



September 23, 2021

**VIA ELECTRONIC DELIVERY**

Ms. Vanessa Countryman  
Secretary  
Securities and Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549

Re: Securities Exchange Act Release No. 92709 (August 9, 2021), 86 FR 47529 (August 25, 2021) (SR-CBOE-2021-046)

Dear Ms. Countryman,

Cboe Exchange, Inc. (the “Exchange” or “Cboe Options”) appreciates the opportunity to respond to comments submitted on the above-referenced proposed rule change to provide that the minimum increment for bids and offers complex orders with any ratio may be \$0.01 or greater, and to permit the legs of such complex orders to be executed in \$0.01 increments (the “Proposal”).<sup>1</sup>

\* \* \* \* \*

The Exchange reiterates that it believes the proposed rule change is consistent with the Securities Exchange Act of 1934, as it will provide market participants with the same pricing flexibility with respect to all their complex trading and hedging strategies rather than just those with certain ratios. The Exchange believes the proposed rule change will benefit investors by providing them with additional flexibility to price their investment and hedging strategies to achieve their desired investment results when executing highly complicated, bona-fide multi-legged trading or hedging strategies.

**Smith Letter**

In response to the Smith Letter, the Exchange first notes its various initiatives to improve options trading for retail investors, as we encourage increased participation by such investors, including Ms. Smith, in the listed options market.<sup>2</sup> While the Proposal is intended to increase the efficiency

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<sup>1</sup> See Letter from Mary Smith, dated August 19, 2021 (“Smith Letter”); and Letter from Alanna Barton, General Counsel, BOX Exchange LLC, dated September 14, 2021 (“BOX Letter”).

<sup>2</sup> See, e.g., Securities Exchange Release Nos. 91528 (April 9, 2021), 86 FR 19933 (April 15, 2021) (SR-CBOE-2020-117) (Commission approval of proposed rule change to permit Cboe Options to list certain broad-based index options with an index multiplier of one); and 91119 (February 12, 2021), 86 FR 10381 (February 19, 2021) (SR-CBOE-2020-051) (Commission approval of proposed rule change to permit the Exchange to determine a maximum size for SPX orders submitted into its Automated Improvement Mechanism (“AIM”)) (the Exchange notes Citadel opposed that initiative, the intent of which was to provide retail customer SPX orders with access to



of trading of larger-ratio, highly complex orders on behalf of customers, it is not intended to benefit high-speed traders. In fact, the Proposal has minimal relevance to high-speed traders, who generally participate in listed options trading as Market-Makers rather than as brokers conducting agency businesses. The Exchange understands that the primary listed options business of high-speed traders is to stream quotes in their appointed classes into the simple book. Unlike the simple book, the complex order book (the “COB”) does not permit market participants to stream quotes, which is an efficient way to provide bids and offers among multiple products, and the Exchange has observed minimal complex order activity from high-speed traders relative to activity in non-complex options. For reference, in August 2021, Market-Makers submitted an average of 2.967 billion simple bids and offers each day compared to an average of 6.239 million complex bids and offers each day, which is a ratio of 4.75 simple Market-Maker bids/offer to one complex Market-Maker bid/offer.

The meaning of the statement in the Smith Letter that “retail traders will get a worse price due to the amended decreased quotes and they don’t desire increased trading speed that this effectuates” is unclear to the Exchange. The proposed rule change is unrelated to quoting, as complex quoting is not available. Additionally, as noted in the Proposal, a substantial amount of volume on the Exchange may already execute in pennies, even in non-penny classes, and the Proposal is not expected to significantly impact the amount of volume that may trade in penny increments. The Exchange notes that in simple options that may trade in pennies, the increased number of permissible prices results in far more price updates available to all traders, including retail traders. Therefore, if a retail customer has an order resting in the simple book, more bids and offers would increase the chances that the retail customer order will receive an execution at its limit price (or better).

If the Proposal has any impact on the simple market, it would be that the increased number of complex orders that are eligible for more flexible pricing may increase the number of complex orders entered on the Exchange that may leg into the simple book, thus increasing execution opportunities for resting customer orders. Further, a resting complex order has no impact on the probability of a resting simple customer order being executed, nor does it impact the price that simple customer orders will receive. This is because a resting simple order will continue to execute with an incoming marketable simple order, even if a complex order is resting. The resting simple order may in fact receive a benefit, however, without being harmed, because such orders are allowed to execute with an incoming marketable complex order, and, as noted above, the proposed rule may ultimately provide more execution opportunities for simple orders.<sup>3</sup>

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the Exchange’s price improvement auction, see Letter from Stephen John Berger, Managing Director, Global Head of Government & Regulatory Policy, Citadel Securities to Vanessa Countryman, Secretary, Commission, dated July 9, 2020 (“Citadel Letter”).

<sup>3</sup> As noted herein, however, the Exchange believes the proposed rule change will not result in any substantial increase in the percentage of volume that may execute in pennies given the large percentage of volume that already trades in pennies on the Exchange.



The following examples demonstrate that the proposed rule change will not negatively impact the simple market, and may even benefit customer orders resting on the simple book:

Example #1

Series A: \$1 (10 (customer)) – \$1.20 (100 (non-customer))

Series B: \$2 (100 (non-customer)) – \$2.20 (100 (non-customer))

Complex order to buy 1 Series A and sell 4 series B for a \$7.79 net credit (which is \$0.01 inside the synthetic market for this complex strategy)

Cboe Options receives a simple order buy 1 Series A at \$1, which executes against the resting customer order at \$1.

The resting complex order has no impact on the execution of the resting simple customer order, despite the presence of a complex order with a Series A leg priced inside the implied leg market.

Example #2

Series A: \$1 (10 (customer)) – \$1.20 (100 (non-customer))

Series B: \$2 (100 (non-customer)) – \$2.20 (100 (non-customer))

Cboe Options receives a complex order to sell 1 Series A and buy 4 Series with a limit price of a \$7.80 net debit.

Complex order executes 1 Series A against the resting customer Series A order at \$1 and executes 4 Series B against the resting non-customer Series B order at \$2.20.

The complex order created an execution opportunity for the customer (and a non-customer) simple order that would otherwise remain resting.

Contrary to Ms. Smith’s comment that “a better price for retail traders isn’t true in most real world occurrences,” the Exchange believes the investor experience is better than it has ever been based on publicly available information.<sup>4</sup> The Exchange believes the Proposal will have minimal impact on either high-speed traders or retail traders (or on the simple market), as it is intended to increase the efficiency and precision available to brokers attempting to execute highly complicated yet

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<sup>4</sup> As stated by Commission Roisman, “I think our equity markets work extremely well today. They are liquid and mature, and it is incumbent on us to continue to ensure that they are fair and efficient. From a retail investor’s standpoint, it has never been easier or cheaper to trade. Also, the products, tools, and information available to investors are incredible and constantly improving. Simply put, investors are in a better position, and have more safeguards, than at any other time in the history of our markets and arguably any other capital markets.” Commissioner Elad L. Roisman, Remarks at the March 2019 Investor Advisory Committee Meeting (March 28, 2019). See also Cboe Global Markets, *Cboe’s Vision: Equity Market Structure Reform*, January 2020, available at [https://cdn.cboe.com/resources/government\\_relations/cboes-vision-equity-market-structure-reform-2020.pdf](https://cdn.cboe.com/resources/government_relations/cboes-vision-equity-market-structure-reform-2020.pdf).



bona-fide multi-leg option strategies on the Exchange, which strategies are not common among high-speed traders or retail traders.

In response to the Smith Letter reference to the example included in the Proposal, the Exchange notes this was merely meant to be a simple example to highlight the difference in complexity of calculations for orders that may trade in pennies compared to those that may not. The Exchange has observed that these orders are generally entered in large quantities with a large number of legs, which would make this calculation process far more time-consuming for brokers – therefore, the Exchange believes this is generally having a negative impact on the customers on whose behalf these brokers are attempting to execute these strategies. The Exchange believes the examples in footnotes 4 and 5 of the Proposal demonstrate in a straight-forward manner how penny increments for these strategies would generally improve prices at which brokers may execute them on behalf of their customers.

#### BOX Letter

In response to assertions made by BOX, Cboe Options believes it made no inaccurate representations in the Proposal based on the knowledge available to Cboe Options. It is a fact that multiple TPHs, which are also members of BOX who would have direct knowledge on this topic, represented to Cboe Options that multi-legged orders with ratios greater than three-to-one or less than one-to-three are executed regularly on BOX's trading floor in penny increments.<sup>5</sup> Therefore, the Exchange's statements to that effect in the Proposal were not false. It is not unusual for Cboe Options or other exchanges to cite information received from customers in rule filings. In fact, if an exchange solicited written comments from customers in connection with a proposed rule change, that exchange would be required to disclose such comments in Item 5 of Form 19b-4, many of which would be "hearsay." While Cboe Options did not solicit written comments from customers in connection with the Proposal, given that multiple TPHs, independently from each other, told Cboe Options the same information, Cboe Options had no reason to not believe these TPHs (that are also BOX members). Cboe Options is dismayed that BOX believes statements of its own members to be nothing more than "hearsay" that should be ignored when pertinent to formal filings with the Commission.

If it had been clearly discernable from BOX's rules what increments applied to multi-leg orders with ratios greater than three-to-one or less than one-to-three, Cboe Options would not have indicated in the Proposal that BOX's Rules were unclear on this point. However, despite the various rules and filings cited in the BOX Letter, Cboe Options continues to believe BOX's Rules lack clarity regarding the increments applicable to multi-leg Qualified Open Outcry Orders ("QOO

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<sup>5</sup> The only clarification Cboe Options believes may be appropriate is to state that the proposed rule change will further remove impediments to and perfect the mechanism of a free and open market and a national market system, as *Cboe Options understands from several customers* that another options exchange permits complex orders with any ratio and their legs to trade in pennies. However, Cboe Options believes it is clear from the Proposal that its belief that these increments are permissible on BOX's trading floor stems from information provided by firms with first-hand knowledge of multi-legged strategy trading on BOX's trading floor.



Orders”) that do not satisfy the definition of a complex order in BOX Rule 7240(a)(7) (and thus that have ratios greater (less) than three-to-one (one-to-three)). While the BOX rule filing cited in the BOX Letter makes clear that these orders are treated like single-leg qualified open outcry orders with respect to “execution and priority,”<sup>6</sup> that rule filing glaringly omits BOX Rule 7240(b)(1) from the complex order provisions of which multi-leg QOO Orders may not take advantage.<sup>7</sup> BOX Rule 7240(b)(1) states bids and offers of complex orders may be expressed in any decimal, and the legs of a complex order may be executed in one cent increments, regardless of the minimum increments otherwise applicable to the individual legs of the order. Therefore, it is a reasonable inference from that filing that BOX considers increments to be in a separate category from “execution and priority.” As a result, that BOX rule filing and BOX’s Rules provide no clarity regarding what increments BOX permits for multi-leg QOOs with ratios greater (less) than three-to-one (one-to-three).<sup>8</sup> As such, Cboe Options requests that BOX immediately clarify in its Rules what minimum increments apply to the net price and leg prices of multi-leg Qualified Open Outcry Orders that do not satisfy the definition of a complex order.

### Conclusion

The Exchange reiterates that the Proposal is intended to enable traders, particularly those on the Exchange’s trading floor, to execute all complex orders more efficiently, including on behalf of customers that wish to execute highly complicated complex orders. The Exchange believes this may enable TPHs to execute customers’ complex orders at better prices, rather than executing at prices that fit within the confines of a larger increment, which ultimately benefits investors. As described in the Proposal, priority customer order interest on the simple book will continue to be protected in the same manner as it is today and in fact may have more opportunities to trade.

While Cboe Options appreciates the Commission’s previously expressed concerns, which are set forth in the Proposal, the Exchange believes the maintenance of heightened priority requirements for larger ratio orders (compared to those with no more (less) than a three-to-one (one-to-three)) will prevent market participants from entering multi-legged strategies designed to trade ahead of orders on the simple book. Additionally, given the significant volume that already executes on the

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<sup>6</sup> See Securities Exchange Act Release No. 85052 (February 5, 2019), 84 FR 3265 (February 11, 2019) (SR-BOX-2019-01).

<sup>7</sup> That rule filing specifically omitted BOX Rule 7240(b)(2) and (3) from the complex order provisions of which multi-leg QOO Orders may not take advantage. If BOX intended to not permit multi-leg QOO Orders with ratios greater (less) than three-to-one (one-to-three) to avail themselves of the benefits of penny increments available to standard-ratio complex orders, Cboe Options finds it curious that BOX flagrantly excluded Rule 7240(b)(1) from the list of complex order “execution and priority” benefits of which these larger (smaller) ratio multi-leg orders could not avail themselves.

<sup>8</sup> BOX Rule 7600(a)(4) and IM-7600-2 also make clear that tied to hedge orders may comprise multi-leg QOOs and are separate from complex orders, and Cboe Options has located no specific guidance on the permissible increments or ratios that qualify for such increments for these multi-leg QOO orders. BOX IM-7600-2 explicitly states that tied hedge transactions (whether simple or complex) are treated the same as complex orders for purposes of BOX’s open outcry allocation and reporting procedures and states when such transactions qualify for trade-through exemptions; however, there is no statement regarding permissible increments or ratios that qualify for such increments for these orders.



Exchange in pennies, the Exchange believes permitting these larger-ratio orders to execute in pennies will have minimal impact on the amount of volume that trades in this increment.<sup>9</sup>

The Exchange believes the benefits of permitting market participants to execute bona-fide strategies in a more efficient, price-precise manner outweigh the risks expressed by the Commission. As noted in the Proposal, the risk of the activity about which the Commission is concerned exists today. For example, a complex order to buy three 100-delta options and sell one 5-delta option may execute in pennies because it has a ratio of three-to-one, and the legs of such order may also execute in pennies. Yet, this “strategy” is far more questionable than the complex strategy to buy twenty 5-delta options and sell one 100-delta option, which is a 100% hedged strategy but has as ratio of twenty-to-one and thus may not execute in pennies. Listed options are derivatives; therefore, their pricing and valuations by market participants generally use various “greeks,” rendering consideration of quantity alone when determining whether different complex strategies should receive different benefits (such as increments) is insufficient to address commonly accepted definitions of legitimate trading strategies. The Exchange believes the current limitation for use of penny increments based on ratio (and thus quantity alone) continues to harm customers looking to hedge, for example, lower versus higher delta options, as described above, and the proposed rule change would eliminate this ongoing harm.

However, submission of such non-bona-fide strategies has not been observed by the Exchange. Given the expansion of complex order trading since the three-to-one restriction was imposed, the Exchange believes it is appropriate for the Commission to reconsider this restriction in order to account for the numerous bona-fide strategies currently being denied the benefits available to smaller-ratio orders, particularly given the low likelihood that the identified risks will occur. The Exchange believes customers’ constantly evolving needs and exchange innovation to address those needs on listed markets should not be hindered due to potential risks that continue to not manifest themselves in the markets.

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The Exchange appreciates the opportunity to respond to comments on the Proposal and urges the Commission to approve it in a timely manner. Please feel free to contact myself at [REDACTED] if you have any questions related to this matter.

Respectfully submitted,

/s/ Laura G. Dickman

Laura G. Dickman

Vice President, Associate General Counsel, Cboe Options

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<sup>9</sup> See discussion beginning at page 11 of Proposal.