

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-95520; File No. SR-CBOE-2022-041)

August 17, 2022

Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing of a Proposed Rule Change to Amend Rule 5.34(b) Related to Price Protections and Risk Controls for Complex Orders

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),¹ and Rule 19b-4 thereunder,² notice is hereby given that on August 4, 2022, Cboe Exchange, Inc. (“Exchange” or “Cboe Options”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

Cboe Exchange, Inc. (the “Exchange” or “Cboe Options”) proposes to amend Rule 5.34(b) related to price protections and risk controls for complex orders. The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange’s website (<http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx>), at the Exchange’s Office of the Secretary, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend Rule 5.34(b) related to price protections and risk controls for complex orders. Specifically, the proposed rule change amends Rule 5.34(b)(4), which provides for a buy strategy price check for complex orders, to adopt an additional buy strategy price check for certain complex orders and amends Rule 5.34(b)(1) to provide clarity regarding the definition of a skewed butterfly spread.

First, the proposed rule change amends Rule 5.34(b)(4) to adopt an additional buy strategy price check for complex orders.³ Specifically, the proposed rule change adopts Rule 5.34(b)(4)(B) to provide that the System cancels or rejects a vertical or butterfly spread⁴ order to buy that has a price of zero and is not designated as either IOC or Direct to PAR, and the System does not initiate a COA with a vertical or butterfly spread order to buy that has a price of zero unless the order is auctioned via PAR. The Exchange may apply this check on a class-by-class basis.

³ Rule 5.34(b)(4) currently provides for one buy strategy price check; that the System cancels or rejects a limit complex order where all the components of the strategy are to buy and the order has (A) a price of zero, (B) a net credit price that exceeds a pre-set buffer (which the Exchange determines), or (C) a net debit price that is less than the number of individual legs in the strategy (or applicable ratio) multiplied by the minimum increment. As a result of the proposed additional buy strategy price check, the proposed rule change renumbers the current buy strategy price check in Rule 5.34(b)(4) as 5.34(b)(4)(A).

⁴ For the purposes of Rule 5.34(b), the System considers a true butterfly and a skewed butterfly to be butterfly spread. The proposal explains this definition in further detail below.

The proposed buy strategy price check is designed to prevent a significant number of resting zero-priced vertical and butterfly buy strategies from overwhelming the complex order book (“COB”). The Exchange has observed a significant and increasing number of zero-priced vertical and butterfly buy spread orders in certain classes submitted to rest in the COB, and does not believe the vast majority of these orders to be legitimately price.[sic]⁵ The Exchange notes that, while a zero-priced vertical or butterfly buy spread order may be a legitimately priced complex order, these orders infrequently execute against an opposing complex order and a majority of such orders remain resting in the COB. That is, it is rare that market participants desire to sell such strategies at a price of zero. The Exchange has observed relatively few fills as compared to the large number of these zero-bid strategy orders that remain resting in the COB.⁶ Such strategy orders also create a substantial amount of excess market data through which market participants must parse. Indeed, the Exchange notes that multiple Trading Permit Holders (“TPHs”) have expressed concern to the Exchange in connection with the amount of excess data that stems from the high number of zero-priced vertical and butterfly buy strategies. In particular, the Exchange understands that the high number of zero-priced vertical and butterfly buy strategies can impede liquidity providers from executing against marketable customer interest, as the stream of incoming zero-priced vertical and

⁵ The Exchange believes that vertical and butterfly spreads particularly are being used in this manner given certain characteristics: a vertical spread has the fewest number of legs (two) that contain the same expiration and different strikes and, therefore, is relatively less expensive and has a greater chance of legging into the Simple book; and a butterfly spread also has comparatively fewer legs (three, as compared to a box spread, which has four legs) that contain the same strike and expiration [sic], and, given its structure, has a more defined PnL (minimum and maximum possible trading price limit) than other strategies, providing it with more manageable risk.

⁶ From its analysis of such orders submitted from January 2022 through July 2022, the Exchange identified that approximately only 1.3% of the approximately 177 million zero-priced buy vertical and butterfly spread orders submitted to rest in the COB received fills (including any in-part fills).

butterfly strategies creates new data messages that liquidity providers must process and synthesize into their systems, interfering with liquidity providers' time and resources to otherwise process, synthesize and react to data messages in connection with marketable customer interest. The Exchange notes too that complex orders also generate a COA auction message before resting in the COB, and the COA auction message volume resulting from the influx of zero-priced vertical and butterfly buy spread orders saturates the auction market data and may deter liquidity providers from providing auction liquidity, which adversely impacts customer orders. Additionally, the Exchange has expended resources to implement multiple System enhancements in order to enable the System to continue to handle the large number of such strategies.

To illustrate this issue, the Exchange reviewed the top 25 classes in which the most orders were submitted during Q2 2022, and, of this sample of classes, the Exchange identified 10 classes that experienced (and continue to experience) resting zero-priced vertical and butterfly buy strategies overwhelming their respective COBs. On average, approximately 6.76% of the orders submitted in these 10 classes were zero-priced vertical and butterfly buy strategies, whereas only approximately 0.48% of the orders submitted in the other 15 classes (classes that the Exchange did not identify as experiencing this issue) were zero-priced vertical and butterfly buy strategies. That is, the 10 classes in the dataset reviewed by the Exchange and identified as subject to this particular issue, experienced approximately 1308% more zero-priced vertical and butterfly buy spreads resting in their COBs, on average, than the other 15 classes. Additionally, from an analysis of zero-priced buy vertical and butterfly spread orders submitted from January 2022 through July 2022, the Exchange identified that approximately only 1.3% of the approximately 177 million zero-priced buy vertical and butterfly spread contracts submitted to rest in the COB were filled. The Exchange further identified that the majority of the zero-priced buy vertical and butterfly spread orders were

submitted by only a few firms, that, on average, received fills on only approximately 0.04% of their zero-priced buy vertical and butterfly spread contracts submitted to rest in the COB.

The proposed price check requires zero-priced vertical and butterfly buy spread orders to be designated only as IOC⁷ or Direct to PAR⁸ to ensure that such orders are either executed against marketable orders immediately (in whole or in part) and then cancelled without resting in the COB or sent to directly to a PAR workstation for manual handling by a Floor Broker—that is, also without resting in the COB. Additionally, the proposed rule change allows a zero-priced vertical and butterfly buy spread order to initiate a COA, only if such order is auctioned via PAR.⁹ By allowing zero-priced vertical and butterfly buy spread orders to be submitted only as IOC or for manual handling, including manual submission into a COA, the proposed rule change continues to provide execution opportunities for orders with these strategies that are legitimately priced at zero, while preventing a significant number of these orders from overwhelming the COB, many of which the Exchange believes do not have legitimate prices. Additionally, the proposed rule change provides that the proposed price check may be implemented on a class-by-class basis so that the Exchange may determine whether allowing zero-prices [sic] vertical and butterfly buy spread orders to rest in the COB is appropriate for different classes, which may exhibit different trading characteristics and have different market models. The Exchange notes that multiple provisions governing price checks

⁷ The terms “Immediate-or-Cancel” and “IOC” mean, for an order so designated, a limit order that must execute in whole or in part as soon as the System receives it; the System cancels and does not post to the Book an IOC order (or unexecuted portion) not executed immediately on the Exchange or another options exchange. Users may designate bulk messages as IOC. A User may not designate an IOC order as Direct to PAR.

⁸ A “Direct to PAR” order is an order a User designates to be routed directly to a specified PAR workstation for manual handling. A User must designate a Direct to PAR order as RTH Only.

⁹ To note, orders submitted manually to a COA that do not execute at the end of the COA route back to PAR for manual handling. See Rule 5.33(d)(5)(B) [sic]

and risk controls for complex orders permit the Exchange to administer such price protections or risk controls on a class-by-class basis.¹⁰

Second, the proposed rule change updates the definition of skewed butterfly spread to be consistent with the manner in which the System defines a skewed butterfly spread and what the System currently considers to be a butterfly spread. Rule 5.34(b)(1)(B) currently provides that, for the purposes of Rule 5.34(b) (order and quote price protection mechanisms and risk control for complex orders), a butterfly spread is a three-legged complex order with two legs to buy (sell) the same number of calls (puts) and one leg to sell (buy) twice as many calls (puts), all with the same expiration date but different exercise prices, and the exercise price of the middle leg is between the exercise prices of the other legs. If the exercise price of the middle leg is halfway¹¹ between the exercise prices of the other legs, it is a “true” butterfly; otherwise, it is a “skewed” butterfly. For the purposes of Rule 5.34(b), the System currently defines a skewed butterfly more granularly than the current rule text. The System considers a butterfly spread to be a skewed butterfly where the exercise price of the middle leg is less in-the-money than the average of the exercise prices of the other legs. To illustrate, the System currently considers, for example, a call butterfly to buy one \$40 call, sell two \$65 calls, and buy one \$80 call to be a skewed butterfly as the middle leg (selling \$65 calls) is less in the money¹² than a \$60 strike (which is the average of the \$40 and \$80 strikes) between the legs to buy calls). Additionally, for the purposes of Rule 5.34(b), the System currently considers a true butterfly and a skewed butterfly to be a butterfly spread. That is, if a complex order is not a true butterfly or a skewed butterfly, the System does

¹⁰ See e.g., Rule 5.34(b)(3), (b)(6), (c)(1), and (c)(10).

¹¹ See *infra*.

¹² A call option is in the money if the price of the underlying is higher than its strike price. Calls increase in moneyness as the strike price decreases.

not consider it to be a butterfly spread for the purposes of the protection mechanisms and risk controls rules. Therefore, to reflect more accurately what the System considers to be a skewed butterfly and a butterfly spread generally, the proposed rule change adopts language in Rule 5.34(b)(1) to provide, in relevant part, that the System considers a true butterfly and a skewed butterfly to be a butterfly spread, and that if the exercise price of the middle leg is less in-the-money than the average¹³ of the exercise prices of the other legs, it is a “skewed” butterfly. The proposed rule change is merely a definitional clarification to the rule text and does not alter any current System functionality, but instead adds clarity to the Rule by more accurately reflecting the manner in which the System currently defines a skewed butterfly and a butterfly spread.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the “Act”) and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.¹⁴ Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)¹⁵ requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the

¹³ The proposed rule change also updates the current definition of a true butterfly to refer to “the average of” the exercise prices of the other legs, instead of “halfway between” the exercise prices of the other legs. The Exchange notes this verbiage does not change the meaning of the rule text and instead more specifically reflects the calculation that arrives at the halfway point between the other legs and is more consistent with proposed updated definition of skewed butterfly.

¹⁴ 15 U.S.C. 78f(b).

¹⁵ 15 U.S.C. 78f(b)(5).

mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)¹⁶ requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

In particular, the Exchange believes that the proposed rule change removes impediments to and perfects the mechanism of a free and open market and national market system, and, in general, protects investors and the public interest as it is designed to prevent significant numbers of resting zero-priced vertical and butterfly buy spread orders from overwhelming the COB, many of which are likely not legitimately priced given their pattern of trading. As described above, the Exchange has recently observed a significant and increasing number of zero-priced vertical and butterfly buy spread orders in certain classes submitted to rest in the COB. Because these orders are infrequently executed, the majority of such orders remain resting in the COB, creating a substantial amount of excess market data, which requires market participants and the Exchange to unessentially expend additional resources to handle such data and which may impede liquidity providers from submitting liquidity in response to otherwise marketable interest, including resting customer orders, and auctions. The Exchange again notes that multiple TPHs have expressed concern to the Exchange in connection with the amount of excess data that stems from the high number of zero-priced vertical and butterfly buy strategies. By allowing zero-priced vertical and butterfly buy spread orders to be submitted only as IOC or for manual handling, including manual submission to COA, the proposed rule change continues to provide execution opportunities for these strategy orders, while preventing an influx of such orders from inundating the COB. Also, the Exchange believes that the proposed rule change to permit the

¹⁶ Id.

Exchange to apply the proposed price check on a class basis protects investors as the proposed price check, like other price protections and risk controls permitted under the Rules on a class basis,¹⁷ may be appropriate for different classes as different classes may exhibit different trading characteristics and have different market models.

Further, the Exchange believes that the proposed rule change to clarify the definition of a skewed butterfly and butterfly spread removes impediments to and perfects the mechanism of a free and open market and national market system by amending Rule 5.34(b)(1)(B) to be more consistent with the manner in which the System currently defines a skewed butterfly and a butterfly spread for the purposes of the protection mechanisms and risk controls rules. The proposed rule change is merely a definitional clarification intended to more accurately reflect how the System currently works, thereby increasing transparency in the Rule and ultimately benefitting investors. The proposed clarifications do not alter any current functionality, but instead provides clarity to the Rule by more precisely defining a skewed butterfly and a butterfly spread.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange does not believe the proposed price check for zero-priced vertical and butterfly buy spread orders will impose any burden on intramarket competition because the proposed priced check will apply to all such orders in the same manner. The proposed price protection will benefit investors and the marketplace generally by preventing significant numbers of resting zero-priced vertical and butterfly buy spread orders from overwhelming the COB, many of

¹⁷ See supra note 10.

which are likely not legitimately priced, while continuing to provide execution opportunities for such orders that are legitimately priced at zero via the IOC instruction or manual handling. The Exchange does not believe the proposed price check will impose any burden on intermarket competition because it is designed solely to mitigate the adverse impacts of an increasingly significant number of certain, infrequently executed complex orders resting in the COB. Further, the proposed rule change to clarify the definition of skewed butterfly and butterfly spread in Rule 5.34(b)(1)(B) is not competitive in nature but are merely a definitional clarification in the Rule, consistent with existing System functionality and intended to provide clarity to the Rule by more accurately reflecting the System's current definition of a skewed butterfly and a butterfly spread for the purposes of the purposes of the protection mechanisms and risk controls rules. As stated, the proposed clarification does not alter any current functionality.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission will:

- A. by order approve or disapprove such proposed rule change, or
- B. institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-CBOE-2022-041 on the subject line.

Paper comments:

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

All submissions should refer to File Number SR-CBOE-2022-041. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change.

Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-CBOE-2022-041, and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁸

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¹⁸ 17 CFR 200.30-3(a)(12).