into non-overlapping intervals of 1.2 milliseconds. Quotes are mapped to every interval during which they are in effect, using the participant timestamp that records when the exchange's matching engine published the message.[636] Second, for each interval and venue, the analysis identifies the highest offer and lowest bid at which a

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634 *See, e.g.*, the definition of "Participant Timestamp" in UTP DATA FEED SERVICES SPECIFICATION VERSION 3.0c (2026), *available at* https://utpplan.com/DOC/UtpBinaryOutputSpec.pdf.

635 One commenter discussed measuring, "…the cost to the limit order that is allegedly traded through" by examining whether the order was subsequently filled. *See* First TTR Roundtable Transcript at 160-161 (Jim Angel, Georgetown University).

636 *See supra* note 634.

market order of a given size could have executed. These are considered the persistent quotes—quotes that do not persist for the full interval are excluded, as a liquidity demander could not have reliably traded against them. Third, the analysis summarizes the persistent quotes across all venues to determine the best persistent bid and offer for each interval. This produces NBBO-like bids and offers for every 1.2 millisecond interval and for each trade size threshold.

Correspondingly, trades are assigned to one of the 1.2 millisecond intervals using the trade's participant timestamp,[637] and then trades are merged to the best persistent quotes in the same interval. Only trades with timestamps between the 800th and 1,000th microsecond of each interval are retained in the sample. This sampling procedure keeps approximately one-sixth of trades (those in the 200 microsecond window of each 1.2 millisecond interval) and matches them to the best quotes that persisted from at least 800 microseconds before execution to at least 200 microseconds after execution. This approach ensures that the analysis accounts for the factors previously discussed: 800 microseconds are allotted for a message to travel from the exchange to the liquidity demander and back, and 200 microseconds are allotted for clock synchronization and simultaneous execution issues.[638]

The sample of trades is shown in Table 5. Panel A shows trades that are executed on an exchange, and Panel B shows trades that are executed off exchange. The first column shows the size of the trade, and the second column shows the number of trades. There is a total of 91 million trades, each of which is matched to the best persistent quotes of various sizes.

To examine the effect of rescinding Rule 611, the analysis focuses on situations where market participants are not prohibited from trading through better-priced quotes. Specifically, the

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637 For trades that occur on an exchange, this timestamp reflects the time that the message is published by the exchange's matching engine. For trades that occur off exchange, the timestamp reflects the execution time of the trade reported by the FINRA member. By matching trades to quotes using the participant timestamp, the quotes reflect—as close as is possible—the state of the order book at the time of trade execution. *See supra* note 634.

638 To the extent these allowances are too short, then the estimated trade-through rates will be too high (and vice versa if the allowances are too long). Additionally, to the extent some off-exchange venues report execution times rounded down to the nearest millisecond, then those trades will be evaluated against quotes that are older by the length of the rounding, potentially increasing measured trade-through rates.

analysis includes only those trades where the best persistent quotes for the trade's size are inside the best persistent quotes for a 100-share order. For example, a 20 share trade is included in the trade-through analysis only if the best persistent bid and ask for a 20-share order are inside the best persistent bid and ask for a 100-share order.[639] This approach avoids the direct effect of Rule 611 in preventing trade-throughs.

These trades are denoted "Candidate trades," and are shown in the third column of Table 5. The fourth column reports the percentage of all trades that are "Candidate trades." Approximately 30% of 10-share trades are "Candidate trades." The fraction of "Candidate trades" decreases with trade size because larger trades are more likely to exhaust all of the available odd-lot liquidity on a venue and thereby reach the protected quote.

The analysis next calculates trade-throughs for the "Candidate trades." A trade-through occurs when the trade's execution price occurs outside of the best persistent bid and ask prices. Column five shows the fraction of "Candidate trades" that are trade-throughs. For each trade-through, the analysis calculates the notional value of the trade-through by multiplying the number of shares in the trade by the difference between the execution price and the best quote (*i.e.*, for a trade-through executed below the best bid, the execution price is subtracted from the best bid; for an execution above the best offer, the best offer is subtracted from the execution price). The summed notional value of all trade-throughs is then divided by the notional value of all the "Candidate trades" to calculate the fraction of notional that is outside the best quote—this is presented in the sixth column as "Notional amount outside of best quote (basis points)." The last column shows the typical effective spread for stock-days in the sample, weighted by the stock-days' notional value of "Candidate trades" in each row.

Panel A shows trade-through rates of 1.6 to 5.5% for on-exchange odd-lot trades. Smaller trades generally have higher trade-through rates, with one-share trades exhibiting the highest

639 As discussed previously, every stock in this sample has a round lot of 100 shares.

trade-through rate—possibly because these are often exploratory or used to "ping" for hidden liquidity rather than being price sensitive.[640] Similarly, smaller trades have a higher notional amount that is outside of the best quotes, ranging from 0.03 to 0.13 basis points. However, the notional value of these trade-throughs is small compared to typical trading costs: effective spreads range from 6 to 9.12 basis points, implying that liquidity demanders on exchange do not leave much money on the table by passing over better-priced quotes. To provide a benchmark, the last row of the panel shows results for trades of size 100 that occur on exchange, which are evaluated against the best 100-share quotes (*i.e.,* the protected NBBO). The trade-through rate for these trades is 0.3%, with the notional amount outside of the best quotes estimated to be 0.01 basis points.[641]

Panel B shows results for off-exchange trades, where trade-through rates are substantially higher than on-exchange trades. Trade-through rates off exchange range from 11.5 to 35.6% for odd-lots.[642] As with on-exchange trades, smaller trades have higher trade-through rates, particularly for one-share trades A possibility for the high trade-through rates for one-share trades is that some of them are the result of fractional trades. During this time period, trades for retail orders smaller than one share are reported as 1-share trades in the SIPs.[643] If a trade involves a whole share component and a fractional share component (e.g. a trade for 10.4 shares), then the broker may execute the whole share component on an agency basis and the

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640 *See, e.g.*, Ryan L. Davis et al., *1-Share Orders and Trades*, 75 J. BANKING & FIN. 109 (2017).

641 The estimated trade-through rate of 0.3% is similar to the round-lot trade-through rates calculated in the OAR Roundtable Analysis—*see supra note* 121. That analysis found a 0.06% trade-through rate for round-lot trades in corporate securities and a 0.08% trade-through rate for round-lot trades in ETP securities, both using a one-second lookback window.

642 One study found off-exchange odd-lot trade-through rates of 31-46%. This study looked at a relatively small sample of trades on one day and for two stocks. These trade-through rates were computed without the requirement that the better-priced odd-lots have sufficient depth to cover the trade size; this difference in methodology may explain part of the difference in the trade-through rate from Table 5. *See* Robert P. Bartlett, *Modernizing Odd Lot Trading*, COLUM. BUS. L. REV. 101 (2021).

643 On February 23, 2006, the SIPs began reporting information on fractional share trade quantities. *See UTP Vendor Alert #2025 – 6: UPDATE New Release Date: SIP Fractional Share Trade Reporting Enhancements*, NASDAQTRADER (Mar. 28, 2025), https://www.nasdaqtrader.com/TraderNews.aspx?id=UTP2025-06.

fractional share component on a principal basis. This trade would result in two prints to the SIP: one for 10 shares, and one for 1 share.[644] Therefore, 1-share trades off exchange might be part of a trade that is larger than 1 share, and the 1-share quotes—which serve as the benchmark for the execution price of 1-share trades in this analysis—might be too stringent of a benchmark. Separately, probing for hidden liquidity with 1-share orders might be particularly valuable off exchange because these trades are only visible to other market participants when they are published by the SIP, which entails a delay relative to the reporting of on-exchange trades published by exchange proprietary feeds.[645]

The notional value of the odd-lot trade-throughs off exchange ranges from 0.32 to 1.44 basis points—roughly ten times higher than on exchange. A possibility for the high trade-through rates off exchange is that orders off exchange are often pegged to the NBBO in various ways and thereby ignore odd-lot quotes by design. A midpoint order, for example, might execute outside of the best odd-lot quotes.[646] Tracking odd-lot quotes can also be costly, both technically and financially (e.g., purchasing the requisite data feeds and connections), so executing at a better price might be less profitable than simply pegging to the NBBO.[647] The last row of the panel shows the trade-through rate for 100-share trades (evaluated against the NBBO) that execute off exchange; the rate is 0.1% with a notional value under 0.01 basis points, and is similar to the estimates for on-exchange trades.

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644 *See* Robert P. Bartlett et al., *Tiny Trades, Big Questions: Fractional Shares*, 157 J. Fin. Econ. 1 (2024). Table 6 therein shows that one broker executes most of their fractional trades at either the NBB or the NBO, which would necessarily trade through any odd-lots inside the NBBO.

645 *See* Thomas Ernst et al., *The Value of Off-Exchange Data* (working paper July 31, 2021), *available at* https://microstructure.exchange/papers/12859989807_TRF_July_1b.pdf.

646 *See* figure 2 of Bartlett et. al. (2025), *supra* note 617, for an example.

647 The Best Odd-Lot Order started to be disseminated by the SIPs on April 27, 2026. To the extent this allows market participants to more cheaply track odd-lot quotes, these quotes will experience lower trade-through rates than observed in this analysis.

The Commission understands that liquidity suppliers may be less willing to post aggressively-priced quotes if they expect their quotes to be traded through by uninformed liquidity demanders. If rescinding Rule 611 causes more uninformed traders to execute off exchange, the pool of on-exchange liquidity demanders may skew toward informed traders,[648] prompting liquidity suppliers to widen spreads to compensate for increased adverse selection. The "notional amount outside of the best quote" in Panel B of Table 5 provides one way to gauge the economic magnitude of this effect—it measures traders' willingness to forgo better-priced quotes when trading off exchange. For trades of five shares, off-exchange traders appear willing to forgo approximately 11% of the effective spread;[649] this drops to approximately 5.5% for trades of twenty shares. This suggests that rescinding Rule 611 may have a smaller impact on lit liquidity provisions for large trades—where the gains from executing at the best price are multiplied by a high number of shares—than for small trades. Therefore, to the extent that the NBBO represents, by design, an order of meaningful size,[650] the rescission of Rule 611 might have a small effect on it.

Table 5: Aggregate trade-through rates by location and trade size

Panel A: On-exchange trades

Trade size	Total trades	Candidate trades	Candidate trades (%)	Trade-through rate	Notional amount outside of best quote (basis points)	Typical effective spread (basis points)
1	16,754,409	7,619,267	45.5%	5.5%	0.13	9.12
5	5,810,260	2,219,607	38.2%	3.5%	0.07	7.60
10	6,908,856	2,122,907	30.7%	2.9%	0.05	6.86
20	2,975,260	662,803	22.3%	2.4%	0.05	7.06
40	1,354,922	140,189	10.3%	1.6%	0.03	6.04
100	15,293,576	n/a	n/a	0.3%	0.01	4.87

Panel B: Off-exchange trades

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[648] *See* section VI.D.2.c. for a discussion of the amendments' effects on competition between exchanges and other venues.

[649] The notional amount outside of the best quote is 0.84 basis points, while the typical effective spread is 7.52 basis points. The ratio is therefore 11% (0.84/7.52)

[650] *See* Market Data Infrastructure Adopting Release, *supra* note 15, at 18618 n.274.

Trade size	Total trades	Candidate trades	Candidate trades (%)	Trade-through rate	Notional amount outside of best quote (basis points)	Typical effective spread (basis points)
1	21,296,491	9,375,566	44.0%	35.6%	1.44	6.45
5	3,818,979	1,441,830	37.8%	19.1%	0.84	7.52
10	3,476,438	1,064,874	30.6%	16.4%	0.64	6.52
20	2,124,338	496,508	23.4%	13.1%	0.42	7.65
40	899,180	86,278	9.6%	11.5%	0.32	6.34
100	10,417,251	n/a	n/a	0.1%	0.00	5.06

This table displays trade-through rates for the sample of stock-days described in Table 4. Panel A shows rates for trades that occur on an exchange, and Panel B shows rates for trades that occur off exchange. The "Trade size" column indicates the number of shares that transacted in the trade.

To calculate trade-throughs for a given stock-day, the following procedure is followed. First, the day is divided into 1.2 millisecond intervals with trades and quotes assigned to the interval by their participant timestamp, and with trades occurring between the 800th and 1000th microsecond of the interval. This procedure samples approximately one-sixth of all regular trades for the stock-day. Quotes come from the proprietary feeds of the sixteen exchanges that operated during the entirety of the fourth quarter of 2025. For a given trade size during the 1.2 millisecond interval, each venue's quotes are aggregated to determine the persistent quote that could have traded against a market order of the specified size. E.g., if the trade size is 1 share, then a venue's persistent quote is the worst displayed price at the top of the venue's book during the interval; if the trade size is 10 shares, then the persistent quote is the worst displayed quote with which a 10-share market order would have interacted. The best persistent bid is the highest persistent bid across the sixteen venues; the best persistent offer is the lowest persistent offer across the sixteen venues.

A "Candidate trade" is a trade that occurs when both the best persistent bid and offer quotes (for a given size) do not cross and are strictly inside the best persistent bid and offer quotes for a round-lot (100-share) trade. An odd-lot trade-through occurs if the candidate trade's execution price is below the best persistent bid or above the best persistent offer. The concept of a "Candidate trade" does not apply to 100-share trades, so these trades are classified as a trade-through if the execution price is below the best persistent 100-share bid or above the best persistent 100-share offer. When a trade-through occurs, the difference between the execution price and the best quote is multiplied by the size of the trade to determine the notional amount outside of the best quote.

The results of the above procedure are collected for 481,928 stock-day-size-location tetrads. Of these tetrads, 33 are dropped because, when there is a trade-through in the tetrad, the average distance from the best quote is larger than ten times the stock-day's NBBO TWAQS and are therefore likely a data error. The remaining tetrads are aggregated by the size-location pairs shown in the table. For each size-location pair: "Total trades" is the number of regular trades in the sample; "Candidate trades" is the number of candidate trades; the fourth column is the percent of total trades that are candidate trades; "Trade-through rate" is the number of trade-throughs divided by the number of candidate trades; "Notional amount outside of best quote" is the difference between the execution price and the best quote for trade-throughs, multiplied by the number of shares in the trade-through and divided by the notional value of the candidate trades. The final column, "Typical effective spread" is a weighted average effective spread for the relevant stock-days. This weighted average effective spread is computed in two steps: first, the trade-weighted effective spread is calculated for each stock-day as described in Table 4; second, the effective spreads of the stock-days are averaged using the stock-days' notional value of candidate trades as weights.

To further explore the interaction of Rule 611 and liquidity, Table 6 tabulates trade-through rates by notional volume quartiles. The sample of stock-days is split into four quartiles using the cutoffs for "dollar-volume" presented in Table 4; the "Notional quartile" column of Table 6 shows the quartile from which the statistics are derived (with "Q1" being the quartile with the smallest notional, and "Q4" being the quartile with the highest). Otherwise, the methodology and calculations are identical to Table 5.

Broadly speaking, trade-through rates are similar across notional quartiles, once conditioning on the trade size and the location of the trade. The largest outlier is the row of one-share trades off exchange for the most active quartile ("Q4"), which shows a trade-through rate of 40.1% compared to rates near 20% for the other quartiles. This may reflect the importance of probing for hidden liquidity in these stocks, or a higher share of fractional trades.[651]

The notional amount outside of the best quote generally declines as notional volume increases. For example, for 20-share trades off exchange, the notional amount outside of the best quote descends monotonically from 1.54 basis points to 0.34 basis points as the notional quartile goes from Q1 to Q4. However, effective spreads also decline as the notional quartile goes from Q1 to Q4, and the notional amount outside of the best quote as a fraction of the effective spread is fairly constant at approximately 5% for these rows.[652] These results suggests that rescinding Rule 611 may not have a differential impact on stocks with varying levels of trading activity.

Table 6: Aggregate trade-through rates by notional volume quartiles

Panel A: On-exchange trades

Trade size	Notional quartile	Total trades	Candidate trades	(%)	Trade-through rate	Notional amount outside of best quote (basis points)	Typical effective spread (basis points)
1	Q1	405,801	262,300	64.6%	9.7%	0.76	36.66
1	Q2	1,865,312	1,114,612	59.8%	7.0%	0.33	20.00

651 *See supra* notes 644 and 640.

652 *E.g.*, for a trade size of 20 off exchange, the Q1 quartile has a notional outside of the best quote equal to 1.54 basis points, with an effective spread of 27.79 basis points, for a ratio of 5.5%. The numbers for the Q4 quartile are 0.34 and 6.14, for a ratio of 5.5%.

1	Q3	3,257,542	1,626,278	49.9%	5.4%	0.15	11.51
1	Q4	11,225,754	4,616,077	41.1%	5.0%	0.08	6.51
10	Q1	63,997	22,547	35.2%	2.2%	0.14	30.09
10	Q2	567,947	234,621	41.3%	2.5%	0.09	16.34
10	Q3	1,082,768	377,555	34.9%	2.7%	0.07	11.00
10	Q4	5,194,144	1,488,184	28.7%	3.0%	0.05	5.01
20	Q1	23,946	6,012	25.1%	2.0%	0.13	30.81
20	Q2	242,688	70,733	29.1%	2.2%	0.07	14.99
20	Q3	580,476	142,961	24.6%	2.2%	0.05	10.19
20	Q4	2,128,150	443,097	20.8%	2.5%	0.04	5.46

Panel B: Off-exchange trades

Trade size	Notional quartile	Total trades	Candidate trades	(%)	Trade-through rate	Notional amount outside of best quote (basis points)	Typical effective spread (basis points)
1	Q1	312,158	119,163	38.2%	20.9%	2.99	29.05
1	Q2	1,610,017	828,485	51.5%	21.9%	1.98	15.49
1	Q3	3,149,907	1,494,542	47.4%	23.7%	1.61	9.96
1	Q4	16,224,409	6,933,376	42.7%	40.1%	1.38	5.40
10	Q1	31,092	9,054	29.1%	17.5%	1.92	28.63
10	Q2	230,863	89,896	38.9%	18.5%	1.39	15.11
10	Q3	545,041	180,733	33.2%	17.3%	1.00	10.12
10	Q4	2,669,442	785,191	29.4%	15.9%	0.54	5.33
20	Q1	23,478	5,325	22.7%	15.4%	1.54	27.79
20	Q2	207,377	59,475	28.7%	13.1%	0.81	15.23
20	Q3	430,347	107,795	25.0%	12.4%	0.58	11.03
20	Q4	1,463,136	323,913	22.1%	13.3%	0.34	6.14

This table displays trade-through rates for the sample of stock-days described in Table 4. The procedure for calculating trade-throughs is described in Table 5. In Table 5, the statistics were aggregated at the location-size pair; in this table, the statistics are aggregated at the location-size-quartile triple, where the quartile is determined by the stock-day's notional trading volume. The quartile cutoffs are shown in Table 4; "Q1" indicates the quartile of stock-days with the lowest notional volume, and "Q4" indicates the quartile with the highest notional volume.

The analysis next examines retail trade-throughs. Retail trades make up a large percentage of smaller off-exchange trades, and retail brokers benchmark wholesaler execution quality and price improvement based on the NBBO.[653] If the observed off-exchange odd-lot trade-throughs are due to wholesalers executing marketable retail orders, this would suggest that wholesalers are not always taking advantage of better-priced displayed odd-lot liquidity on

653 *See, e.g.,* Battalio & Jennings (2025) (showing that the average marketable retail order size in their sample is $709) and Ernst, Malenko, Spatt and Sun (2023) (showing that retail brokers use the average effective over quoted ratio, the average effective spread divided by the average NBBO quoted spread, as one of the main measures to evaluate wholesaler performance).

exchanges at the time of execution.[654] If these retail orders could have executed against better-priced odd-lot quotes, their transaction costs would have been lower. If wholesalers knowingly trade-through these better-priced odd-lot quotes, it suggests they may also trade through the NBBO for some retail trades if Rule 611 is rescinded. In that case, retail transaction costs could increase for some trades that previously would have executed against protected quotes. However, even if costs rise for some trades, the increase may not be large: Table 5 shows that for 40-share trades, the notional amount traded outside the best quote is 0.32 basis points, compared to under 0.01 basis points for a round-lot trade.

Even if wholesalers begin trading through round-lot quotes, rescinding Rule 611 is unlikely to significantly affect average retail execution quality. As discussed above, competition among wholesalers—measured by average execution quality relative to the NBBO and price improvement statistics for shares executed at or inside the NBBO—may limit trade-throughs, even without explicit protection.[655] Wholesaler performance can also be monitored using publicly available Rule 605 data. Any decline in average execution quality would be detectable in these data and would incentivize wholesalers to maintain average execution quality.[656]

To empirically examine retail trade-throughs, the analysis categorizes each trade-through (from Table 5) by venue and broker type using CAT data. Each trade is assigned to one of three mutually exclusive categories: "ATS" for trades that occurred on an ATS, "Retail – wholesaler"

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654 As discussed above, wholesalers generally compete on average execution quality measured relative to the NBBO to attract order flow from retail brokers. Since this competition is based on average execution quality, rather than at the individual order level, it may result in wholesalers executing some retail orders at prices worse than the displayed odd-lot quotes. However, wholesalers may also off-set this by cross-subsidizing additional price improvement for other orders in order to maintain their average execution quality. *See* Thomas Ernst et al., *supra* note 404.

655 *See supra* note 612 and surrounding discussion on potential changes to retail execution quality if Rule 611 is rescinded.

656 In addition, the Commission expects forthcoming changes to Rule 605 statistics to increase the force of this incentive.

for trades that are executed by a wholesaler and originated from a retail account,[657] and "Other" for all other trades. The results are shown in Table 7.

Panel A shows the percentage of off-exchange trade-throughs by venue and odd-lot size. One-share trades are unusual—most of these trade-throughs occur on an "Other" venue, likely because they represent fractional shares.[658] For other sizes, the fraction of trade-throughs on ATS is relatively stable at 50-60%, and for retail orders executed by wholesalers, at 20-30%.

Panel B shows trade-through rates by size and venue, scaling the number of trade-throughs by the number of candidate trades on each venue—i.e., the trade-through rate scales the number of trade-throughs by the number of opportunities for trade-throughs. Trade-through rates on ATSs decline from 20% to 10% as trade size increases, potentially because larger trades benefit more from executing at the best price. Rates for retail orders executed by wholesalers also decline from 21% to 15% as trade sizes increase. The similarity of the rates between these two columns suggests that institutions routing to ATSs and wholesalers executing retail orders have a similar willingness to trade through better-priced odd-lot quotes. This helps alleviate concerns that retail execution quality is particularly sensitive to the rescission of Rule 611.

Table 7: Source of off-exchange trade-throughs

Panel A: Percent of trade-throughs by trade size and source

Trade size	Total matched trade-throughs	% ATS	% Retail - wholesaler	% Other
1	3,315,307	19%	10%	70%
5	272,061	63%	19%	18%
10	172,198	52%	27%	21%
20	64,620	63%	20%	17%
40	9,861	66%	16%	18%

Panel B: Trade-through rate by trade size and source

Trade size	% ATS	% Retail - wholesaler	% Other
1	20%	21%	52%
5	18%	17%	23%

657 For the purpose of this analysis, seven broker-dealers are classified as wholesalers based on a review of retail broker Rule 606(a) reports from Q4 2025; wholesalers were identified as the broker-dealers to which retail brokers routed the majority of their market and marketable limit orders. A trade is classified as originating from a retail account if it has an "individual" account type and is not an IOC order.

658 *See supra* note 644 on the execution practices of one broker who specializes in fractional shares.

10	14%	16%	25%
20	11%	16%	25%
40	10%	15%	23%

This table displays the source of off-exchange trade-throughs identified in Table 5. Trades are assigned to one of three categories using data from CAT. Candidate trades are matched to CAT trade records by date, stock, timestamp, price, and shares. 60% of trades match exactly on all fields. A further 28% of trades are matched by adjusting the quantity field in CAT to reflect the way in which fractional shares are reported by the SIP during the sample—in particular, quantities less than one are rounded up to one, while quantities over one are rounded down to the nearest integer. A final 12% of candidate trades are matched by allowing for a timestamp difference of less than 1 millisecond. The final match rate is 99.6%. Trades are assigned to category "ATS" if the matched CAT trades were reported to CAT with a market participant identifier ("MPID") identified in CAT as an ATS. Trades are assigned to category "Retail-wholesaler" if the matched CAT trades 1) were reported to CAT with an MPID that a wholesaler typically uses to execute orders from retail brokers, 2) do not involve an order marked with a time in force of immediate or cancel, and 3) include at least one side that originated from an "Individual" account type order. The remaining trades are assigned to category "Other". For further information about CAT fields see https://www.catnmsplan.com/specifications. Seven broker-dealers were identified as wholesalers based on a review of retail broker Rule 606(a) reports from Q4 2025. Wholesalers were identified as the broker-dealers to which retail brokers routed the majority of their market and marketable limit orders. Based on these wholesalers, CAT data was used to select the wholesaler MPIDs where most orders originating from "Individual" account types executed.

Panel A shows the fraction of trade-throughs that occur on each venue; the fractions sum to 100% for each row. Panel B shows the fraction of candidate trades that are trade-throughs by venue and trade size.

ii. Round-Lot Change Trade-Through Analysis

The analysis in the previous section showed that odd-lot quotes inside the NBBO are traded-through more frequently than round-lot quotes. One possible explanation is that round lots are larger, and therefore the incentives to avoid trade-throughs are stronger—as trade size increases, the benefit of obtaining the best price per share rises. In other words, the earlier results might not be driven by the protected status of a round lot. To address this concern, the analysis in this section holds trade size constant and explores changes in trade-through rates around a change in the round-lot definition.

As discussed above, the MDI Rules introduced a four-tiered definition of round lot that is tied to a stock's average closing price.[659] The MDI round-lot rules were implemented on November 3, 2025 and stocks with an average closing price greater than $250 during October 2025 had their round-lot size reduced. This round-lot size change provides a way to study the effects of Rule 611 because these stocks changed from having a protected quote size of 100 shares to a protected quote size of 40 shares or fewer. The effects of trade-through protection can potentially be estimated by comparing the change in trade-through rates between an unprotected odd-lot quote before the round-lot change (October 2025) with the trade-through rate of a similarly sized protected quote after the change (November and December 2025). A limitation of this approach is that both the NBBO and the quotes shown in the SIPs changed for stocks that experienced a round-lot size change, because the NBBO and each exchange's BBO were now based on a 40-share quote size. As a result, it is not possible to disentangle the effects of a change in trade-through protection from the effects of a change in the NBBO benchmark and the broader dissemination of smaller quotes in the SIP. [660] Accordingly, the findings should be interpreted with caution, as multiple factors may influence the observed changes in trade-through rates.

This analysis starts by constructing a sample of stock-days that have a round lot of 100 shares in October. Some of these stock-days maintain a 100-share round lot throughout the quarter, while those with an average closing price above $250 in September switch to a 40-share round lot starting in November. Summary statistics for this sample are presented in Table 8. The primary difference from the sample in the previous section is that this sample includes higher-priced stocks once they switch to a 40-share round lot, whereas the previous sample only includes stock-days with a 100-share round lot. This difference can be seen by comparing Table

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659 *See supra* section VI.C.1.d.i.

660 Prior to the change in round-lot size, the NBBO and exchange BBO for stocks in the sample were based on a 100-share standard. Information on quote sizes of 99 shares or less were accessible exclusively through exchange proprietary feeds.

4 with Table 8—the latter sample has a higher VWAP, higher dollar volume, and slightly less depth at the best displayed price.

Table 8: Sample summary statistics for analysis of trade-throughs before and after the round-lot change

Variable	Stock-days	Mean	P5	P25	P50	P75	P95
VWAP	54,354	$221	$104	$127	$169	$256	$525
Number of trades	54,354	30,219	104	4,510	13,370	30,105	96,833
Dollar-volume (millions)	54,354	$305.5	$0.6	$19.1	$76.4	$223.4	$987.1
Market Cap. (millions)	54,351	$68,165	$221	$3,212	$11,203	$38,016	$214,562
NBBO TWAQS	54,354	$0.660	$0.058	$0.161	$0.337	$0.767	$2.296
BDP TWAQS	54,354	$0.356	$0.043	$0.109	$0.213	$0.414	$1.093
BDP TW depth at bid	54,354	141	25	47	78	141	475
BDP TW depth at offer	54,354	155	24	45	76	143	558
Effective spread	54,354	$0.233	$0.024	$0.063	$0.122	$0.246	$0.745
Effective spread (%)	54,354	0.110%	0.015%	0.037%	0.065%	0.121%	0.317%

This table displays summary statistics for the sample constructed for the analysis of trade-throughs. The sample starts with all stock-days in the TAQ Masterfile for the fourth quarter of 2025. The following filters are then applied: to narrow the focus on odd-lots, stock-days with a volume-weighted average price ("VWAP") under $100 are dropped; stock-days are dropped if they have a round lot less than 40 shares; to allow for room inside the NBBO, stock-days are dropped if they a time-weighted average NBBO quoted spread ("NBBO TWAQS") less than $0.04 over the month of October; December 16th is dropped due to a data quality issue with an exchange proprietary feed; 34 stock-days with a negative "BDP TWAQS" are dropped due to a likely data error; finally, stock-days without any trades are dropped.

Trade data is from the SIP and includes regular-way trades (i.e., a sale condition of "Regular Trade," "Intermarket Sweep Order", or "Odd Lot Trade"). The market capitalization is calculated by multiplying the shares outstanding from the TAQ Masterfile by the VWAP. The "NBBO TWAQS" is the time-weighted average quoted spread during market hours using the SIP round-lot quotes. The "BDP TWAQS" is the time-weighted average quoted spread during market hours using the best-priced bid and ask regardless of quote size; this is constructed using 16 exchange proprietary feeds. The time-weighted average depth at the best priced bid ("BDP TW depth at bid") is measured in shares and, in the case where multiple venues quote at the best price, the maximum quote size is taken; the depth at the best priced offer is measured analogously. The effective spread is a measure of trading cost and is computed as twice the absolute difference between the trade price and the NBBO midpoint at the time of the trade; at the stock-day level, the effective spread is equally weighted across regular trades. The effective spread is measured both in dollars and as a percent of the NBBO midpoint.

For each variable, the following statistics are shown: the number of stock-days in the sample with non-missing values, the mean, and the 5th, 25th, 50th, 75th, and 95th percentiles.

Using the same methodology as the odd-lot quote trade-through analysis described above,[661] the Commission compared the trade-through rates for trade sizes of 1, 5, 10, 20, 40, and 100 shares around the MDI round-lot size implementation, and did so separately for stocks that maintained a 100 share round-lot size and those whose round-lot size was reduced from 100 to 40 shares.[662] As discussed above, for each trade size, the trade-through rates are calculated for "Candidate trades," which are trades that occurred when the best persistent quotes for the trade's size are inside the best persistent quotes for a 100-share order. This means that for stocks in this analysis, the best persistent quotes between 40 and 99 shares were unprotected before the MDI round-lot change but became protected after the round lot changed from 100 to 40. Therefore, for stocks that experience a reduction in the round lot, all of the best persistent quotes become protected after the MDI round-lot change for the 40-share category, while a portion of the best persistent quotes (those that are between 40 and 99 shares) become protected for the other trade-size categories.

The trade-through statistics are presented in Table 9. Panel A shows trades that are executed on an exchange, and Panel B shows trades that are executed off exchange. Trades are grouped together based on whether the stock maintained a 100-share round lot (indicated by a "Round-lot change" of "None") or switched from a 100-share to a 40-share round lot ("100 to 40"). Trades are further grouped by whether they occurred before the MDI round-lot change ("Pre") or after ("Post").

The "Candidate trades(%)" column is generally higher for stocks that switch round lots. This is consistent with these stocks being higher-priced and therefore more likely to have quotes better priced than the 100-share quote. In addition, the "Candidate trades(%)" increases in the post-period for stocks that switch round lots, reflecting a greater likelihood of quotes sized

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661 *See supra* section VI.C.1.c.i.

662 Based on how the round-lot size is determined, these stocks would have had an average closing price between $250 and $1,000 during October 2025.

between 40 and 99 shares being inside the 100-share quote after the reduction in the round-lot size. There is no comparable increase for stocks that maintained a 100-share round lot.

The next columns show trade-through rates. For stocks that maintained the 100-share round lot, there is little evidence that the trade-through rates changed from the pre- to the post-periods, for either on- or off-exchange trades. Similarly, there is little evidence that the notional value of the trade-throughs changed for these stocks.

For stocks that switched round lots, however, trade-through rates and the notional value of the trade-throughs declined across the board. The declines were smaller for trades that executed on exchange, indicating that market participants trading on exchange may already be aware of odd-lot-sized quotes and are likely to trade against them whether they are protected or not. In addition, the greater presence of small-sized quotes—as evidenced by the higher fraction of candidate trades—may make it easier to execute at the best-priced quotes on exchange. The decline in trade-through rates on exchange was largest for small trades: for one-share trades, the trade-through rate fell from 5.8% to 4.3% with the notional value of the trade-throughs falling from 0.10 basis points to 0.07; for 40-share trades, the trade-through rate fell from 1.6% to 0.5%, with the notional value declining from 0.02 to 0.01 basis points.

The patterns off exchange are similar but larger in magnitude. For one-share trades, the trade-through rate fell from 41.6% to 24.2%, with the notional value of trade-throughs falling from 1.04 to 0.51 basis points. For 10-share trades, the corresponding declines are from 17.2% to 7.6%, and 0.53 to 0.17 basis points, respectively. For larger trades, the trade-through rates converge toward those for on-exchange trades: for 40-share trades, the trade-through rate falls to 0.2% from 12.6%, while the notional value declines to under 0.01.[663] As discussed above, it is difficult to disentangle how much of these decreases reflect the introduction of trade-through

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663 The forty-share trade-through rates of 0.2% (off exchange) and 0.6% (on exchange) represent round-lot trade-through rates because this is the sample with the forty-share round lot. These estimates are close to the round-lot trade-through rates calculated in Table 5, and the round-lot trade-through rates calculated in the OAR Roundtable Analysis using a one-second lookback window—*see supra note* 121.

protections versus changes in the NBBO benchmark. Nevertheless, the results indicate that the variation in trade-through rates between protected and unprotected quotes is not driven solely by size.

Table 9: Trade-through rates before and after the round-lot change

Panel A: On-exchange trades

Round-lot change	Trade size	Candidate trades (%)		Trade-through (%)		Notional amount outside of best quote (basis points)	
		Pre	Post	Pre	Post	Pre	Post
None	1	41.7%	41.6%	5.1%	5.6%	0.15	0.17
None	5	34.9%	34.7%	3.2%	3.5%	0.06	0.08
None	10	29.0%	28.0%	2.8%	2.7%	0.06	0.06
None	20	20.9%	20.4%	2.2%	2.4%	0.05	0.05
None	40	9.7%	9.7%	1.5%	1.7%	0.03	0.04
None	100	n/a	n/a	0.2%	0.3%	0.01	0.01
100 to 40	1	57.3%	67.7%	5.8%	4.3%	0.10	0.07
100 to 40	5	48.1%	61.9%	3.8%	2.4%	0.05	0.03
100 to 40	10	39.8%	54.3%	3.5%	1.9%	0.04	0.02
100 to 40	20	29.0%	45.4%	2.7%	1.5%	0.04	0.02
100 to 40	40	15.0%	35.8%	1.6%	0.5%	0.02	0.01
100 to 40	100	n/a	n/a	0.4%	0.2%	0.01	0.01

Panel B: Off-exchange trades

Round-lot change	Trade size	Candidate trades (%)		Trade-through (%)		Notional amount outside of best quote (basis points)	
		Pre	Post	Pre	Post	Pre	Post
None	1	38.5%	38.8%	31.8%	31.0%	1.17	1.06
None	5	33.9%	33.8%	18.2%	20.5%	0.86	1.00
None	10	27.4%	27.7%	16.5%	15.6%	0.69	0.62
None	20	20.5%	20.1%	13.0%	13.1%	0.48	0.49
None	40	8.9%	8.6%	11.4%	11.2%	0.36	0.33
None	100	n/a	n/a	0.1%	0.1%	0.00	0.00
100 to 40	1	54.2%	60.6%	41.6%	24.2%	1.04	0.51
100 to 40	5	49.0%	57.9%	17.9%	10.3%	0.64	0.31
100 to 40	10	41.3%	51.6%	17.2%	7.6%	0.53	0.17
100 to 40	20	31.4%	44.8%	13.1%	3.9%	0.34	0.07
100 to 40	40	15.3%	31.8%	12.6%	0.2%	0.26	0.00
100 to 40	100	n/a	n/a	0.1%	0.1%	0.00	0.00

This table displays trade-through rates for the sample of stock-days described in Table 8. Panel A shows rates for trades that occur on an exchange, and Panel B shows rates for trades that occur off exchange. The “Round-lot change” column indicates whether the stock kept a 100-share round lot (‘None’) or switched to a 40-share round lot (‘100 to 40’). The “Trade size” column indicates the number of shares that transacted in the trade. Each statistic is calculated for the “Pre” and “Post” periods separately, where “Pre” includes October 2025 and “Post” includes November and December of 2025.

To calculate trade-throughs for a given stock-day, the following procedure is followed. First, the day is divided into 1.2 millisecond intervals with trades and quotes assigned to the interval by their participant timestamp, and with trades occurring between the 800th and 1000th microsecond of the interval. This procedure samples approximately one-sixth of all regular trades for the stock-day. Quotes come from the proprietary feeds of the sixteen exchanges that operated during the entirety of the fourth quarter of 2025. For a given trade size during the 1.2-millisecond interval, each venue's quotes are aggregated to determine the persistent quote that could have traded against a market order of the specified size. E.g., if the trade size is 1 share, then a venue's persistent quote is the worst displayed price at the top of the venue's book during the interval; if the trade size is 10 shares, then the persistent quote is the worst displayed quote with which a 10-share market order would have interacted. The best persistent bid is the highest persistent bid across the sixteen venues; the best persistent offer is the lowest persistent offer across the sixteen venues.

A "Candidate trade" is a trade that occurs when both the best persistent bid and offer quotes (for a given size) are not crossed and are strictly inside the best persistent bid and offer quotes for a 100-share trade. An odd-lot trade-through occurs if the candidate trade's execution price is below the best persistent bid or above the best persistent offer. The concept of a "Candidate trade" does not apply to 100-share trades, so these trades are classified as a trade-through if the execution price is below the best persistent 100-share bid or above the best persistent 100-share offer. When a trade-through occurs, the difference between the execution price and the best quote is multiplied by the size of the trade to determine the notional amount outside of the best quote.

The results of the above procedure are collected for 584,318 stock-day-size-location tetrads. Of these tetrads, 40 are dropped because, when there is a trade-through in the tetrad, the average distance from the best quote is larger than ten times the stock-day's NBBO TWAQS and are therefore likely a data error. The remaining tetrads are aggregated by the size-location pairs shown in the table. For each row of the table: "Candidate trades (%)" is the fraction of regular way trades that are classified as a "Candidate trade"; "Trade-through (%)" is the number of trade-throughs divided by the number of candidate trades; "Notional amount outside of best quote" is the difference between the execution price and the best quote for trade-throughs, multiplied by the number of shares in the trade-through and divided by the notional value of the candidate trades.

2. Rescinding Rule 610(e)

a. Benefits

The Commission expects repealing the prohibition on locked and crossed markets to result in lower operating costs for exchanges and, relatedly, reduced complexity. Additionally, for a limited number of stocks, the Commission estimates modestly lower spreads.

Rescinding rule 610(e) is likely to result in exchanges removing their rules prohibiting locks or crosses, thereby reducing operating costs. While removing the prohibition on locked and crossed markets does not require exchanges to modify their rules to permit locked or crossed markets, it is likely that they will do so. This is because maintaining the prohibition requires exchanges to operate and maintain systems designed to prevent locked and crossed markets,

which entails ongoing compliance costs associated with monitoring markets for, and responding to, locked or crossed market conditions. Absent a mandate, exchanges are likely to seek to reduce these compliance costs.[664] Removing these rules, and the associated monitoring and enforcement programs, would therefore reduce exchanges' operating costs.

Allowing locked and crossed markets could reduce complexity by eliminating the need for specific order types designed to manage locked and crossed markets. The prohibition on locked and crossed markets has resulted in specialized order types, such as "price-to-comply" and other re-pricing orders, which adjust automatically to avoid locking or crossing the NBBO.[665] Without a prohibition on locked or crossed markets, such orders may no longer be necessary and thus could be expected to disappear, leading to a reduction in the number of order types used. Having fewer order types reduces market complexity and should lower the cost that broker-dealers face when managing orders, as their routing logic would no longer need to avoid locking or crossing markets.

The impacts on compliance costs for both exchanges and broker-dealers are likely to be similar to those associated with the rescission of Rule 611.[666] Both rules require market participants to have systems in place to monitor market conditions and then to use or maintain specialized order types to avoid violating Rule 610(e) or Rule 611. Thus, rescinding both rules is expected to result in similar market savings. Accordingly, rescinding Rule 610(e) is expected to generate annual savings to exchanges of $619,000 associated with reduced compliance costs.[667]

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664 *See* Cboe December 2025 Letter, at 6 calling for the elimination of the prohibition on locked and crossed markets.

665 *See, e.g.*, FIA PTG Paper at 4.

666 *See infra* section VI.C.3.a.

667 The Commission estimates that rescission of Rule 610(e) would eliminate 20 exchanges x 60 hours annually = 1,200 annual burden hours that would be associated with complying with Rule 610(e). The total estimated monetized annual hour burden is 20 exchanges x $30,996 = $619,320. *See infra* note 577-578 and surrounding discussion (discussing how the cost per exchange is estimated).

Further, rescinding Rule 610(e) is expected to result in reduced compliance costs for broker-dealers that run SORs, producing annual savings of $2.8 million.[668]

This benefit would be moderated by the fact that, if exchanges modify their rules to allow locked and crossed markets, both exchanges and broker-dealers would face one-time costs associated with adjusting their logic to adapt to the new environment. These costs are likely to be relatively minor. For exchanges, this is because the modifications largely consist of removing existing restrictions and ensuring that the trading environment remains stable. Broker-dealers are also accustomed to frequent modifications of their logic, as exchanges frequently change access fees and rebates, which can affect how broker-dealers route orders.[669] Further, the changes to broker-dealer systems would also largely consist of removing logic designed to prevent orders from locking or crossing markets. However, once these adjustments are completed, the benefits described above would be realized.

By removing exchange rules that prohibit locked and crossed markets, the specialized order types used to prevent such outcomes would no longer be necessary and would likely be eliminated. Reducing the set of order types available to broker-dealers when submitting orders would lower complexity in the trading environment and reduce the costs associated with designing, maintaining, and updating order routing systems.

A reduction in complexity could also have the benefit of reducing the trading disadvantage of less sophisticated liquidity providers. This could help level the playing field between less and more sophisticated liquidity providers. Less sophisticated liquidity providers face adverse selection costs when interacting with more sophisticated liquidity providers who may be able to act more quickly due to superior information-processing capacity and reaction times. Because of this, less sophisticated liquidity providers are at risk of having stale quotes adversely selected before they can cancel and update those quotes, which leads to trading losses

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668 *See infra* note 582 and surrounding discussion.

669 *See* 2024 Regulation NMS Amendments at section VII.C.2.

and thereby increases the cost of liquidity provision. If market complexity is reduced, the disadvantage that less sophisticated liquidity providers face could diminish somewhat, which could lower the cost of providing liquidity and induce more liquidity provision.

Another benefit of removing the prohibition on locked markets would be potentially narrower spreads. Allowing markets to lock would narrow spreads and could allow some investors to execute at prices that are more advantageous than those available currently. Economically, the spread compensates liquidity suppliers for several costs: adverse selection costs (liquidity demanders may have information unknown to liquidity suppliers), inventory-holding costs (the market maker acquires a position in a stock that may then change in value), and order-processing costs.[670] While this required compensation is greater than zero, a quoted spread of zero may be a sustainable equilibrium in the presence of rebates. In a maker-taker rebate system, a locked market does not imply that there is no compensation for liquidity providers: on a maker-taker exchange, liquidity providers receive a rebate generally around 30 mils, or $0.003 per share.[671] This rebate is funded by an exchange transaction fee charged to the liquidity demander that is also around $0.003.[672] Thus, even if displayed spreads are zero, the economic spread-the actual cost paid by liquidity demanders to access liquidity-will be the access-fee cap, or approximately $0.003. In market settings where the cost of liquidity provision is below $0.003, a displayed spread of $0.00 could therefore be maintainable as an economic equilibrium.

The reduction in transaction costs due to allowing locked markets could be significant for some stocks. In the presence of a prohibition on locked or crossed markets, the minimum displayed spread equals the minimum pricing increment, or $0.01 for stocks priced greater than

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670 *See,* e.g., Roger D. Huang and Hans R. Stoll, *The Components of the Bid-Ask Spread: A General Approach*, 10 REV. FIN. STUD. 995 (Winter 1997).

671 *See* analysis in 2024 Regulation NMS Amendments.

672 For protected quotations priced $1.00 or more, the access fee cap will be lowered to 10 mils, or $0.001 per share in November, 2026 pursuant to the recently adopted amendments to the tick size and access fee cap adopted by the Commission in 2024. *See supra* note 76. Thus, should the proposed rule be adopted and implemented after that date, the following analysis can simply use $0.001 in place of $0.003.

$1.00.[673] In this case, the actual cost of taking liquidity is half the spread ($0.005) plus the access fee (normally around $0.003), for a total of approximately $0.008 ($0.005+$0.003). Consequently, for some stocks, removing the prohibition on locked or crossed markets could reduce the economic spread by more than 50%, from $0.008 to $0.003. However, the Commission is unable to estimate how many stocks this would apply to, as there is no reliable way to determine how many stocks could justify an economic spread at this level.[674] The Commission seeks comment on this issue.

The reduction in transaction costs from allowing locked markets is likely to interact with the 2024 Regulation NMS amendments in two ways. First, the amendments to Rule 612 will, once implemented, allow some stocks to trade with a reduced minimum pricing increment of $0.005. By creating a finer grid of allowable price points, these amendments will increase the opportunities for markets to lock and thereby further reduce transaction costs.[675] Second, the amendments to Rule 610(c) will, once implemented, reduce the access fee cap from $0.003 to $0.001. This reduction in the fee cap will reduce the rebates that exchanges can pay for liquidity provision in the maker-taker system. With smaller rebates, it will become less likely that the rebate alone will provide sufficient compensation to liquidity suppliers, reducing the likelihood that a quoted spread of zero can be maintained.[676] Hence, the implementation of the amendments to Rule 610(c) is expected to reduce the benefits of allowing locked markets.

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673 For stocks priced below $1.00, the minimum pricing increment is $0.0001. Additionally, in November 2026 the minimum pricing increment for stocks priced greater than $1.00 and that have narrow prevailing quoted spreads will reduce from $0.01 to $0.005.

674 *See* analysis in the 2024 Regulation NMS Amendments.

675 For example, suppose, in the absence of rebates, a market maker is willing to purchase a stock at $10.003 and sell the stock at $10.007. With a rebate of $0.003, the market maker is willing to post a buy order up to $10.006 and a sell order as low as $10.004—i.e., the market maker is willing to offer more aggressive quotes because some of the required compensation comes in the form of a rebate. With a tick size of $0.01, the posted buy price will be $10.00 (the highest allowable price below $10.006) and the posted sell price will be $10.01 (lowest allowable price above $10.004). However, with a tick size of $0.005, the market maker is willing to lock the market by posting both a buy and a sell order at $10.005, thereby reducing transaction costs.

676 Consider the example in *id.* If the rebate is reduced to $0.001, then the market maker is only willing to post a buy order up to $10.004 and a sell order as low as $10.006, resulting in posted prices of $10.00 and $10.01 rather than a locked market at $10.005.

b. Costs

Removing the prohibition on locked and crossed markets is also expected to be associated with certain costs. One potential cost is investor confusion. In particular, crossed markets may create uncertainty regarding the true state of the order book, which could lead to inefficient trading decisions. This risk would likely be higher for less sophisticated investors who do not have access to data from all of the exchanges and therefore cannot view the entire order book across venues. Access to full-depth of book data would mitigate this risk by enabling investors to determine whether the lock or cross reflects market movements or another cause. Investors without such data would be less able to make this assessment and thus could be confused about the state of the order book. This cost will likely diminish over time as market participants adjust to the new trading environment and adapt their behaviors accordingly.

Additionally, as mentioned above, if the exchanges choose to allow locked and crossed markets, then they will face one-time costs associated with modifying their trading rules and the logic in their trading systems. Broker-dealers will then face related costs to modify their order routing logic to adapt to the new environment. These costs, along with the combined implementation costs of rescinding Rule 611, are discussed below in section VI.C.3.b.

Another potential cost associated with rescinding Rule 610(e) is the reduced reliability of Rule 605 statistics that reference the NBBO. This effect is expected to be minor. While locked markets do not pose significant conceptual challenges for computing most Rule 605 statistics, crossed markets are expected to be rare, and market participants are already familiar with following guidance on how to handle such conditions.[677] The primary exception is the effective over quoted ratio: in cases where quoted spreads fall to zero when locked markets are allowed, the ratio cannot be computed because its denominator cannot be zero. However, other Rule 605 statistics would still provide meaningful information to investors, and therefore the overall market impact of this limitation is expected to be minor.

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677 *See supra* note 235.

c. Empirical Analysis

This section presents the Commission's empirical analysis of the prevalence and economic determinants of locked and crossed markets. A primary challenge in empirically evaluating the effect of the amendments is that Rule 610(e) requires exchanges and national securities associations to enforce rules to prevent displayed quotations from locking or crossing protected quotations. This prohibition on locked and crossed markets causes observed locks and crosses to be less frequent than they would otherwise be if determined by market forces alone. Further, the locked and crossed markets that violate Rule 610(e)—e.g., by mistake—are likely to be systematically different than a quote that intentionally locks or crosses the market. An empirical analysis therefore requires a setting where locked and crossed quotes are permissible; behavior in this setting can then serve as a counterfactual for broader market behavior should Rule 610(e) be rescinded.

The Commission therefore focuses on odd-lot quotes for high-priced stocks. This setting is a useful laboratory for multiple reasons. First, Rule 610(e) only applies to protected (*i.e.,* round-lot) quotes; odd-lot quotes are not protected, and the rule does not prohibit them from locking or crossing. Second, odd-lot quotes represent substantial notional liquidity for high-priced stocks and can therefore emulate the liquidity provision of round lots for less expensive stocks.[678] Third, odd-lot quotes occur during the core trading session under the same market conditions as round-lot quotes, providing a relatively clean test of market behavior in the absence of Rule 610(e).

The results of the Commission's analysis are summarized here. The analysis finds that the typical stock-day in our sample of high-priced stocks spends almost no time with locked or crossed odd-lot quotes. On average, a stock-day in our sample spends 0.3% of the trading day locked, and 0.3% crossed. This indicates that locked and crossed markets will generally remain rare in the event that Rule 610(e) is rescinded. However, locked markets are substantially more

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678 *See supra* note 618.

prevalent among stocks with tighter spreads: stock-days with a BDP TWAQS of $0.015 or less spend, on average, 3.8% of the day locked, which rises to 10.8% at the 90th percentile of the distribution.[679] This indicates that there is demand to lock the market when spreads are narrow, which is expected to lead to a reduction in transaction costs in the event that Rule 610(e) is rescinded.[680]

The Commission acknowledges, however, that these results come from a subset of high-priced stocks. The behavior of these stocks may vary systematically from the behavior of lower-priced stocks. Accordingly, the estimated frequency and duration of locked and crossed markets should be interpreted with caution, as they may differ for round lots if Rule 610(e) is rescinded. Nevertheless, the Commission believes that this setting provides an economically meaningful environment to study patterns of market behavior in the absence of the prohibition on locked and crossed markets.

A detailed discussion of the methodology and results of the Commission's analysis is set forth below.

The analysis starts by constructing a sample of stock-days with high share prices. The sample construction has the following steps. First, all stock-days for the fourth quarter of 2025 are collected from the TAQ Masterfile.[681] Second, stock-days are dropped from the sample if

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679 The BDP TWAQS is the time-weighted average quoted spread using the best-priced bid and ask regardless of quote size. *See* notes to Table 4.

680 One explanation is that locked quotes are not economically locked due to fees and rebates. With an access fee of 30 mils, a locked quote implies that the cost of taking liquidity instead of making liquidity is $0.006. One commenter stated: "with current . . . access fees and pricing, the market would be locked . . . certainly much more often than having it prohibited because economically it's not a locked market." *See* First TTR Roundtable Transcript at 146 (Adam Nunes, Hudson River Trading).

681 The data in this analysis precede the implementation of the 2024 Regulation NMS amendments. Once implemented, stocks that generally maintain an NBBO TWAQS less than $0.015 will trade with a reduced minimum pricing increment; this will increase the number of price points at which market participants can place a quote, which may increase the opportunities for markets to lock or cross in these tick-constrained stocks. Additionally, once implemented, the 2024 Regulation NMS amendments will reduce the access fee cap for all stocks; because access fees are generally used to fund rebates, the resulting reduction in rebates may put upward pressure on quoted spreads and thereby reduce the incidences of locked and crossed markets—*see supra notes* 675-676 for an example demonstrating this effect. The data in this analysis also precedes the dissemination of top-of-book odd-lot quotations by the SIPs, which was implemented on Monday, April 27, 2026. Market participants may be less likely to post quotes that lock or cross resting odd-lot quotes once it is easier and cheaper to see the top-of-book odd-lot quotations; to the extent that

their VWAP is less than $100 or they do not have a trade. Third, to avoid data errors in an exchange proprietary feed, December 16th is dropped, as are 38 stock-days that have a negative BDP TWAQS. Finally, slightly under half of stock-days for the SPY and QQQ symbols are dropped to alleviate data processing constraints. The result is a sample of 62,992 stock-days. The sample is larger and more active than the sample constructed in section VI.C.1.c. because that section focused on stock-days with a round lot of 100 and relatively wide spreads.

Summary statistics are presented in Table 10. The sample captures a wide range of trading activity—stock-days at the 5th percentile have fewer than 100 trades, while the 95th percentile has over 115,000 trades. Likewise, dollar volume ranges from $0.4 million to $1.2735 billion; overall, the sample covers more than $26 trillion in notional volume over the quarter.[682]

Turning toward quoted spreads, the sample includes stock-days that are relatively tick-constrained with an NBBO TWAQS of $0.014 at the 5th percentile, and also includes stock-days that are far from being tick-constrained with a NBBO TWAQS over $2 at the 95th percentile. Importantly, the distribution of the BDP TWAQS lies below the distribution of the NBBO TWAQS. That is, at each percentile, the BDP TWAQS is lower than the NBBO TWAQS, indicating that there are often odd-lots inside the NBBO and thus an opportunity to lock and cross the market without violating Rule 610(e).

The final two rows of the table show summary statistics for the fraction of the trading day that the stock-day spends locked or crossed.[683] When determining whether the market is locked or crossed, the analysis uses the best displayed prices of any size—quotes could be for an odd-lot

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most orders are posted by market participants who see odd-lot quotations in the proprietary feeds, the dissemination of odd-lot quotations by the SIPs is unlikely to have a large impact on the results of this analysis.

682 The total notional is computed by multiplying the average notional by the number of stock-days in the sample: $419.5 million * 62,992.

683 To avoid including limit-on-open orders, this analysis uses quotes that are in effect starting at 9:45 am each day. As part of the opening cross, limit-on-open orders cross each other but are not executed until the end of the opening process; this process may extend past 9:30 am, which can give the appearance of a crossed market in the proprietary feeds. When calculating the fraction of the day that is locked or crossed, the denominator of the fraction is the amount of time from 9:45 am to market close.

or a round-lot order. The table shows that stocks in the sample spend almost no time locked or crossed: the median stock-day spends 0.0% of the day locked or crossed, and the average is 0.3%. Only at the 95th percentile of the sample do stock-days spend a non-trivial amount of the day locked or crossed—at this percentile, the fraction of the day locked is 0.9% and the fraction crossed is 1.5%; 1% of the trading day amounts to approximately four minutes.[684]

Table 10: Summary statistics for analysis of locked and crossed quotes

Variable	Stock-days	Mean	P5	P25	P50	P75	P95
VWAP	62,992	$996	$102	$122	$165	$254	$594
Number of trades	62,992	36,282	68	3,784	13,032	31,210	115,875
Dollar-volume (millions)	62,992	$419.5	$0.4	$18.4	$79.1	$248.9	$1,273.5
Market Cap. (millions)	62,981	$80,067	$145	$3,047	$11,375	$40,954	$238,130
NBBO TWAQS	62,991	$1.422	$0.014	$0.118	$0.299	$0.728	$2.658
BDP TWAQS	62,992	$1.028	$0.011	$0.083	$0.190	$0.401	$1.299
Fraction of day with locked quotes	62,992	0.3%	0.0%	0.0%	0.0%	0.0%	0.9%
Fraction of day with crossed quotes	62,992	0.3%	0.0%	0.0%	0.0%	0.1%	1.5%

This table displays summary statistics for the sample constructed for the analysis of locked and crossed quotes. The sample starts with all stock-days in the TAQ Masterfile for the fourth quarter of 2025. The following filters are then applied: to narrow the focus on odd-lots, stock-days with a volume-weighted average price ("VWAP") under $100 are dropped; December 16th is dropped due to a data quality issue with an exchange proprietary feed; half of the SPY and QQQ stock-days are dropped due to data processing constraints; 38 stock-days with a negative "BDP TWAQS" are dropped due to a likely data error; finally, stock-days without any trades are dropped.

Trade data is from the SIP and includes regular-way trades (i.e., a sale condition of "Regular Trade," "Intermarket Sweep Order", or "Odd Lot Trade"). The market capitalization is calculated by multiplying the shares outstanding from the TAQ Masterfile by the VWAP. The "NBBO TWAQS" is the time-weighted average quoted spread during market hours using the SIP round-lot quotes. The "BDP TWAQS" is the time-weighted average quoted spread during market hours using the best displayed prices regardless of quote size; this is constructed using 16 exchange proprietary feeds. The fraction of the day with locked quotes is computed by dividing the time in which the best bid (of any size) is equal to the best offer by the length of the trading day; the fraction of the day with crossed quotes is computed analogously using the time in which the best bid is greater than the best offer.

For each variable, the following statistics are shown: the number of stock-days in the sample with non-missing values, the mean, and the 5th, 25th, 50th, 75th, and 95th percentiles.

684 The typical trading day is 6.5 hours long (9:30 am to 4 pm)—390 minutes—1% of which amounts to 4 minutes.

The primary determinant of a locked market is the spread. Panel A of Table 11 shows summary statistics for the fraction of the day spent locked, split by the stock-day's BDP TWAQS. The first row shows results for the 3,870 stock-days that are tick-constrained with a BDP TWAQS below $0.015—i.e., this sample spends the majority of the day with a quoted spread of a penny or less. On average, these stock-days spend 3.8% of the day locked. At the 90th percentile, the number rises to 10.8%—i.e., nearly 400 stock-days spend over 10% of the day locked. The second row shows results for the 2,821 stock-days with BDP TWAQS between $0.015 and $0.03. These stock-days spend much less time locked—0.8% on average, and 1.6% at the 90th percentile. As spreads widen with each subsequent row, the amount of time spent locked falls. This suggests that, in the absence of Rule 610(e), the stocks that are most likely to lock will be those whose quoted spread is closest to one tick.

Panel B of Table 11 shows summary statistics for the fraction of the day spent crossed, split by the stock-day's BDP TWAQS. The pattern in Panel B contrasts with Panel A: stock-days with wider spreads spend more time crossed. Because stocks with tight spreads are generally more liquid than stocks with wide spreads, the results in Panels A and B suggest that crossed markets may be driven by illiquidity while locked markets are driven by liquidity. Illiquid stocks might be more likely to cross for multiple reasons.

First, uncrossing a market—by buying at the low asking price and selling at the higher bid price—is not entirely without risk. A trader attempting to uncross the market may transact on only one side while the other quote is canceled or executed by another market participant, leaving the trader with a position in an illiquid stock that is costly to unwind. If the gains to uncrossing the market are small, it may not be worth taking this risk.

Second, uncrossing odd-lot quotes may not be possible due to limit-up/limit-down (LULD) bands. If a stock is in a straddle state—i.e. one side of the NBBO is outside of the bands

while the other side is inside—odd-lot quotes that cross outside the bands may be impossible to uncross until the bands move.[685]

In the absence of Rule 610(e), round lots of illiquid stocks might therefore be more likely to cross, although the estimates in Panel B are likely overestimates because round-lot quotes (unlike odd-lot quotes) cannot cross outside the LULD bands.

Table 11: Time spent locked or crossed, by quoted spread

Panel A: Time spent with locked quotes

BDP TWAQS Bucket	Stock-days	Stocks per day	Mean	P50	P75	P90	P95	P99
Spread < $0.015	3,870	61	3.8%	1.5%	5.5%	10.8%	14.2%	20.5%
$0.015 < Spread < $0.03	2,821	45	0.8%	0.3%	0.8%	1.6%	3.1%	10.5%
$0.03 < Spread < $0.06	5,072	81	0.2%	0.1%	0.2%	0.4%	0.5%	1.6%
$0.06 < Spread < $0.12	10,317	164	0.1%	0.0%	0.1%	0.2%	0.3%	0.6%
$0.12 < Spread < $0.24	14,373	228	0.0%	0.0%	0.0%	0.1%	0.2%	0.5%
$0.24 < Spread	26,539	421	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%

Panel B: Time spent with crossed quotes

BDP TWAQS Bucket	Stock-days	Stocks per day	Mean	P50	P75	P90	P95	P99
Spread < $0.015	3,870	61	0.1%	0.0%	0.0%	0.0%	0.2%	1.9%
$0.015 < Spread < $0.03	2,821	45	0.3%	0.0%	0.1%	0.7%	1.2%	3.7%
$0.03 < Spread < $0.06	5,072	81	0.3%	0.0%	0.1%	0.6%	1.2%	4.6%
$0.06 < Spread < $0.12	10,317	164	0.4%	0.0%	0.2%	0.8%	1.7%	5.6%
$0.12 < Spread < $0.24	14,373	228	0.4%	0.0%	0.2%	0.9%	1.8%	5.6%
$0.24 < Spread	26,539	421	0.3%	0.0%	0.0%	0.6%	1.4%	4.7%

This table displays distributional statistics of the fraction of the stock-day spent locked or crossed. The sample is defined in Table 10. The statistics are computed for subsamples based on the BDP TWAQS of the stock-day, ranging from a BDP TWAQS under $0.015 to over $0.24. For each subsample, the following statistics are shown: the number of stock-days in the subsample, the average number of stocks per day, the mean, 50th, 75th, 90th, 95th, and 99th percentiles of the duration variable. The duration variable in Panel A is the fraction of the stock-day spent with a locked quote, while Panel B shows the fraction of the stock-day spent with a crossed quote. To determine whether the quotes lock or cross, the best-priced bid and offer of any size are taken from each exchange to construct the best bid and offer prices across all exchanges; the market is locked if the best bid and offer are equal, and crossed if the best bid is greater than the best offer.

Table 12 further explores the composition of quotes that cause the market to be locked or crossed. To do so, the analysis focuses on the subsample of stock-days that are locked or crossed

685 Illiquid stocks can spend a long time in straddle states. During the fourth quarter of 2025, the average number of tier 2 non-ETPs with multiple straddle states during a day was 100. The average time spent in a straddle state for these stock-days was over an hour. See *Reports/Studies: Quarterly Monitoring Report*, LULD PLAN, https://www.luldplan.com/studies (last visited April 16, 2026).

for at least 1% of the trading day and have a round lot of 100 shares. Panel A shows results for stock-days that are locked for more than 1% of the day, split by the stock-day's BDP TWAQS; Panel B does likewise for stock-days that are crossed for more than 1% of the day. Columns two and three of the table show the number of stock-days in this subsample and the average fraction of the day spent locked or crossed.

The remaining three columns decompose the time spent locked or crossed into three mutually exclusive categories to reflect the three ways that a market might be locked or crossed: (1) an odd-lot quote may lock or cross another odd-lot quote (e.g., an odd-lot bid is higher than an odd-lot offer); (2) an odd-lot quote may lock or cross a round-lot quote (e.g., an odd-lot bid is higher than a round-lot offer); or (3) two round-lot quotes may lock or cross each other.

For example, the first row of Panel A shows that there are 2,137 stock-days with a BDP TWAQS less than $0.015 that spend at least 1% of the day locked and have a round lot of 100 shares. Of these stock-days, 6.7% of the day is spent locked. Further, of the time locked, 20.1% is attributable to two odd-lots; 72.2% to an odd-lot locking a round lot; and 7.7% to two round lots locking each other.

The analysis shows that the vast majority of locks and crosses involve odd-lot quotes. When spreads are narrow, most of the locks and crosses involve an odd-lot locking or crossing a round lot; when spreads are wider, most of the locks and crosses involve two odd-lot quotes. These results underscore the importance of using odd-lot quotes when studying the determinants of locked and crossed markets—if there is demand to lock or cross the market, it will be manifested through odd-lot quotes because of Rule 610(e). In the event of a rescission of Rule 610(e), this demand to lock or cross the market might extend to round lots, though the magnitude of the demand to lock or cross round lots may differ from what is observed with odd-lots.

Table 12: Composition of quotes that lock or cross the market for stock-days where at least 1% of the day is affected, and with a round lot of 100 shares

Panel A: Composition of locked markets

BDP TWAQS Bucket	Stock-days	Fraction of day locked	Odd-lot locks Two odd-lots	round lot	Two round lots
Spread < $0.015	2,137	6.7%	20.1%	72.2%	7.7%
$0.015 < Spread < $0.03	507	3.1%	52.0%	46.6%	1.5%
$0.03 < Spread < $0.06	88	2.1%	64.3%	35.1%	0.6%
$0.06 < Spread < $0.12	28	1.7%	59.6%	38.6%	1.8%
$0.12 < Spread < $0.24	28	1.8%	72.8%	27.2%	0.0%
$0.24 < Spread	27	1.9%	81.1%	18.9%	0.0%
Panel B: Composition of crossed markets					
BDP TWAQS Bucket	Stock-days	Fraction of day crossed	Odd-lot crosses Two odd-lots	round lot	Two round lots
Spread < $0.015	73	4.3%	22.3%	61.3%	16.4%
$0.015 < Spread < $0.03	172	3.1%	40.3%	48.4%	11.3%
$0.03 < Spread < $0.06	290	3.3%	44.8%	45.3%	9.9%
$0.06 < Spread < $0.12	729	3.2%	58.3%	36.8%	4.9%
$0.12 < Spread < $0.24	1,016	2.9%	65.6%	31.5%	3.0%
$0.24 < Spread	1,113	3.0%	74.2%	23.9%	1.9%

This table displays the composition of quotes that cause the market to lock or cross. The sample starts with the stock-days defined in Table 10 but only includes the subsample with a round lot of 100 shares and which spend at least 1% of the day locked (Panel A) or crossed (Panel B). Like Table 11, the statistics are tabulated by time-weighted BDP TWAQS category. For each category, the following statistics are reported: the number of stock-days in the sample, the average fraction of the trading day that is affected, and the type of quotes that cause the markets to lock or cross. A locked or crossed market could be caused by two odd-lots, one odd-lot and one round lot, or two round lots.

3. Combined Economic Effects

This section discusses the joint benefits and costs that result from the combined rescission of both Rule 611 and Rule 610(e). The Commission anticipates rescinding both rules will benefit market participants by reducing market complexity, which will result in ongoing cost savings for trading centers and broker-dealers that operate SORs. However, these firms will also experience one-time implementation costs to update their systems. Additionally, rescinding both Rule 611 and Rule 610(e) will increase exchange competition, which may reduce market data and connectivity costs for broker-dealers. However, it may also result in a loss of revenue for smaller exchanges and higher barriers to entry for new exchanges.

a. Reduced Market Complexity

Rescinding both Rule 611 and Rule 610(e) together could reduce market complexity.[686] Rescinding both rules would result in fewer mandatory linkages and routing constraints between trading venues and also could result in a reduction of order types, such as the elimination of the ISO order type as well price-to-comply and other re-pricing order types.[687] This could result in the simplification of algorithmic routing and trading strategies, reductions in operational risk (*e.g.,* broker-dealers will no longer need to deal with the risk of an execution trading through a protected quote or submitting a quote that locks or crosses the NBBO), and also a simplification of post-trade analytics because there would be no need to also monitor for trade-through compliance. Rescinding Rule 611 would also allow market participants to simplify their routing strategies by avoiding trading on venues that may have features that complicate their order routing and execution, such as speed bumps.

Rescinding Rule 611 and Rule 610(e) may reduce market complexity by removing rules that allow for trading strategies that lead to the "gaming" of displayed protected quotes, such as posting flickering orders as protected quotes designed to attract the routing of marketable orders or posting orders that are designed to establish queue priority in a locked market.[688] This would improve the ability of market participants to avoid interacting with the orders of HFTs and other market participants that engage in these strategies (i.e., market participants could avoid routing orders to a venue when they think an HFT quote is at the best price and is likely to cancel/reprice before their order arrives at the venue), which may reduce their transactions costs and also the

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686 *See supra* sections II.C.2.a. and VI.B.2.d. for further discussions on how Rule 611 contributes to increased market complexity. *See also supra* section III.B.3. and VI.B.3. for further discussions on how Rule 610(e) contributes to increased market complexity.

687 *See supra* sections VI.C.2.d. and VI.C.3. (discussing how Rule 611 and Rule 610(e) increase market complexity) and *supra* sections VI.B.1.a and VI.B.1.b (discussing order types related to Rule 611 and Rule 610(e)). *See also supra* sections II.B.2. and III.B.3 (for commenter discussions on how Rules 611 and 610(e) have contributed to an increase in the number of order types).

688 *See, e.g.*, Sida Li et al., *Financial Regulation, Clientele Segmentation, and Stock Exchange Order Types* (NBER Working Paper No. 28515, Feb. 2021), *available at* https://ssrn.com/abstract=3795035 (retrieved from SSRN Elsevier database) (discussing the uses of different exchange order types to comply with Rule 611 and Rule 610).

profits HFTs earn from these strategies.[689] This, in turn, may reduce the incentives for HFTs and other market participants to engage in these types of trading strategies, which would reduce market complexity.

Rescinding the rules should result in trading centers and broker-dealers that run SORs experiencing cost savings related to regularly maintaining and updating their execution and smart order routing systems.[690] For example, the reduction in market complexity may reduce the time it would take staff to make changes to their systems and program in logic for a new order type that an exchange or ATS offers, because they would no longer need to account for additional logic related to trading through or locking or crossing protected quotes.

To estimate the annual savings for trading centers and broker-dealers operating SORs, the Commission assumes that rescinding Rule 611 and Rule 610(e) would reduce the time it takes to update trade execution systems and SORs by 5% to 10%.[691] Larger broker-dealers that connect to more exchanges are likely to have more complicated SOR systems that are more costly to maintain and update. We estimate that rescinding Rule 611 and Rule 610(e) would save each of the 20 exchanges between $319,000 and $637,000 annually;[692] each of the 33 ATSs between $159,000 and $319,000 annually;[693] each of the 23 largest broker-dealers with SORs that connect

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689 This would represent a transfer from the HFTs and other market participants who currently engage in these strategies to the market participants that interact with these HFT orders.

690 *See, e.g.*, Robinhood Letter at 5 (stating that the resulting complexity from Rule 611 imposes increased costs on market participants).

691 The Commission acknowledges uncertainty about how much time rescinding Rule 611 and Rule 610(e) will save trading centers and broker-dealers operating SROs in updating their systems and has requested comment on these estimates.

692 The Commission estimates that each exchange employs the equivalent of 3 full-time Financial Analysts and 4 full-time Software Developers to maintain its order execution and routing systems. The Commission's lower bound on the estimated annual savings for each exchange is ($405 for a financial analyst x 312 hours) + ($462 for a software developer x 416 hours) = $318,552. The Commission's upper bound on the estimated annual savings for each exchange is ($405 for a financial analyst x 624 hours) + ($462 for a software developer x 832 hours) = $637,104.

693 The Commission estimates that each ATS employs the equivalent of 1.5 full-time Financial Analysts and 2 full-time Software Developers to maintain its order execution system. The Commission's lower bound on the estimated annual savings for each ATS is ($405 for a financial analyst x 156 hours) + ($462 for a software developer x 208 hours) = $159,276. The Commission's upper bound on the estimated annual savings for each ATS is ($405 for a financial analyst x 312 hours) + ($462 for a software developer x 416 hours) = $318,552.

to 16 or more exchanges between $159,000 and $319,000 annually;[694] each of the 21 broker-dealers with SORs that connect to 11 to 15 exchanges between $54,000 and $109,000 annually;[695] each of the 169 broker-dealers with SORs that connect to 1 to 10 exchanges between $16,000 and $32,000 annually;[696] and each of the 225 OTC market makers between $16,000 and $32,000 annually.[697] We estimate that the total aggregate annual cost savings will be between $22.8 million and $45.6 million.[698]

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694 The Commission estimates that each larger broker-dealer with a SOR that connects to 16 exchanges employs the equivalent of 1.5 full-time Financial Analysts and 2 full-time Software Developers to maintain its SOR. The Commission's lower bound on the estimated annual savings for each of these broker-dealers is ($405 for a financial analyst x 156 hours) + ($462 for a software developer x 208 hours) = $159,276. The Commission's upper bound on the estimated annual savings for each of these broker-dealers is ($405 for a financial analyst x 312 hours) + ($462 for a software developer x 416 hours) = $318,552. If a broker-dealer operates both a SOR and an ATS, then it would save the cumulative amount of both its ATS and SOR savings. The cost savings for broker-dealers that also operate as exchange market makers is included in their SOR cost savings because the Commission believes these broker-dealers use the same systems for both functions. *See* Table 1 in *supra* section VI.B.4.e for estimates of how many exchanges broker-dealers connect to. *See also supra* note 578 for estimates of how many broker-dealers are exchange market makers.

695 The Commission estimates that each broker-dealer with a SOR that connects to 11 to 15 exchanges employs the equivalent of 0.5 full-time Financial Analysts and 0.7 full-time Software Developers to maintain its SOR. The Commission's lower bound on the estimated annual savings for each of these broker-dealers is ($405 for a financial analyst x 52 hours) + ($462 for a software developer x 72 hours) = $54,324. The Commission's upper bound on the estimated annual savings for each of these broker-dealers is ($405 for a financial analyst x 104 hours) + ($462 for a software developer x 144 hours) = $108,648.

696 The Commission estimates that each broker-dealer with a SOR that connects to 1 to 10 exchanges employs the equivalent of 0.15 full-time Financial Analysts and 0.2 full-time Software Developers to maintain its SOR. The Commission's lower bound on the estimated annual savings for each of these broker-dealers is ($405 for a financial analyst x 16 hours) + ($462 for a software developer x 21 hours) = $16,182. The Commission's upper bound on the estimated annual savings for each of these broker-dealers is ($405 for a financial analyst x 32 hours) + ($462 for a software developer x 42 hours) = $32,364.

697 The Commission estimates that there are 225 broker-dealers that operate as OTC market-makers. *See supra* note 578. The Commission estimates that each of these OTC market-makers employs the equivalent of 0.15 full-time Financial Analysts and 0.2 full-time Software Developers to maintain its execution systems. The Commission's lower bound on the estimated annual savings for each of these OTC market makers is ($405 for a financial analyst x 16 hours) + ($462 for a software developer x 21 hours) = $16,182. The Commission's upper bound on the estimated annual savings for each of these OTC market makers is ($405 for a financial analyst x 32 hours) + ($462 for a software developer x 42 hours) = $32,364. There will be overlap between the broker-dealers that operate a SOR and the broker-dealers that are OTC market makers. For these broker-dealers, the Commission believes that the costs savings from operating their SOR and their cost savings from operating as an OTC market maker will be additive (i.e., they will save on both costs).

698 The Commission's lower bound on the total estimated annual savings is (20 exchanges x $318,552) + (33 ATSs x $159,276) + (23 broker-dealers connect to 16 or more exchanges x $159,276) + (21 broker-dealers connect to 11 to 15 exchanges x $54,324) + (169 broker-dealers connect to 1 to 10 exchanges x $16,182) + (225 OTC market makers x $16,182) = $22.81 million. The Commission's upper bound on the total estimated annual savings is (20 exchanges x $637,104) + (33 ATSs x $318,552) + (23 broker-dealers connect to 16 or more exchanges x $318,552) + (21 broker-dealers connect to 11 to 15 exchanges x $108,648) + (169 broker-dealers connect to 1 to 10 exchanges x $32,364) + (225 OTC market makers x $32,364) = $45.61 million.

b. Implementation Costs

We anticipate that rescinding Rule 611 and Rule 610(e) would impose one-time implementation costs on broker-dealers and trading centers to remove written policies and procedures designed to prevent trade-throughs and locked and crossed markets and to capture compliance with the exceptions to Rule 611. These compliance costs would include both costs related to legal personnel updating policies and procedures as well as software engineering and IT costs related to updating and configuring systems related to trade execution, order handling and surveillance. Order routing and trade execution logic would need to be redesigned to allow for trading through the NBBO; routing logic would need to be modified to remove ISO handling and other trade-through exception logic; exchange matching engines would need to be updated to allow for the display of orders that lock or cross the NBBO; SORs would need to be recalibrated; surveillance alerts that currently hinge on trade-through exceptions would need to be removed; and staff would need to be trained on new policies and procedures.

We estimate that each of 33 ATSs would incur one-time implementation costs of $195,000 to update their systems and policies and procedures for the rescission of Rule 611 and Rule 610(e).[699] Additionally, we estimate the one-time implementation costs for each of 23 largest broker-dealers with SORs that connect to 16 or more exchanges would be $195,000,[700]

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699 The Commission estimates that each ATS, on average, would need 430 hours to update their systems and policies and procedures for the rescission of Rule 611 and Rule 610(e): 24 hours of legal time, 36 hours of compliance time, 6 hours of review by a Chief Compliance Officer, 156 hours of work by a financial analyst, and 208 hours of work by a software developer. The estimated monetized one-time cost is as follows: ($744 for an attorney x 24 hours) + ($365 for a financial examiner (i.e., compliance) x 36 hours) + ($731 for a financial manager (i.e., Chief Compliance Officer) x 6 hours) + ($405 for a financial analyst x 156 hours) + ($462 for a software developer x 208 hours) = $194,658. *See supra* note 577 for details on how hourly rates are calculated.

700 The Commission estimates that each broker-dealer that operates a SOR that connects to 16 or more exchanges, on average, would need 430 hours to update its systems and policies and procedures for the rescission of Rule 611 and Rule 610(e): 24 hours of legal time, 36 hours of compliance time, 6 hours of review by a Chief Compliance Officer, 156 hours of work by a financial analyst, and 208 hours of work by a software developer. The estimated monetized one-time cost is as follows: ($744 for an attorney x 24 hours) + ($365 for a financial examiner (i.e., compliance) x 36 hours) + ($731 for a financial manager (i.e., Chief Compliance Officer) x 6 hours) + ($405 for a financial analyst x 156 hours) + ($462 for a software developer x 208 hours) = $194,658. *See* Table 1 in *supra* section VI.B.4.e for estimates of how many exchanges broker-dealers connect to. If a broker-dealer operates both a SOR and an ATS, then it would incur the cumulative implementation costs of both its ATS and SOR operations. The implementation costs for broker-dealers that operate a SOR and also operate as exchange market makers is already averaged into

each of the 21 broker-dealers with SORs that connect to 11 to 15 exchanges would be $90,000,[701] each of the 169 broker-dealers with SORs that connect to 1 to 10 exchanges would be $52,000,[702] and each of the 225 OTC market makers would be $52,000.[703] Furthermore, we estimate that the one-time implementation costs to each of 20 exchanges to update their systems and policies and procedures for the rescission of Rule 611 and Rule 610(e) would be $389,000.[704] Exchanges would incur higher costs because their systems might contain more complex logic for ensuring they do not display quotes that lock or cross the NBBO. Exchanges would also have to incur additional costs to update their rulebooks to account for the rescission

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the cost estimate because the Commission believes there would be significant overlap in updating their SOR and exchange market maker systems.

701 The Commission estimates that each broker-dealer that operates a SOR that connects to 11 to 15 exchanges, on average, would need 190 hours to update their systems and policies and procedures for the rescission of Rule 611 and Rule 610(e): 24 hours of legal time, 36 hours of compliance time, 6 hours of review by a Chief Compliance Officer, 52 hours of work by a financial analyst, and 72 hours of work by a software developer. The estimated monetized one-time cost is as follows: ($744 for an attorney x 24 hours) + ($365 for a financial examiner (i.e., compliance) x 36 hours) + ($731 for a financial manager (i.e., Chief Compliance Officer) x 6 hours) + ($405 for a financial analyst x 52 hours) + ($462 for a software developer x 72 hours) = $89,706.

702 The Commission estimates that each broker-dealer that operates a SOR that connects to 1 to 10 exchanges, on average, would need 103 hours to update its systems and policies and procedures for the rescission of Rule 611 and Rule 610(e): 24 hours of legal time, 36 hours of compliance time, 6 hours of review by a Chief Compliance Officer, 16 hours of work by a financial analyst, and 21 hours of work by a software developer. The estimated monetized one-time cost is as follows: ($744 for an attorney x 24 hours) + ($365 for a financial examiner (i.e., compliance) x 36 hours) + ($731 for a financial manager (i.e., Chief Compliance Officer) x 6 hours) + ($405 for a financial analyst x 16 hours) + ($462 for a software developer x 21 hours) = $51,564.

703 The Commission estimates that each broker-dealer that operates as an OTC market maker, on average, would need 103 hours to update its systems and policies and procedures for the rescission of Rule 611 and Rule 610(e): 24 hours of legal time, 36 hours of compliance time, 6 hours of review by a Chief Compliance Officer, 16 hours of work by a financial analyst, and 21 hours of work by a software developer. The estimated monetized one-time cost is as follows: ($744 for an attorney x 24 hours) + ($365 for a financial examiner (i.e., compliance) x 36 hours) + ($731 for a financial manager (i.e., Chief Compliance Officer) x 6 hours) + ($405 for a financial analyst x 16 hours) + ($462 for a software developer x 21 hours) = $51,564. There will be overlap between the broker-dealers that operate a SOR and the broker-dealers that are OTC market makers. For these broker-dealers, the Commission believes that the implementation costs related to operating their SOR and their implementation costs related to operating as an OTC market maker will be additive (i.e., they will incur both costs).

704 The Commission estimates that each exchange, on average, would need 860 hours to update its systems and policies and procedures for the rescission of Rule 611 and Rule 610(e): 48 hours of legal time, 72 hours of compliance time, 12 hours of review by a Chief Compliance Officer, 312 hours of work by a financial analyst, and 416 hours of work by a software developer. The estimated monetized one-time cost is as follows: ($744 for an attorney x 48 hours) + ($365 for a financial examiner (i.e., compliance) x 72 hours) + ($731 for a financial manager (i.e., Chief Compliance Officer) x 12 hours) + ($405 for a financial analyst x 312 hours) + ($462 for a software developer x 416 hours) = $389,316.

of Rule 611 and Rule 610(e) and related defined terms. We estimate that the total aggregate one-time implementation costs will be $40.9 million from rescinding Rule 611 and Rule 610(e).[705]

c. Increased Exchange Competition

Without Rule 611 and 610(e), broker-dealer demand for access to trading on every exchange may diminish.[706] This reduced demand may lower the cost to be an executing broker-dealer because broker-dealers would be able to disconnect from some exchanges, which may introduce pressure on exchanges to attract broker-dealers. This could lead to lower prices for products such as market data and connectivity and increase exchanges' incentive to innovate to try to attract or retain order flow.[707]

Exchanges may lose revenue because of broker-dealer disconnections and/or lower prices for data and connectivity. Exchanges that experience disconnections may lose volume while exchanges that do not may gain volume. It may become more difficult for small exchanges, as well as potential new exchanges, to gain market share, reducing the incentive for new entry. Small exchanges may even lose market share as broker-dealers shift their routing behavior away from these exchanges. The fragmentation of displayed liquidity may also decrease.[708]

i. Benefits

Some broker-dealers may choose to disconnect from existing exchanges, or not connect to new exchanges, because there is no longer an "interference cost" from not connecting to an exchange.[709] Broker-dealers that have determined, consistent with their duty of best execution,

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705 The Commission estimates that the total one-time implementation cost for rescinding Rule 611 and Rule 610(e) is:(20 exchanges x $389,316) + (33 ATSs x $194,658) + (23 broker-dealers connect to 16 or more exchanges x $194,658) + (21 broker-dealers connect to 11 to 15 exchanges x $89,706) + (169 broker-dealers connect to 1 to 10 exchanges x $51,564) + (225 OTC market makers x $51,564) = $40.89 million.

706 *See supra* section VI.B.4.e. (discussing broker-dealer demand for liquidity) and VI.C.1.a and VI.C.2.a. Note that off-exchange trading may increase. *See infra* note 730 and section VI.D.2.c. (discussing competition between exchanges and off-exchange venues).

707 *See supra* section VI.B.4.e.

708 Market fragmentation may also decrease. *See* also *infra* section VI.D.2.c.

709 *See supra* sections VI.B.4.e. (defining the "interference cost") and VI.B.4.f. (discussing the role of 611 and 610(e)).

that it is reasonable for them to not connect to an exchange would be able to reorganize their order routing to exclude that exchange without facing interference costs. Broker-dealers would face some costs from disconnecting from an exchange because they must update their routing practices, but there would be no such costs for not connecting to a new exchange.

A broker-dealer may disconnect from an exchange if the cost to modify its routing practices and any other costs, such as the cost of lost execution quality, is lower than the cost to remain connected to the exchange. However, there may be other reasons that a broker-dealer decides not to disconnect, such as the up-front costs which have already been paid and would have to be paid again if the broker-dealer disconnects and then later reconnects.[710] Rather than fully disconnecting, broker-dealers may choose to subscribe to fewer services (*e.g.,* unsubscribe from or decrease the number of use cases for market data, reduce the number of connections)[711] or utilize third-party vendors to save on costs rather than fully disconnecting. For a new exchange, there may be fewer broker-dealers for whom the cost of connecting to a new exchange is lower than the cost of not connecting and thus fewer broker-dealers would connect to a new exchange.[712]

Disconnections may occur at small exchanges and by small- to medium-sized broker-dealers. Disconnections are more likely to occur at small exchanges because the effect on execution quality from disconnecting is likely smaller because small exchanges have less available liquidity. With the rescission, broker-dealers can concentrate their orders on venues that contribute relatively more to overall execution quality. Academic research shows that liquidity and trading tend to concentrate on the most liquid venues.[713] If orders receive better execution quality on larger, more liquid exchanges, then brokers may concentrate on sending

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710 *See*, *e.g.*, letter from Peter J. Haynes, CFA, Index and Market Structure Research, TD Securities, *The History of OPR in Canada – It is Not Exactly What You Think?* (July 22, 2025) ("TD Securities Comment") at 4. *See also* First TTR Roundtable at 104 (Peter Haynes, TD Securities).

711 *See supra* section VI.B.4.c. (describing exchange products).

712 This would mean a slower uptake for new exchanges. *See infra* section VI.C.3.ii.

713 *See* Marco Pagano, *Trading Volume and Asset Liquidity*, 104 Q. J. ECON. 255 (1989).

their orders to these venues and reduce the number of orders that they send to smaller, less liquid exchanges. Disconnections are less likely to occur at small exchanges that are part of a large exchange family because there may be more benefits, relative to an exchange that is independent or part of a small exchange family, for broker-dealers that have a connection to multiple exchanges within the large exchange family.[714] Disconnections are more likely to occur by small- to medium-sized broker-dealers because they may seek to lower their costs. High-volume broker-dealers may be better positioned competitively,[715] and the effect on execution quality from disconnecting from an exchange may be smaller for small- to medium-sized broker-dealers to the extent that they demand less liquidity. Broker-dealers that execute large block orders for more shares than are available at the NBBO may continue to connect to as many venues as possible, even if they are small, because of the effect of disconnecting from a venue on their execution quality. Small- to medium-sized broker-dealers may already have lower up-front and ongoing costs, particularly if they outsource some of their connectivity or data processing to third-party vendors.[716]

Broker-dealers' ability to disconnect, along with the potential for order flow to shift, may increase the competitive pressure among exchanges. This may lead exchanges to lower prices for connectivity and data[717] or innovate.[718] Some exchanges may receive more order flow as broker-dealers shift their market activity, whether after disconnecting from other venues or not,[719] potentially leading to increased revenue from access fees and the SIPs for these exchanges.

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714 For example, one exchange family has "integrated trading technology." *See NYSE Pillar*, NYSE, https://www.nyse.com/trade/pillar (last visited May 11, 2026).

715 *See infra* section VI.D.2.d. (describing competition for broker execution services).

716 *See supra* section VI.B.4.c. (discussing market data and connectivity use cases for market participants).

717 For example, if some broker-dealers currently view an exchange's price for data as being too high, they may unsubscribe once they are no longer required to comply with Rules 611 and 610(e). If enough broker-dealers unsubscribe, the exchange may find it advantageous to lower the price of its data to keep more customers.

718 The fact that order flow could shift off exchange as well is another potential source of competitive pressure that could encourage lower prices and innovation. *See infra* section VI.D.2.c.

719 In addition to order flow potentially shifting away from small exchanges as described, broker-dealers may trade less on some exchanges for other reasons, such as to avoid certain types of venues except when

This would also result in a reduction in displayed liquidity fragmentation. As broker-dealers can disconnect and can concentrate their orders on venues that offer better execution quality or their preferred venue type, some exchanges would have more quotes while others would have fewer.

We estimate that about 4 small- to medium-sized broker-dealers may disconnect from each of the 5 smallest exchanges that are not part of the 3 largest exchange families. As explained above, disconnections are more likely to occur from small exchanges because of the potential for a lower effect on execution quality. Additionally, disconnections are more likely to occur from the 5 small exchanges that are not a part of the three large exchange families because, having connected to at least one exchange from a large exchange family, there is potentially a lower cost to connecting to additional exchanges from that family compared to the cost of connecting to a new exchange family.[720] It is difficult to reasonably estimate how many broker-dealers may disconnect, but we estimate it could be 4 with more or fewer being possible.[721] As explained above, exchanges have an incentive to lower prices or innovate to attract order flow and prevent disconnections. Broker-dealers may also maintain connections to avoid paying up-front costs again if they think they may have to reconnect later. They may also change or reduce their services rather than fully disconnect. Finally, in light of the competition for broker execution services, even the potential for small negative impacts on execution quality may limit

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submitting large block orders or because they downgrade their connection and devote fewer maintenance resources rather than fully disconnecting. For example, HFTs may route fewer orders to exchanges with speedbumps, but maintain a connection.

720 Until MX2 comes online, there are no two equities exchanges owned by the same company outside of the three largest exchange families. *See supra* section VI.B.4.a.

721 As mentioned above, broker-dealers that connect to all exchanges are not likely to disconnect from any exchanges. To the extent there may be disconnections, we would expect broker-dealers to disconnect from the newest and smallest exchanges. The newest and smallest exchanges have the smallest number of connections. The older, more established exchanges that have more connections, and also more market share, are likely to retain more connections. The exchanges that are smaller but are members of a large exchange family are also likely to retain more connections.

broker-dealer willingness to disconnect.[722] Thus, we do not anticipate that many disconnections will occur.

We do not expect that a broker-dealer's costs to modify routing practices, or a broker-dealer's ongoing yearly savings due to a disconnection, would depend on an exchange's size. We estimate that the ongoing yearly savings for a broker-dealer would be $187,000 per disconnection.[723] We estimate that the average cost a broker-dealer would save per disconnection per year on market data and connectivity fees is approximately $307,000.[724] We also expect that broker-dealers that disconnect will correspondingly discontinue their exchange membership. The estimated average savings for a broker-dealer per membership discontinuation is about $3,440.[725] Thus, the total savings from all disconnections are estimated to be $10 million per year.[726] There may be additional broker-dealers who choose to subscribe to fewer services from an exchange rather than fully disconnecting. Broker-dealers may instead utilize more third-party services. Broker-dealers may also need to update their routing system to account for the change in services. We are uncertain about the cost savings that this would generate, and how many broker-dealers would choose to do this, because we are unable to quantify the costs of third-party services or how many broker-dealers use such services. Third-party vendors that provide

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722 See supra sections VI.B.4.e discussing the value of access to exchange liquidity for broker-dealer execution costs, and VI.B.5.b, discussing competition among institutional brokers. In addition, significant alterations to a broker-dealer's routing practices would be made in accordance with that broker-dealer's policies and procedures for compliance with best execution requirements.

723 The Commission estimates that each broker-dealer, on average, would spend 429 hours to maintain its SOR: 184 hours of work by a financial analyst, and 245 hours of work by a software developer. The estimated monetized cost is as follows: ($405 for a financial analyst x 184 hours) + ($462 for a software developer x 245 hours) = $187,710. *See supra* note 577 for details on how hourly rates are calculated.

724 *See supra* note 467. The cost to connect to the five new exchanges is $1,536,360 total, or divided by five approximately $307,272 per exchange.

725 This estimate is based on the average yearly membership cost at 24X, IEX, LTSE, MEMX, and MIAX.

726 Each disconnection represents a savings for a broker-dealer from lower cost to maintain routing practices as well as from not paying membership, market data, and connectivity fees to the exchange. Thus, the total savings for all broker-dealer disconnections is [(savings from lower routing maintenance costs) + (savings from not paying market data and connectivity fees) + (savings from not paying membership fees)] x (number of broker-dealer disconnections), which is [($187,710)+($307,272) + ($3,440)] x (4 broker-dealers x 5 exchanges) = $9,968,440. *See supra* notes 467, 723, and 725.

connectivity and data services may also gain revenue if broker-dealers switch to using these services to connect to or receive data from an exchange.[727]

The Commission believes that the cost to connect to a new exchange could be lower, and that, without the "interference cost" from not connecting, fewer broker-dealers would find it necessary to connect to a new exchange compared to today. We are unable to reasonably estimate the change in the cost to connect due to the loss of the "interference cost" or how many broker-dealers this would impact.[728] We also expect that new exchanges will continue to charge zero fees, or lower fees, for connections and market data for a longer initial period after they commence to attract more order flow.[729]

ii. Costs

After the rescission of Rules 611 and 610(e), it may be more difficult for new and small exchanges to gain market share, and their revenue could be lower.[730] We do not expect that any exchanges would exit the market or that new exchanges would not be able to enter. The small exchanges may lose revenue and volume due to some small- to medium-sized brokers disconnecting, but we do not expect any broker-dealers that connect to all or almost all exchanges to disconnect. We expect that broker-dealers may submit fewer orders to small

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727 On the other hand, the vendors may lose revenue from customers that decide to disconnect from an exchange or choose not to connect to a new exchange using a third-party vendor. The Commission would anticipate that the loss is likely smaller than the potential gain of revenue from downgrading connections.

728 The Commission is unable to estimate the change in the cost to connect because this would require estimating the interference cost itself. Estimating the interference cost is infeasible for the Commission, as it would be impractical to create a detailed reconstruction of the circumstances faced by a SOR under conditions where it is not connected to some exchanges. This would include knowledge of the cost to the parent order, and the resulting impact on broker-dealer revenue, from failed child order routes.

729 *See* First TTR Roundtable Transcript at 86-87 (Chris Solgan, MIAX Exchange Group) (describing initial waivers of data and connectivity fees for new exchanges). Additionally, one ATS that has quotes that are not protected provides its market data for free. *See* First TTR Roundtable Transcript at 65 (Ari Burnstein, IntelligentCross).

730 If there is increased competitive pressure among exchanges and large exchanges do not respond (*e.g.,* by lowering fees or innovating), these large exchanges may lose market share to other small- to medium-sized exchanges that better compete to attract order flow. It is unlikely that large exchanges would lose much market share to other exchanges because they have the same incentives to attract order flow as small- to medium-sized exchanges. *See supra* note 713. It is also possible that exchanges as a whole lose market share to off-exchange venues, which could lead to lower revenue. *See supra* section VI.C.1.b. (discussing how exchanges may lose market share to off-exchange venues). It is uncertain whether this effect would be large enough to lead to large exchanges losing market share, but we preliminary expect that it would not.

exchanges.[731] To the extent that dollar volume decreases on these exchanges, their revenue from access fees as well as revenue from the SIPs may decrease.[732] Because most of the dollar volume traded on these exchanges comes from broker-dealers that connect to all or almost all exchanges,[733] the market share of these exchanges will not decrease significantly as a result of broker-dealer disconnections. We would not anticipate that these revenue losses (*i.e.,* from disconnections, fewer order submissions) would be sufficient to make an exchange exit. Many of these broker-dealers that connect to all or almost all exchanges may continue to connect to a new exchange right away. These new or small exchanges may keep prices on connectivity and data lower for longer, but this would not impact profitability significantly because the profit from such sources is already smaller for these exchanges.[734]

We estimate that 4 broker-dealers may disconnect from the five exchanges that are not a part of a large exchange family.[735] We estimate that the one time cost per broker-dealer per disconnection to modify routing practices would be $17,000, or in total $348,000.[736] The loss in revenue resulting from a disconnection is estimated at $311,000 per year, which is approximately $1.2 million per exchange or $6.2 million total.[737]

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731 *See supra* note 713.

732 *See supra* section VI.C.1.b. (discussing why there may be more trading off exchange and less trading on exchange).

733 *See supra* section VI.B.4.e.

734 *See supra* note 480.

735 *See supra* section VI.C.3.c.i. (discussing why we believe this number of disconnections would occur on these exchanges).

736 The Commission estimates that each broker-dealer, on average, would spend 43 hours to maintain its SOR: 18 hours of work by a financial analyst, and 25 hours of work by a software developer. The estimated monetized cost is as follows: ($405 for a financial analyst x 18 hours) + ($462 for a software developer x 25 hours) = $17,415. Then, multiplying by the number of broker-dealers and disconnections, the total cost is ($17,415) x (4 broker-dealers) x (5 exchanges) = $348,300. *See supra* note 577 for details on how hourly rates are calculated.

737 *See supra* notes 724 and 725. To estimate the cost per disconnection, we add the revenue loss from market data and connectivity and the revenue loss from membership: ($307,272) + ($3,440) = $310,712. To get the average cost per exchange: ($310,712) x (number of disconnects per exchange) = $1,242,848. To get the total cost: ($310,712) x (number of disconnects per exchange) x (number of exchanges) = $6,214,240. A part of this may represent a transfer. When a broker-dealer disconnects from an exchange, the broker-dealer saves on costs, while an exchange loses revenue. At the same time, the broker-dealer no longer receives the connection and thus the value of the liquidity on that exchange. The amount of the transfer would not represent the total amount of the fee but rather the amount of the fee net of the value of liquidity on the

Broker-dealers may face lower execution quality if they disconnect from exchanges. For example, if a broker-dealer is not connected to the exchange with the best quote, it may decide to trade through this quote on an exchange to which it is connected, thus achieving a worse execution quality for customers. Additionally, if a broker-dealer is executing a large block order for more shares than available at the NBBO at the exchanges where it is connected, it may achieve a worse execution quality because it does not access the liquidity at the exchanges to which it is not connected.[738]

4. Monetized Benefits and Costs

Throughout this economic analysis, we have estimated monetized benefits and costs per affected entity. In this section, we present aggregate measures of these monetized effects. These totals include only benefits and costs that are monetized in the economic analysis and thus do not encompass all of the proposed amendments' benefits and costs.

a. Initial and Annual Aggregate Monetized Benefits and Costs

Tables 13 and 14 report the benefits and costs, respectively, that are monetized in this economic analysis, aggregated across all affected entities and instances of compliance each year. The annual aggregate monetized benefit is based on cost savings for trading centers (*i.e.,* exchanges, ATSs, and exchange and OTC market makers) and broker-dealers that operate SORs from rescinding Rule 611 and 610(e). The sources of annual aggregate cost savings are as follows: (i) compliance cost savings for trading centers from no longer having to maintain policies and procedures and surveillance associated with Rule 611;[739] (ii) compliance cost savings for broker-dealers that operate SORs from no longer having to maintain policies and

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exchange (i.e. this would be the additional "interference premium" related to Rule 611 and Rule 10(e) that they paid to connect to the exchange). We are unable to quantify the amount of the transfer because we cannot quantify the "interference premium." There may be an additional loss in revenue if exchanges lower their fees or market participants that maintain a connection change their trading activity by routing fewer orders to these exchanges, but the Commission does not know by how much exchanges may lower their fees or how market participants would change their routing activity.

738 The broker-dealer may choose to route to these exchanges using an exchange router or another broker-dealer.

739 *See supra* section VI.C.1.a.

procedures associated with Rule 611;[740] (iii) compliance cost savings for exchanges from no longer having to maintain policies and procedures and surveillance associated with Rule 610(e);[741] (iv) compliance cost savings for broker-dealers that operate SORs from no longer having to maintain policies and procedures associated with Rule 610(e);[742] (v) costs savings for trading centers and broker-dealers that operate SORs due to the reduction in time for updating trade execution systems and SORs from rescinding Rule 611 and Rule 610(e);[743] and (vi) costs savings for broker-dealers that operate SORs due to the disconnection from five exchanges from rescinding Rule 611 and Rule 610(e).[744]

We estimate the lower and upper bound of total aggregate annual monetized benefit to be approximately $54.2 million and $77.0 million, respectively.

Table 13: Aggregate Monetized Benefits
(2025 dollars)

	Lower Bound of Annual Benefit Per Entity (A)	**Upper Bound of Annual Benefit Per Entity (B)**	**Estimated Number of Entities (C)**	**Lower Bound of Aggregate Annual Benefit (Millions) (D) [(A) x (C)]**	**Upper Bound of Aggregate Annual Benefit (Millions) (E) [(B) x (C)]**
Exchange	$381,000[a]	$699,000[b]	20[c]	$7.6[d]	$14.0[e]
ATS	$190,000[f]	$350,000[g]	33[h]	$6.3[i]	$11.5[j]
BD with SOR connecting to 16 or more exchanges	$190,000[k]	$350,000[l]	23[m]	$4.4[n]	$8.0[o]
BD with SOR connecting to 11 to 15 exchanges	$85,000[p]	$140,000[q]	21[r]	$1.8[s]	$2.9[t]
BD with SOR connecting to 1 to 10 exchanges	$47,000[u]	$63,000[v]	169[w]	$8.0[x]	$10.7[y]
OTC market maker	$47,000[z]	$63,000[aa]	225[ab]	$10.6[ac]	$14.3[ad]
BD with SORs	$26,000[ae]		213[af]	$5.6[ag]	
BD disconnecting from exchange	$498,000[ah]		4 - 20[ai]	$10.0[aj]	
Total				$54.2[ak]	$77.0[al]

Notes:

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740 *See id.*

741 *See supra* section VI.C.2.a.

742 *See id.*

743 *See supra* section VI.C.3.a.

744 *See supra* sectionVI.C.3.c.i.

[a] $30,996 + $30,996 + $318,552 = $380,544. *See supra* notes 577, 667, and 692.

[b] $30,996 + $30,996 + $637,104 = $699,096. *See supra* notes 577, 667, and 692.

[c] *See supra* note 578.

[d] $380,544 x 20 = $7,610,880.

[e] $699,096 x 20 = $13,981,920.

[f] $30,996 + $159,276 = $190,272. *See supra* notes 577 and 693.

[g] $30,996 + $318,552 = $349,548. *See supra* notes 577 and 693.

[h] *See supra* note 578.

[i] $190,272 x 33 = $6,278,976.

[j] $349,548 x 33 = $11,535,084.

[k] $30,996 + $159,276 = $190,272. *See supra* notes 577 and 694.

[l] $30,996 + $318,552 = $349,548. *See supra* notes 577 and 694.

[m] *See supra* note 694.

[n] $190,272 x 23 = $4,376,256.

[o] $349,548 x 23 = $8,039,604.

[p] $30,996 + $54,324 = $85,320. *See supra* notes 577 and 695.

[q] $30,996 + $108,648 = $139,644. *See supra* notes 577 and 695.

[r] *See supra* note 695.

[s] $85,320 x 21 = $1,791,720.

[t] $139,644 x 21 = $2,932,524.

[u] $30,996 + $16,182 = $47,178. *See supra* notes 577 and 696.

[v] $30,996 + $32,364 = $63,360. *See supra* notes 577 and 696.

[w] *See supra* note 696.

[x] $47,178 x 169 = $7,973,082.

[y] $63,360 x 169 = $10,707,840.

[z] $30,996 + $16,182 = $47,178. *See supra* notes 577 and 697.

[aa] $30,996 + $32,364 = $63,360. *See supra* notes 577 and 697.

[ab] *See supra* note 697.

[ac] $47,178 x 225 = $10,615,050.

[ad] $63,360 x 225 = $14,256,000.

[ae] $13,140 + $13,140 = $26,280. *See supra* notes 581 and 582.

[af] *See supra* note 582.

[ag] $26,280 x 213 = $5,597,640.

[ah] $187,710 + $307,272 + $3,440 = $498,422. *See supra* notes 723, 724, and 725.

[ai] We estimate that 4 to 20 distinct broker-dealers may disconnect from 5 exchanges. For example, the same 4 broker-dealers may disconnect from 5 exchanges, resulting in the total cost savings of $9,968,440 = ($498,422 x 5 exchanges) x 4 broker-dealers, or 20 distinct broker-dealers may disconnect, resulting in the total cost savings of $9,968,440 = $498,422 x 20 broker-dealers. *See supra* section VI.C.3.c.i.

[aj] $498,422 x 5 x 4 = $9,968,440.

[ak] $7,610,880 + $6,278,976 + $4,376,256 + $1,791,720 + $7,973,082 + $10,615,050 + $5,597,640 + $9,968,440 = $54,212,044.

[al] $13,981,920 + $11,535,084 + $8,039,604 + $2,932,524 + $10,707,840 + $14,256,000 + $5,597,640 + $9,968,440 = $77,019,052.

The one-time aggregate monetized cost is based on the following sources: (i) costs associated with updating best execution policies and procedures for broker-dealers that operate SORs due to the rescission of Rule 611;[745] (ii) costs associated with updating systems and policies and procedures for exchanges, ATSs, OTC market makers, and broker-dealers that operate SORs due to the rescission of Rule 611 and Rule 610(e);[746] and (iii) costs associated with modifying routing practices for disconnecting broker-dealers due to the rescission of Rule 611 and Rule 610(e).[747] The annual aggregate monetized cost is based on the loss in revenue from disconnections for five exchanges.[748]

We estimate that the total aggregate one-time monetized cost is approximately $48.2 million and the total aggregate annual monetized cost is approximately $6.2 million.

Table 14: Aggregate Monetized Costs (2025 dollars)

	One-Time Cost Per Entity (A)	Annual Cost Per Entity (B)	Estimated Number of Entities (C)	Aggregate One-Time Cost (Millions) (D) [(A) x (C)]	Aggregate Annual Cost (Millions) (E) [(B) x (C)]
Exchange	$389,000[a]	-	20[b]	$7.8[c]	-
ATS	$195,000[d]	-	33[e]	$6.4[f]	-
BD with SOR connecting to 16 or more exchanges	$195,000[g]	-	23[h]	$4.5[i]	-
BD with SOR connecting to 11 to 15 exchanges	$90,000[j]	-	21[k]	$1.9[l]	-
BD with SOR connecting to 1 to 10 exchanges	$52,000[m]	-	169[n]	$8.7[o]	
OTC market maker	$52,000[p]	-	225[q]	$11.6[r]	-

745 *See supra* section VI.C.1.b.

746 *See supra* section VI.C.3.b.

747 *See supra* section VI.C.3.ii.

748 *See id.*

BD with SORs	$40,000[s]	-	173[t]	$6.9[u]	-
BD disconnecting from exchange	$17,000[v]	-	4 – 20[w]	$0.3[x]	-
Exchange that experiences disconnection	-	$1,243,000[y]	5[z]	-	$6.2[aa]
Total				$48.2[ab]	$6.2[ac]

Notes:

[a] *See supra* note 704.

[b] *See supra* note 704.

[c] $389,316 x 20 = $7,786,320.

[d] *See supra* note 699.

[e] *See supra* note 699.

[f] $194,658 x 33 = $6,423,714.

[g] *See supra* note 700.

[h] *See supra* note 700.

[i] $194,658 x 23 = $4,477,134.

[j] *See supra* note 701.

[k] *See supra* note 701.

[l] $89,706 x 21 = $1,883,826.

[m] *See supra* note 702.

[n] *See supra* note 702.

[o] $51,564 x 169 = $8,714,316.

[p] *See supra* note 703.

[q] *See supra* note 703.

[r] $51,564 x 225 = $11,601,900.

[s] *See supra* note 593.

[t] *See supra* note 593.

[u] $40,098 x 173 = $6,936,954.

[v] *See supra* note 736.

[w] *See supra* note 736.

[x] $17,415 x 5 x 4 = $348,300.

[y] *See supra* note 737.

[z] *See supra* note 737.

[aa] $1,242,848 x 5 = $6,214,240. This amount may include transfers. *See supra* note 737.

[ab] $7,786,320 + $6,423,714 + $4,477,134 + $1,883,826 + $8,714,316 + $11,601,900 + $6,936,954 + $348,300 = $48,172,464.

[ac] *See supra* note aa.

b. Present Values and Annualized Values of Aggregate Monetized Benefits and Costs

Consistent with the requirements of Executive Order 12866, the Commission reports estimated total monetized benefits and costs for all affected entities in two additional ways specified in OMB Circular A-4.[749] The two presentations are intended to address the fact that the various benefits and costs of the proposed amendments would not accrue at the same point in time; rather, benefits and costs that accrue sooner are generally more valuable than those that occur later in time.[750]

We report (1) the present values of expected benefits and costs that are monetized in our Economic Analysis, aggregated across all affected entities, over a 10-year time horizon, starting in 2026, as well as (2) the annualized values over the same time horizon that are derived from the present values. This time horizon represents the period over which the principal benefits and costs that are monetized in the Economic Analysis are expected to accrue.[751] The present values and annualized values account for the timing of benefits and costs through discounting, which is a procedure that accounts for the time value of money.[752]

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749 *See* Executive Order (E.O.) 12866 (Sept. 30, 1993), 58 FR 51735, 51741 (Oct. 4, 1993) (requiring agencies to provide an analysis of benefits, costs, and regulatory alternatives to OIRA for significant regulatory actions); OMB, CIRCULAR A-4, at 31-34, 45 (Sept. 17, 2003) (providing guidance to agencies regarding compliance with E.O. 12866); *see also* E.O. 14215 (Feb. 18, 2025), 90 FR 10447, 10448 (Feb. 24, 2025) (requiring independent agencies to comply with E.O. 12866). In addition, E.O. 14192 requires agencies to provide their best approximation of the total costs or savings associated with each new regulation or repealed regulation consistent with the analyses required by E.O. 12866. *See* E.O. 14192 (Jan. 31, 2025), 90 FR 9065, 9066 (Feb. 6, 2025). For purposes of approximating the total cost savings and costs under E.O. 14192, the Commission uses the annualized monetized benefits and costs using a real discount rate of 7 percent. *See* Table 16 and accompanying discussion.

750 *See* CIRCULAR A-4, at 32.

751 *See id.* at 31 (stating that "[t]he ending point should be far enough in the future to encompass all the significant benefits and costs likely to result from the rule"). For the purposes of this analysis, we assume the effective date of the amendments, as well as the start year for the analysis's time horizon, is the present year. The analysis uses calendar years and accounts for the compliance periods included in the release (*see* note a in Table 15).

752 *See id.* at 32 ("The Rationale for Discounting") & 45 ("Treatment of Benefits and Costs over Time"); *see also* OIRA, REGULATORY IMPACT ANALYSIS: A PRIMER, at 11 (Aug. 15, 2011), *available at* https://www.reginfo.gov/public/jsp/Utilities/circular-a-4_regulatory-impact-analysis-a-primer.pdf ("To provide an accurate assessment of benefits and costs that occur at different points in time or over different time horizons, an agency should use discounting. Agencies should provide benefit and cost estimates using both 3 percent and 7 percent annual discount rates expressed as a present value as well as annualized."); HARVEY S. ROSEN & TED GAYER, PUBLIC FINANCE 151 (8th ed. 2008) (defining present value as "the value today of a given amount of money to be paid or received in the future").

Table 15 reports the present values of the aggregate monetized benefits and costs from Tables 13 and 14, combining one-time and annual monetized benefits and costs. The analysis uses annual real discount rates of 3 percent and 7 percent over a 10-year time horizon, starting in 2026.[753] We estimate that the present value of total monetized benefits is approximately between $469.3 million (lower bound) and $666.8 million (upper bound) using a 3 percent discount rate and approximately between $393.9 million (lower bound) and $559.6 million (upper bound) using a 7 percent discount rate. We estimate that the present value of total monetized costs is approximately $102.0 million using a 3 percent discount rate and approximately $93.3 million using a 7 percent discount rate.

Table 15: Present Value of Aggregate Monetized Benefits and Costs over 10 years from 2026 to 2035 (2025 Dollars)

Estimated Effects[a]	3% real discount rate	7% real discount rate
Benefits (lower bound, millions)	$469.3	$393.9
Benefits (upper bound, millions)	$666.8	$559.6
Costs (millions)	$102.0	$93.3

Notes:

[a] The present values for aggregated monetized benefits represent the present values of annual aggregated benefits of $54.2 million (lower bound) and $77.0 million (upper bound) per year (presented in Table 13) over 10 years using each of a 3 percent and 7 percent discount rate. The present values for aggregated monetized costs represent the present values of one-time costs of $48.2 million and annual aggregated costs of $6.2 million per year (presented in Table 14) over 10 years using each of a 3 percent and 7 percent discount rate. We assume that monetized benefits and costs accrue mid-year, and we use a mid-year discount rate.

Table 16 reports annualized aggregate monetized benefits and costs using real discount rates of 3 percent and 7 percent over a 10-year horizon.[754] The lump sum present values of aggregate monetized benefits and costs reported in Table 15 are converted in Table 16 into a

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753 This approach is consistent with OMB Circular A-4. *See* CIRCULAR A-4, at 31-34 (stating that, "[f]or regulatory analysis, [agencies] should provide estimates of net benefits using both 3 percent and 7 percent" discount rates and discussing why those rates are reasonable default rates). Also, we use a mid-year discount rate. *See* OMB, CIRCULAR A-94, at 21-22 (Oct. 19, 1992) ("When costs and benefits occur in a steady stream, applying mid-year discount factors is more appropriate.").

754 This approach is consistent with the recommended treatment of benefits and costs over time in Circular A-4. *See id.* at 45 ("You should present annualized benefits and costs using real discount rates of 3 and 7 percent").

constant stream of annualized benefits and costs over a 10-year time horizon, starting in 2026.[755] Annualized benefits and costs may differ from an aggregation of the recurring monetized annual benefits and costs discussed earlier in the Economic Analysis because they incorporate the timing of benefits and costs, through discounting, and combine one-time and recurring benefits and costs.[756] We estimate that annualized total monetized benefits are approximately between $54.2 million and $77.0 million per year using 3 and 7 percent discount rate. The annualized total monetized benefits (in 2025 dollars) in Table 16 are the same as the total monetized benefits (in 2025 dollars) reported in Table 13 because there are no one-time benefits. We estimate that annualized total monetized costs are approximately $11.8 million per year using a 3 percent discount rate and approximately $12.8 million per year using a 7 percent discount rate. Because the annualized costs are discounted and include both one-time and annual costs, they should not be compared directly to the aggregate annual monetized costs in Table 14.

Table 16: Annualized Aggregate Monetized Benefits and Costs over 10 years from 2026 to 2035 (2025 Dollars)

Estimated Effects[a]	3% real discount rate	7% real discount rate
Benefits (lower bound, millions)	$54.2	$54.2
Benefits (upper bound, millions)	$77.0	$77.0
Costs (millions)	$11.8	$12.8

Notes:

[a] For each discount rate, the annualized values are calculated by dividing the corresponding present values in Table 15 by the sum of discount factors over the time horizon. The discount factor in year t of the time horizon is equal to $1/(1 + discount\ rate)^{(t-0.5)}$.

D. Effect on Efficiency, Competition, and Capital Formation

1. Efficiency

The rescission of Rule 611 could have competing effects on efficiency, although the net effect is likely to be an improvement in efficiency. On one hand, the rescission of Rule 611 could increase the efficiency of order routing by removing the restriction Rule 611 imposes on how

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755 For each discount rate, the annualized monetized benefits (costs, respectively) in Table 16 represent the constant annual stream of benefits (costs, respectively) whose present value over the time horizon equates the corresponding present value in Table 15. *See* note a, Table 16 for additional calculation details.

756 The annualized benefits and costs present these values over the 10-year time horizon, starting in the present year.

orders are routed. This effect would increase price efficiency by reducing frictions to trading that could slow the speed at which information is incorporated into prices. On the other hand, the rescission of Rule 611 could harm price efficiency to the extent that it leads to a reduction in displayed quotes, although this effect is expected to be relatively small.[757] Thus, the overall effect of rescinding Rule 611 on market efficiency is likely to be an improvement in efficiency.

The removal of the prohibition on locked and crossed markets is expected to improve liquidity for some stocks.[758] An improvement in liquidity is associated empirically with improved price efficiency.[759] Thus, to the extent that some stocks experience an improvement in liquidity due to rescinding Rule 610(e), these stocks could experience an improvement in price efficiency.

2. Competition

a. Competition in the Market for Trading Services

The rescission of Rule 611 is expected to increase competition among trading centers, because exchanges would no longer be able to attract order flow away from non-exchange trading centers by having a protected quote. Consequently, there is likely to be an increase in innovation of trading protocols as exchanges search for other means of attracting order flow. To the extent that these innovations improve the trading experience or execution quality on exchanges, they may also improve liquidity and lead to more volume executing on exchanges.

b. Competition Between Exchanges

Rescinding Rules 611 and 610(e) may increase competitive pressure among exchanges. This is because one of the anticipated effects of rescinding Rule 611 is that if small exchanges cannot provide sufficient value to justify the price of their connectivity products, then they may see the number of market participants that connect to them shrink. With the rescission of Rule

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757 *See* text surrounding *supra* note 587 for a discussion of the effects of the rescission of Rule 611 on liquidity provision, and for a discussion of why those effects are expected to be relatively minor.

758 *See supra* section VI.C.2.a.

759 *See, e.g.*, Tarun Chordia, et al., *Liquidity and Market Efficiency*, 87 J. FIN. ECON. 249 (2008).

611, broker-dealers can disconnect from an exchange, or not connect to a new exchange, and not suffer the interference cost when routing orders. This may mean fewer broker-dealers consider it worthwhile connecting to such exchanges or utilizing the full set of exchange products they currently purchase.[760] In economic terms, these effects reduce demand for exchange products, which lowers broker-dealers' willingness to pay for them, unless the exchange offers enough value to justify the price. These effects would increase competition among exchanges leading to lower prices and increased innovation in exchange services.

As a result of this increased competition, smaller exchanges may lose volume or exit the market if some market participants disconnect. It could also be difficult for new exchanges to enter the market or gain market share because fewer market participants may choose to connect. Further, to the extent that the number of market participants connected to the exchange diminishes, activity on that exchange would also diminish, resulting in a reduction in liquidity available on that exchange. This, in turn, would lead to a further reduction in the value of that exchange, further reducing its membership. This phenomenon may make it difficult for small exchanges to persist unless they can differentiate themselves. It may also make it more difficult for new exchanges to start and to acquire market share. Consequently, there may be a reduction in the overall number of exchanges, or a reduction in the rate of entry of new exchanges to the market. The exchanges that remain may need to compete more on execution quality and innovate new features to attract order flow. In order to avoid losing customers and liquidity, exchanges, particularly small or new ones, might charge lower fees for market data and connectivity.

However, a substantial portion of the cost to broker-dealers of connecting to an exchange is in the initial new connection costs, which are already paid for existing connections, so it may be the case that few broker-dealers disconnect.[761]

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760 *See supra* section VI.C.3.c.i, further discussing these changes in broker-dealer connections.

761 *See supra* section VI.B.5.b.

c. Competition Between Exchanges and Off-Exchange Venues

The Proposal's impact on competition between on- and off-exchange trading venues is uncertain. On the one hand, the rescission of 610(e) may improve liquidity on exchanges for some stocks, which would make exchanges relatively more attractive places to transact and lead more order flow onto exchanges.[762] Further, to the extent that Rule 611 reduces the efficiency of routing orders on exchanges, rescinding Rule 611 could further make exchanges relatively more attractive venues. Market fragmentation may thus decrease, to the extent that displayed liquidity fragmentation decreases.

On the other hand, the proposal, if adopted, may lead institutional investors to execute more large orders off exchange. This could occur because Rule 611 may hinder block trades by restricting trades from occurring outside protected quotes. The rescission of Rule 611 may enable large block trades to occur at off-exchange venues at prices that, while potentially advantageous to the traders, would occur outside of the NBB or NBO prices on exchanges. This could potentially improve the competitive position of off-exchange venues. As a result of these competitive dynamics, the proposal could result in an increase in innovation for both on- and off-exchange venues.

If the proposal is adopted, broker dealers may connect to new ATSs before connecting to new exchanges because they may feel less obligation to connect to all exchanges to ensure that they can access all protected quotes. This may lead to new ATSs experiencing more growth and exchanges experiencing less growth. This could also result in an increase in innovation from exchanges, in order to try to retain their current growth.

The lack of restrictions on executions that would result from rescinding Rule 611 may result in increased innovation opportunities for ATSs as well.

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762 *See supra* section VI.C.2.a. (discussing on and off exchange order flow).

d. Competition for Broker Execution Services

The Proposal may lead to an increase in competition for executing broker services, as it may result in lower fixed costs to becoming an executing broker. This would occur to the extent that broker-dealers do not need to connect to as many market centers to be competitive, or it could occur to the extent that competitive pressures drive market data and connectivity fees lower. Lower fixed costs would reduce the barriers to entry and increase competition for order flow in the market for broker execution services. This effect may be mitigated to the extent that competitive pressure in the market for broker execution services does not allow brokers to reduce the number of connections to market centers.

The rescission may reduce the concentration in the broker-dealer industry because broker-dealers may face lower costs.[763]. Because there may be fewer new exchanges, and new exchanges that do enter may wait longer to charge fees for data and connectivity, the trend of rising data and connectivity costs may slow. Additionally, existing exchanges could lower their prices for data and connectivity. Also, broker-dealers may decide not to connect to some exchanges, and thus the costs, especially the upfront costs, of being an executing broker-dealer may decrease.[764] The Commission believes that high-volume brokers may continue to be better positioned competitively compared to small broker-dealers, in part because broker-dealers compete in other dimensions, such as by offering additional services bundled with execution. High-volume broker-dealers will likely continue to connect to all or almost all exchanges and invest in the most sophisticated technology that allows them to minimize transaction costs and maximize execution quality.

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763 *See supra* sections VI.C.3.a. and VI.C.3.c. The broker-dealer industry continues to be competitive, but it is the Commission's belief that the industry may become less competitive if the broker-dealer industry continues the trend of increasing concentration.

764 *See* First TTR Transcript at 172-3 (Adam Nunes, Hudson River Trading).

e. Competition for Liquidity Provision

Removing the prohibition on locked and crossed markets is expected to increase competition for liquidity provision by making it easier for liquidity providers to compete on price. Allowing locked and crossed markets means that if a liquidity provider sees a profitable opportunity to provide liquidity, but such provision would lock or cross the market, it would be able to post the quote at the desired price. This increased competition to provide liquidity could improve efficiency and liquidity on exchanges, which could allow exchanges to better compete with off-exchange market makers for order flow, as extant research suggests that improved market quality on exchanges is associated with more volume being routed to exchanges.[765]

3. Capital Formation

To the extent that the Proposal results in improved liquidity, or improved price efficiency, it could improve capital formation because both factors are associated with a decrease in the cost of capital. By standard economic arguments, investors must be compensated for risk. Liquidity risk is the risk that a stock may be illiquid when investors need to liquidate. Investors are compensated for this risk in the form of higher returns which imply a higher cost of capital. As liquidity risk diminishes, the compensation that investors need to hold the stock declines, which implies a lower cost of capital. Thus, to the extent that liquidity improves, the cost of capital may decline for stocks experiencing improved liquidity.[766]

Similarly, mispricing risk is the risk that a stock is not priced in accordance with its fundamental value. Investors must be compensated for this risk in the form of a higher cost of capital. Thus, to the extent that the Proposal improves price efficiency for some stocks it can reduce the cost of capital for these stocks.[767]

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765 *See, e.g.*, Albert J. Menkveld et al., *Shades of Darkness: A Pecking Order of Trading Venues*, 124 J. FIN. ECON. 503 (2017).

766 *See*, *e.g.*, Yakov Amihud & Haim Mendelson, Asset Pricing and the Bid-Ask Spread, 17 J. FIN. ECON. 223 (1986); Ľuboš Pástor & Robert F. Stambaugh, *Liquidity Risk and Expected Stock Returns*, 111 J. POL. ECON. 642 (2003).

767 *See, e.g.*, Michael J. Brennan & Ashley W. Wang, *The Mispricing Return Premium*, 23 REV. FIN. STUD. 3437 (2010).

A lower cost of capital facilitates capital formation by making investment easier for firms, and thus to the extent that the proposal improves liquidity or price efficiency it can facilitate capital formation.

E. Reasonable Alternatives

1. Venue Trading Volume Threshold for Protected Quotes

As an alternative to rescinding Rule 611, the Commission could consider a minimum volume threshold requirement for an automated trading center to qualify for having a protected quote under Rule 611. Under this alternative, an automated trading center would be required to have an average daily dollar trading volume of a certain percentage or more of the aggregate average daily dollar volume for all NMS stocks as reported by an effective transaction reporting plan over a set period, *e.g.,* during four out of the preceding six calendar months. The volume threshold across all NMS stocks, and not merely for a single NMS stock, is designed to help ensure that the automated trading center has a large enough market share to support the costs associated with the requirements to connect and route to the automated trading center to prevent trading-through its protected quote. Quotes from automated trading centers below the threshold would continue to be disseminated via the SIP and could contribute to the NBBO for transparency and benchmarking purposes, but they would not be protected. Brokers would not be required to route to those automated trading centers to avoid trade-throughs, and intermarket sweep order (ISO) obligations would not attach with respect to their displayed prices.

We believe that both the benefits and costs of this alternative would be lower than those of the Proposal. Trading centers and broker-dealers would experience lower one-time implementation costs to reprogram systems under this alternative. However, the reduction in their ongoing compliance costs and the ongoing reduction in costs they experience from simplified maintenance and updates of their order execution and SOR systems would be smaller. They would still have to maintain policies and procedures and programming logic to prevent trading through protected quotes on automated trading centers that meet the volume threshold.

Additionally, they may have to make updates to their systems to track which automated trading centers have protected quotes and which ones do not. Therefore, market complexity may not be significantly reduced under this alternative compared to the Proposal.

There would potentially be a smaller increase in the trade-through rate of displayed limit orders compared to the Proposal, which could potentially lead to less of a reduction in displayed liquidity and less investor confusion. Maintaining order protection at larger exchanges may also reduce the migration of order flow to off-exchange venues, because market participants would still be required to interact with the protected quotes on these exchanges before trading at worse prices off exchange.

Institutional investors could experience a smaller increase in the execution quality of their large orders compared to the Proposal. Although their orders could ignore the displayed quotes on smaller automated trading centers, they would still need to execute against the displayed quotes on protected trading centers before "walking the book" on an exchange or trading outside the protected quotes off exchange. This may increase their price impact and information leakage relative to the Proposal, which could increase the overall execution cost of the larger parent order.

Under this alternative, larger exchanges may gain more of a competitive advantage over smaller exchanges and the barriers to entry for new exchanges may be higher compared to the Proposal. Market participants would not be able to trade through protected quotes at larger exchanges, even if a smaller exchange offered better overall execution quality for an order. This may make market participants less likely to disconnect from larger exchanges and more likely to disconnect from smaller, unprotected exchanges. Additionally, new exchanges would have to wait for a period of at least four months to qualify for a protected quote after they initially hit the volume threshold. Compared to the Proposal, this may reduce the incentives for market participants to connect to a new exchange when it firsts starts, raising the barriers to entry.

The Commission could vary the costs and benefits of this alternative by varying the market volume threshold, which would increase or decrease the number of automated trading centers that qualify to have a protected quote. For example, if the Commission set the threshold at 1% of average dollar volume, then 7 exchanges would have a protected quote under this alternative.[768] If the Commission set the threshold higher, e.g., 2% of average dollar volume, then only 6 exchanges would have a protected quote. A higher threshold would result in this alternative having benefits and costs more similar to the Proposal, while a lower threshold would result in lower benefits and costs compared to the Proposal.

2. Large Trade Exception from Rule 611

As an alternative to rescinding Rule 611, the Commission could consider adding an exception to Rule 611 for large trades of institutional size. This exception would give trading centers and broker-dealers more flexibility to negotiate large block crosses that do not fit one of the other current exceptions to Rule 611, such as trades executed at benchmark prices (*e.g.,* VWAP or TWAP) or block crosses executed with an ISO sweep of protected quotes.

Under this alternative, market participants would not experience most of the costs and benefits discussed in the Proposal. Institutional investors would experience some improvement in the execution quality of their large orders compared to the baseline, but it would be less improvement than they would experience under the Proposal (*i.e.,* institutional investors would experience lower execution quality in this alternative compared to the Proposal). Institutional orders would have less flexibility in executing child orders, because smaller child orders would still be limited in their ability to trade through protected quotes. This may result in higher price impact and greater information leakage compared to the Proposal. Additionally, trading centers and broker dealers may incur costs to modify their systems to incorporate the new exception, but

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768 This estimate is based on CBOE Market Volume Data from September 2025 – February 2026. Exchanges were identified as being eligible for a protected quote if their average daily dollar trading volume was 1% or more of the average daily dollar market trading volume during at least four of the six months in the sample period. See supra note 442 for more information in CBOE Market Volume data.

these costs would be small compared to the costs of the systems modifications they would make under the Proposal.

3. Only Rescind Locked Market Prohibition, Keep Prohibition on Crossed Markets.

The Commission could rescind only the prohibition on locked markets, while leaving in place the prohibition on crossed markets. Due to the existence of rebates, a stock that has a zero quoted spread, *i.e.,* a stock with a locked market, may be an economically competitive and stable outcome since the liquidity providers may still earn the rebate on a maker/taker exchange resulting in an economic spread that is greater than zero. Compared to the Proposal, this alternative could have the benefit of reducing any confusion associated with crossed markets, while still providing an improved pricing lattice, relative to the baseline, on which liquidity providers can transact.

This alternative would also be associated with lower benefits in terms of reduced ongoing compliance costs for broker-dealers and for exchanges compared to the Proposal. This is because prohibiting crossed markets but allowing locked markets would require exchanges and broker-dealers to modify existing systems that currently ensure compliance with the prohibition on locked and crossed markets, but they could not do away with such systems entirely as would be the case with the Proposal. Keeping these systems in place, even if modifying them to allow for locked markets but prohibiting crossed markets, would not be expected to result in the reduction of significant compliance costs.

F. Request for Comment

34. Do commenters agree with the Commission's qualitative and quantitative baseline descriptions of the economic effects of Rule 611, Rule 610(e), and the structure of trading for NMS stocks? Why or why not?
35. How do trading centers and broker-dealers routing orders surveil for compliance with Rule 611? How does this vary based on the size of the trading center or broker-dealer? To what degree is this integrated with surveillance for compliance with other

SEC or SRO rules? Please explain. Please provide estimates of the costs trading centers and broker-dealers incur to surveil for compliance with Rule 611. To what degree are these costs separate or integrated with the costs associated with surveillance for compliance with other SEC or SRO rules?

36. Do commenters agree with the Commission's baseline description of exchange policies and procedures for posting odd-lot and round-lot quotes that may lock or cross a protected quote? Why or why not? Please explain.
37. Do commenters agree with the Commission's baseline description of how exchanges, ATSs, and SDPs handle executions when the NBBO is locked or crossed? Why or why not? Please explain.
38. Do commenters agree with the Commission's assessment of how Rule 611 impacts the handling of institutional orders? How does Rule 611 affect the execution costs of institutional orders? How do the exceptions to Rule 611 impact the costs of executing institutional orders? Please provide conceptual and quantitative context.
39. Do commenters agree with the Commission baseline description of the price improvement wholesalers provide to marketable retail orders? Why or why not? Please explain.
40. Do commenters agree with the Commission baseline description of how wholesalers handle and internalize marketable retail orders? Why or why not? Please explain.
41. Do commenters agree with the Commission baseline description of how retail brokers evaluate and route orders to wholesalers? Why or why not? Please explain.
42. Do commenters agree with the Commission baseline description of the effects Rule 611 has on how wholesalers handle and execute marketable and non-marketable retail orders? Why or why not? Please explain.
43. Do commenters agree with the Commission baseline description of the effects Rule 611 has on displayed liquidity? Why or why not? Please explain.

44. Do commenters agree with the Commission baseline description of the effects Rule 611 and Rule 610(e) have on market complexity? Why or why not? Please explain.
45. Do commenters agree with the Commission's estimates of the cost to subscribe to market data from all exchanges? Why or why not? Please explain and provide conceptual and quantitative context.
46. Do commenters agree with the Commission's assumption that market participants would have about 2 use cases for market data? Why or why not? Please explain and provide conceptual and quantitative context.
47. Do commenters agree with the estimate by a commenter of $200,000 ongoing maintenance costs per exchange and $1.5 million upfront costs to connect to a new exchange? Why or why not? Please explain and provide conceptual and quantitative context.
48. Do commenters have an estimate of the "interference cost" from not connecting to an exchange currently?
49. How has Rule 611 affected the fragmentation of displayed liquidity? How have other factors, such as exchange proliferation, technological advances and electronification of trading, changes in transaction costs, SIP revenue allocation, the SRO rule filing process, etc., affected the fragmentation displayed liquidity? Please explain and provide conceptual and quantitative context.
50. How has Rule 611 affected overall market fragmentation, including off-exchange trading? How have other factors, such as exchange proliferation, technological advances and electronification of trading, changes in transaction costs, SIP revenue allocation, the SRO rule filing process, etc., affected overall market fragmentation, including off-exchange trading? Please explain and provide conceptual and quantitative context.

51. How have Rule 611 and Rule 610(e) affected exchange innovation? How have other factors, such as fair access requirements, limitations on segmentation, the SRO rule filing process, etc., affected exchange innovation? Please explain and provide conceptual and quantitative context.
52. Do commenters agree with the Commission's assessment of the benefits and costs of the rescission of Rule 611? Why, or why not? Please explain.
53. Do commenters agree with the Commission's assessment of the compliance costs savings for trading centers and broker-dealers operating SORs from rescinding Rule 611? Why, or why not? Please explain and provide estimates of these cost savings.
54. Do commenters agree with the Commission's assessment that rescinding Rule 611 will reduce institutional investor execution costs? What will be the magnitude of any reduction in institutional investor execution costs if Rule 611 is rescinded? Please explain and provide conceptual and quantitative context.
55. Will there be an increase in the rate that institutional orders trade through the NBBO if Rule 611 is rescinded? If so, how much will the trade-through rate increase? Please explain and provide conceptual and quantitative context.
56. Do commenters agree with the Commission's assessment of the effects rescinding Rule 611 will have on the execution quality of marketable retail orders? Why, or why not? Please explain and provide conceptual and quantitative context.
57. Do commenters agree with the Commission's assessment of the effects rescinding Rule 611 will have on the execution quality of non-marketable retail orders? Why, or why not? Please explain and provide conceptual and quantitative context.
58. Do commenters agree with the Commission's assessment of the effects rescinding Rule 611 will have on displayed liquidity? Why, or why not? Please explain and provide conceptual and quantitative context.

59. Do commenters believe more trading will occur off exchange if Rule 611 is rescinded? Why, or why not? Please explain and provide conceptual and quantitative context.
60. Do commenters agree with the Commission's assessment of the benefits and costs of the rescission of Rule 610(e)? Why, or why not? Please explain.
61. Do commenters agree with the Commission's assessment of the compliance costs savings for exchanges and broker-dealers operating SORs from rescinding Rule 610(e)? Why, or why not? Please explain and provide estimates of these cost savings.
62. Does the Economic Analysis in this release account for all compliance costs? If not, what other compliance costs would market participants or exchanges incur? Please provide estimates of the additional compliance costs that you believe should be considered.
63. Do commenters agree with our assessment that rescinding Rule 611 and Rule 610(e) will reduce market complexity? Why, or why not? Please explain and provide conceptual and quantitative context.
64. Will rescinding Rule 611 increase exchange innovation? Will rescinding Rule 611 increase ATS innovation? Why, or why not? Please explain and provide conceptual and quantitative context.
65. Do commenters agree with our assessment that rescinding Rule 611 and Rule 610(e) will reduce the time it takes trading centers and broker dealers with SORs to regularly update their trade execution and SOR systems? Is the Commission's estimate that it will reduce the time to update these systems by 5%-10% reasonable? If not, how much time will it save? Do commenters agree with our estimates of the annual savings this will provide to exchanges, ATSs, OTC market makers, and broker-dealers operating SORs? Why, or why not? Please explain and provide estimates of these cost savings.

66. Do commenters agree with our assessment of the implementation costs trading centers and broker-dealers with SOR systems will incur if Rule 611 and Rule 610(e) are rescinded? Why, or why not? Please explain and provide estimates of these implementation costs.
67. Do commenters agree with our estimate of the costs to maintain a SOR associated with one exchange? Why or why not? Please explain.
68. Do commenters think that prices for market data and connectivity may decrease? By how much? Do commenters think that new exchanges will charge lower prices for longer?
69. Will broker-dealers update their best execution policies and procedures if Rule 611 is rescinded? If so, how many broker-dealers will update their best execution policies and procedures? Do you agree with the Commission's estimate of how much it will cost each broker-dealer that chooses to update their best execution policies and procedures? Why or why not? Please explain and provide estimates of these costs.
70. Do commenters agree that third-party vendors may gain revenue? Do commenters agree that the gain in revenue as a result of users subscribing to more third-party vendors (rather than disconnecting from exchanges) would be larger than the loss of revenue as a result of users that currently subscribe to third-party vendors disconnecting from exchanges?
71. Do commenters agree that disconnections may occur at small independent exchanges and with our estimate of the number of broker-dealers that will disconnect from exchanges and discontinue exchange memberships as a result of the proposed amendments, and our estimate of the resulting economic effects? Why or why not?
72. Do commenters believe that broker-dealers may modify their market activity by trading more or less on some exchanges to which they maintain a connection? Why or why not?

73. Do commenters agree that displayed liquidity fragmentation may decrease? Why or why not?
74. Do commenters agree that no exchanges will exit and that new exchanges may still enter, but that new and small exchanges may have more difficulty gaining market share? Why or why not?
75. Do commenters agree with our estimate of the cost to modify SORs following a disconnection?
76. Does the Economic Analysis in this release account for all relevant costs? If not, which other costs should the economic analysis consider? Please provide estimates of additional costs, other than compliance costs, that you believe should be considered.
77. Do commenters agree with the Commission's assessment of how the Proposed Rule would impact efficiency, competition, and capital formation? Why, or why not? Please explain.
78. Do commenters agree with the Commission's analysis of the benefits and costs of the reasonable alternatives to the Proposed Rule? Why, or why not? Please explain.
79. Are there any additional reasonable alternatives the Commission should consider? If so, please describe that alternative and provide the benefits and costs of that alternative relative to the baseline and to the proposal.
80. If SROs rescinded their own rules relating to locked and crossed market prohibitions, what would the reduction in compliance costs be for SROs and other market participants? Are there other SRO rules that should be rescinded or modified if Rule 610(e) is rescinded?

VII. Regulatory Flexibility Act Certification

The Regulatory Flexibility Act ("RFA")[769] requires Federal agencies, in promulgating rules, to consider the impact of those rules on small entities. Section 603(a)[770] of the Administrative Procedure Act,[771] as amended by the RFA, generally requires the Commission to undertake a regulatory flexibility analysis of all proposed rules, or proposed rule amendments, to determine the impact of such rulemaking on "small entities."[772] Section 605(b) of the RFA states that this requirement shall not apply to any proposed rule or proposed rule amendment which, if adopted, would not have a significant economic impact on a substantial number of small entities.[773]

The Commission is proposing to rescind Rule 611 and Rule 610(e). Rescinding Rule 611 would eliminate requirements for trading centers, which includes national securities exchanges, NMS stock ATSs, exchange market makers, OTC market makers, and other broker-dealers executing orders internally by trading as principal or crossing orders as agent. The rescission would also result in non-trading center broker-dealers that operate SORs no longer using ISOs and vendors making systems modifications to support the rescission of Rule 611. Rescinding Rule 610(e) would remove the rule's requirements for national securities exchanges and national securities associations.

For purposes of Commission rulemaking in connection with the RFA, the Commission's definition of a small entity includes an exchange that has been exempt from the reporting requirements of Rule 601 of Regulation NMS, and is not affiliated with any person (other than a

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769 5 U.S.C. 601 *et seq.*

770 5 U.S.C. 603(a).

771 5 U.S.C. 551 *et seq.*

772 Although section 601(b) of the RFA defines the term "small entity," the statute permits agencies to formulate their own definitions. The Commission has adopted definitions for the term "small entity" for purposes of Commission rulemaking in accordance with the RFA. Those definitions, as relevant to this proposed rulemaking, are set forth in 17 CFR 240.0-10 ("Rule 0-10").

773 *See* 5 U.S.C. 605(b).

natural person) that is not a small business or small organization.[774] Applying this test, no national securities exchange is a small entity. The only national securities association is also not a "small entity."[775]

For purposes of Commission rulemaking in connection with the RFA, a small entity includes a broker or dealer that: (1) had total capital (net worth plus subordinated liabilities) of less than $500,000 on the date in the prior fiscal year as of which its audited financial statements were prepared pursuant to Rule 17a-5(d) under the Exchange Act,[776] or, if not required to file such statements, a broker-dealer with total capital (net worth plus subordinated liabilities) of less than $500,000 on the last business day of the preceding fiscal year (or in the time that it has been in business, if shorter); and (2) is not affiliated with any person (other than a natural person) that is not a small business or small organization.[777] Applying this test and based on a review of data relating to broker-dealers,[778] the Commission estimates, as discussed below, that of the 312 trading centers that are broker-dealers and currently subject to Rule 611, only one would be a

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774 *See* 17 CFR 240.0-10(e) (providing that when used with reference to an exchange, means any exchange that: (1) has been exempted from the reporting requirements of Rule 601; and (2) is not affiliated with any person (other than a natural person) that is not a small business or small organization); *see also* 17 CFR 240.0-10(i) (providing that a person is affiliated with another person if that person controls, is controlled by, or is under common control with such other person; and a person shall be deemed to control another person if that person has the right to vote 25% or more of the voting securities of such other person or is entitled to receive 25% or more of the net profits of such other person or is otherwise able to direct or cause the direction of the management or policies of such other person).

775 *See* 13 CFR 121.201.

776 17 CFR 240.17a-5(d).

777 *See* 17 CFR 240.0–10(c); *see also* 17 CFR 240.0-10(i) (providing that a broker or dealer is affiliated with another person if: such broker or dealer controls, is controlled by, or is under common control with such other person; a person shall be deemed to control another person if that person has the right to vote 25% or more of the voting securities of such other person or is entitled to receive 25% or more of the net profits of such other person or is otherwise able to direct or cause the direction of the management or policies of such other person; or such broker or dealer introduces transactions in securities, other than registered investment company securities or interests or participations in insurance company separate accounts, to such other person, or introduces accounts of customers or other brokers or dealers, other than accounts that hold only registered investment company securities or interests or participations in insurance company separate accounts, to such other person that carries accounts on a fully disclosed basis).

778 The Commission considered FOCUS data and information about broker-dealers made publicly available by FINRA through reports available at https://brokercheck.finra.org/.

"small entity" and also in the scope of the rules the Commission is proposing to rescind.[779] With respect to non-trading center broker-dealers, the Commission estimates that none of the broker-dealers operating SORs and using ISOs to comply with Rule 611 would be small entities for purposes of the RFA.[780]

With respect to vendors, as defined in Rule 600(b)(111),[781] a "small entity" includes a securities information processor that: (1) had gross revenues of less than $10 million during the preceding fiscal year (or in the time it has been in business, if shorter); (2) provided service to fewer than 100 interrogation devices or moving tickers at all times during the preceding fiscal year (or in the time that it has been in business, if shorter); and (3) is not affiliated with any person (other than a natural person) that is not a small business or small organization under this section.[782] The Commission estimates that 13 of the 80 vendors including data related to Rule 611 would be small entities for purposes of the RFA.

Based on this analysis, the Commission believes that rescission of these rules, and the amendments to rules to remove definitions and administrative rules relevant to Rules 611 and 610(e),[783] correspondingly would not have a significant impact on a substantial number of small entities.

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779 At the time Rules 611 and 610(e) were adopted, the Commission certified that these rules would not have a significant economic impact on a substantial number of small entities. *See* NMS Adopting Release at 37598-99.

780 The Commission has based this estimate on data from the consolidated audit trail for November 2025.

781 Regulation NMS Rule 600(b)(11) defines vendor as any securities information processor engaged in the business of disseminating transaction reports, last sale data, or quotations with respect to NMS securities to brokers, dealers, or investors on a real-time or other current and continuing basis, whether through an electronic communications network, moving ticker, or interrogation device.

782 17 CFR 240.0-10(g).

783 These changes include proposed rescission of Rule 600(b)(105), defining "trade-through"; Rule 600(b)(81), defining "protected bid or protected offer"; Rule 600(b)(82), defining "protected quotation"; Rule 600(b)(54), defining "manual quotation"; Rules 600(b)(6) and (7), which define the terms "automated quotation" and "automated trading center," respectively; and Rule 600(b)(47), which defines the term "intermarket sweep order"; removing "protected quotation" from Rule 610(c) of Regulation NMS; and changing two administrative rules to: (1) remove paragraph (82) from Rule 30-3, which delegates to the Director the ability to grant or deny exemptions from Rule 611 pursuant to Rule 611(d); and (2) remove references to Rule 611 and its related OMB control number from Rule 800, which sets forth the current control numbers assigned to information collection requirements of the Commission by the Office of Management and Budget pursuant to the Paperwork Reduction Act of 1995. *See* section IV.B.2.

The Commission is also proposing to amend the definition of "core data" in Rule 600(b)(26) to eliminate the reference to "protected bid and protected offer" and the definition of "regulatory data" in Rule 600(b)(89) to eliminate the reference to "trade-through exempt indicators."[784] The Commission added these definitions in connection with the adoption of market data infrastructure rules.[785] The Commission certified that the adopted rules would not have a significant economic impact on a substantial number of small entities for purposes of the RFA for the reason that none of the entities subject to the adopted rules were small entities.[786] As a result, the Commission preliminarily estimates that none of the entities that would be affected by the elimination of terms related to Rules 611 and 610(e) from the definitions of "core data" and "regulatory data" are small entities.

The Commission also proposes to amend Rule 15c3-5 to remove the language excepting a broker-dealer routing orders for the purpose of accessing other trading centers with protected quotations in compliance with Rule 611 from the requirements of the rule. The Commission preliminarily estimates that none of the broker-dealers that route orders to comply with Rule 611 are small entities[787] for the purposes of the Regulatory Flexibility Act.

Finally, the Commission proposes to amend Rule 15b9-1 to remove an exemption from becoming a member of a registered national securities association for broker-dealers that effect off-member-exchange securities transactions that result from orders that are routed by an exchange in order to comply with Rule 611.[788] This exemption was adopted as part of amendments to Rule 15b9-1 that narrowed the criteria by which a Commission-registered broker-dealer could be exempted from becoming a member of a registered national securities

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784 *See supra* section IV.B.2.

785 *See* Market Data Infrastructure Adopting Release.

786 *See id*. at 18808-09. *See also* 17 CFR 240.0-10(e) and (g).

787 17 CFR 240.0-10(c).

788 *See supra* section IV.B.3.

association.[789] At the time of adoption, the Commission certified that the amendments to Rule 15b9-1 would not have a significant economic impact on a substantial number of small entities because no more than three small firms could be significantly impacted by the narrowed exemptions (*i.e.*, they could be required to become a member of FINRA if they did not qualify for one of the adopted exemptions).[790] Based on this analysis, the Commission believes that no more than three small entities are potentially relying on the exemption that the Commission is proposing to remove. The Commission believes that the proposed elimination of one of the Rule 15b9-1 exemptions would significantly impact no more than three small entities, and therefore, would not have a significant economic impact on a substantial number of small entities.

For the above reasons, the Commission certifies that the proposed rescissions and the proposed related amendments would not have a significant economic impact on a substantial number of small entities for purposes of the RFA.

The Commission invites commenters to address whether the proposed rules would have a significant economic impact on a substantial number of small entities, and, if so, what would be the nature of any impact on small entities. The Commission requests that commenters provide empirical data to support the extent of such impact.

VIII. Congressional Review Act

For purposes of Subtitle E of the Small Business Regulatory Enforcement Fairness Act of 1996 (also known as the Congressional Review Act),[791] the Commission must seek OMB's determination as to whether a final regulation constitutes a "major rule". Under the Congressional Review Act, a rule is considered "major" where, if adopted, it results in or is likely to result in:

- An annual effect on the economy of $100 million or more;

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789 *See* Securities Exchange Act Release No. 98202, 88 FR 61850 (Sept. 7, 2023) (Exemption for Certain Exchange Members).

790 *See id.* at 61892-93. *See also* 17 CFR 240.0-10(c).

791 *See* 5 U.S.C. chapter 8.

- A major increase in costs or prices for consumers or individual industries; or
- Significant adverse effects on competition, investment, or innovation.[792]

To help inform OMB's determination as to whether any final rule that results from the proposal would be a "major rule," the Commission solicits comment and data on:

- The potential effect on the U.S. economy on an annual basis;
- Any potential increase in costs or prices for consumers or individual industries; and
- Any potential effect on competition, investment, or innovation.

Commenters are requested to provide empirical data and other factual support for their views to the extent possible.

IX. Other Matters

This action is an economically significant regulatory action under section 3(f)(1) of Executive Order 12866 and has been reviewed by OMB, consistent with Executive Order 14215. This action, if finalized as proposed, is expected to be an Executive Order 14192 deregulatory action.

Statutory Authority

Pursuant to the Exchange Act, and particularly sections 2, 3(b), 5, 6, 11, 11A, 15, 15A, 17, 19, 23(a), and 36 thereof, 15 U.S.C. 78b, 78c, 78e, 78f, 78k, 78k-1, 78*o*, 78*o*-3, 78q, 78s, 78w(a), and 78mm, the Commission proposes to amend sections 240.15b9-1, 240.15c3-5, 242.600, 242.610, and 242.611 of Chapter II of Title 17 of the Code of Federal Regulations.

List of Subjects in 17 CFR Parts 240 and 242

Brokers, Reporting and recordkeeping requirements, Securities.

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792 *See* 5 U.S.C. 804(2) defining "major rule."

Text of Rule Amendments

For the reasons stated in the preamble, the Commission is proposing to amend Title 17, Chapter II of the Code of Federal Regulations as follows:

PART 240–GENERAL RULES AND REGULATIONS, SECURITIES EXCHANGE ACT OF 1934

1. The authority citation for part 240 continues to read in part as follows:

Authority: 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77z-2, 77z-3, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78c, 78c-3, 78c-5, 78d, 78e, 78f, 78g, 78i, 78j, 78j-1, 78j-4, 78k, 78k-1, 78*l*, 78m, 78n, 78n-1, 78*o*, 78*o*-4, 78*o*-10, 78p, 78q, 78q-1, 78s, 78u-5, 78w, 78x, 78dd, 78*ll*, 78mm, 80a-20, 80a-23, 80a-29, 80a-37, 80b-3, 80b-4, 80b-11, 1681w(a)(1), 6801-6809, 6825, 7201 *et seq.*, and 8302; 7 U.S.C. 2(c)(2)(E); 12 U.S.C. 5221(e)(3); 18 U.S.C. 1350; and Pub. L. 111-203, 939A, 124 Stat. 1376 (2010); and Pub. L. 112-106, sec. 503 and 602, 126 Stat. 326 (2012), unless otherwise noted.

* * * * *

2. Amend §240.15b9-1 by revising paragraph (c)(1) to read as follows:

§ 240.15b9-1 Exemption for certain exchange members.

* * * * *

(c) * * *

(1) A broker or dealer may effect transactions in securities otherwise than on a national securities exchange of which the broker or dealer is a member that result solely from orders that are routed by a national securities exchange of which the broker or dealer is a member to comply with the Options Order Protection and Locked/Crossed Market Plan; or

* * * * *

3. Amend §240.15c3-5 by revising paragraph (b) to read as follows:

§ 240.15c3-5 Risk management controls for brokers or dealers with market access.

* * * * *

(b) A broker or dealer with market access, or that provides a customer or any other

person with access to an exchange or alternative trading system through use of its market participant identifier or otherwise, shall establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of this business activity. Such broker or dealer shall preserve a copy of its supervisory procedures and a written description of its risk management controls as part of its books and records in a manner consistent with § 240.17a-4(e)(7). A broker-dealer that routes orders on behalf of an exchange or alternative trading system for the purpose of accessing other trading centers in compliance with a national market system plan for listed options shall not be required to comply with this rule with regard to such routing services, except with regard to paragraph (c)(1)(ii) of this section.

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PART 242 – REGULATIONS M, SHO, ATS, AC, NMS, SE, AND SBSR, AND CUSTOMER MARGIN REQUIREMENTS FOR SECURITY FUTURES

4. The authority citation for part 242 continues to read as follows:

Authority: 15 U.S.C. 77g, 77q(a), 77s(a), 78b, 78c, 78c-4, 78g(c)(2), 78i(a), 78j, 78k-1(c), 78*l*, 78m, 78n, 78*o*(b), 78*o*(c), 78*o*(g), 78q(a), 78q(b), 78q(h), 78w(a), 78dd-1, 78mm, 80a-23, 80a-29, 80a-37, and 8343.

5. Amend §242.600 by:

a. Removing and reserving paragraph (b)(6);

b. Removing and reserving paragraph (b)(7);

c. In paragraph (b)(26)(i), removing paragraph (E) and redesignating paragraphs (F) through (J) as paragraphs (E) through (I);

d. In paragraphs (b)(26)(ii), (iii) and (iv), removing the text “protected bid and protected offer”;

e. Removing and reserving paragraph (b)(47);

f. Removing and reserving paragraph (b)(54);

g. Revising paragraph (b)(72) to read as follows:

(b) * * *

(72) ***Order size benchmark*** means the number of shares of the full displayed size of all bids disseminated pursuant to an effective national market system plan at the same price as the national best bid at the time of order receipt, in the case of a market or limit order to sell, or the full displayed size of all offers disseminated pursuant to an effective national market system plan at the same price as the national best offer at the time of order receipt, in the case of a market or limit order to buy. For midpoint-or-better limit orders, the full displayed size should be measured at the time the order becomes executable rather than the time of order receipt. For each order, the share count shall be capped at the order size.

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h. Removing and reserving paragraph (b)(81);

i. Removing and reserving paragraph (b)(82);

j. In paragraph (b)(89)(ii)(B), removing the text “and trade-though exempt;”; and

k. Removing and reserving paragraph (b)(105).

6. Amend §242.610 by:

a. In paragraph (c), removing the text “protected quotation of the trading center or against any other”;

b. In paragraphs (c)(1) and (c)(2), removing the text “protected quotation or other”; and

c. Removing and reserving paragraph (e).

7. Remove and reserve § 242.611.

By the Commission.

Dated: June 11, 2026.

J. Matthew DeLesDernier,

Deputy Secretary.

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