

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-67752; File No. SR-CBOE-2012-043)

August 29, 2012

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Order  
Approving a Proposed Rule Change Relating to Spread Margin Rules

I. Introduction

On May 29, 2012, the Chicago Board Options Exchange, Incorporated (“Exchange” or “CBOE”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to amend CBOE Rule 12.3 to propose universal spread margin rules. The proposed rule change was published for comment in the Federal Register on June 7, 2012.<sup>3</sup> The Commission received no comment letters on the proposed rule change. This order approves the proposed rule change.

II. Description of the Proposal

An option spread is typically characterized by the simultaneous holding of a long and short option of the same type (put or call) where both options involve the same security or instrument, but have different exercise prices and/or expirations. To be eligible for spread margin treatment, the long option may not expire before the short option. These long put/short put or long call/short call spreads are known as two-legged spreads.

Since the inception of the Exchange, the margin requirements for two-legged spreads have been specified in CBOE margin rules.<sup>4</sup> The margin requirement for a two-legged spread

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> Securities Exchange Act Release No. 67086 (May 31, 2012), 77 FR 33802.

<sup>4</sup> CBOE Rules Chapter 12; CBOE Rule 12.3(c)(5)(C)(4).

that is eligible for spread margin treatment is its maximum risk based on the intrinsic values of the options, exclusive of any net option premiums paid or received when the positions were established.<sup>5</sup> For example, consider the following equity option spread:

Long 1 XYZ May2011 60 call  
Short 1 XYZ May2011 50 call

The maximum potential loss (i.e., risk) for this particular spread would be a scenario where the price of the underlying stock (XYZ) is \$60 or higher. If the market price of XYZ is \$60, the May2011 60 call would have an intrinsic value of zero, because the right to buy at \$60 when XYZ can be purchased in the market for \$60 has no intrinsic value. The May2011 50 call would have an intrinsic value of \$10 because of the \$10 advantage gained by being able to buy at \$50 when it costs \$60 to purchase XYZ in the market. Because each option contract controls 100 shares of the underlying stock, the intrinsic value, which was calculated on a per share basis, is multiplied by 100, resulting in an aggregate intrinsic value of \$1,000 for the May2011 50 call.<sup>6</sup> However, because the May2011 50 call is short, the \$1,000 intrinsic value is a loss, because it represents the cost to close (i.e., buy-back) the short option. At an assumed XYZ market price of \$60, netting the intrinsic values of the options results in a loss of \$1,000 (-\$1,000 + \$0).<sup>7</sup> Therefore, the maximum risk of, and margin requirement for, this spread is \$1,000. If there is no maximum risk (i.e., there is no loss calculated at any of the exercise prices found in the spread), no margin is required, but under Exchange margin rules, any net debit incurred to establish the

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<sup>5</sup> Any net credit received for establishing a spread may be applied to the margin requirement, if any. In the case of a spread that is established for a net debit, the net debit must be paid for in full.

<sup>6</sup> The result would be multiplied by the number of contracts when more than a one-by-one contract spread is involved.

<sup>7</sup> At an assumed market price of \$50, both the May2011 50 call and May2011 60 call would have no intrinsic value. Thus, there is no risk (provided any net debit is paid for in full) at an assumed market price of \$50.

spread would be required to be paid for in full. Current CBOE Rule 12.3(c)(5)(C)(4) provides that, when the exercise price of the long call (or short put) is less than or equal to the exercise price of the offsetting short call (or long put), no margin is required; and that when the exercise price of the long call (or short put) is greater than the exercise price of the offsetting short call (or long put), the amount of margin required is the lesser of the margin requirement on the short option, if treated as uncovered, or the difference in the aggregate exercise prices. The intrinsic value calculation described above is essentially expressed, in different words, in the current rule language.

The maximum risk remains constant at \$1,000 for XYZ market prices higher than \$60 because for each incremental increase in the assumed market price of XYZ above \$60, the loss on the short option is equally offset by a gain on the long option in terms of their intrinsic values. By calculating the net intrinsic value of the options at each exercise price found in the spread, as in the computation exemplified above, the maximum risk of, and margin requirement for, any two-legged spread can be determined.

On July 27, 1999, the Commission approved the Exchange's implementation of specific definitions and margin requirements for butterfly spreads and box spreads.<sup>8</sup> In a butterfly spread, a two-legged spread is combined with a second two-legged spread (same type – put or call – and same underlying security or instrument) as in the following example:

Long 1 XYZ May2011 50 call  
Short 1 XYZ May2011 60 call

Long 1 XYZ May2011 70 call  
Short 1 XYZ May2011 60 call

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<sup>8</sup> The butterfly and box spread margin rules, and various other CBOE margin rule changes, were approved by the Commission on July 27, 1999. See Securities Exchange Act Release No. 41658 (July 27, 1999), 64 FR 42736 (SR-CBOE-97-67).

Note that a short XYZ May2011 60 call option is common to both two-legged spreads. Therefore, by adding the May2011 60 call options together, the two spreads can be combined to form a butterfly spread as follows:

Long 1 XYZ May2011 50 call  
Short 2 XYZ May2011 60 calls  
Long 1 XYZ May2011 70 call<sup>9</sup>

The margin requirement for a butterfly spread is its maximum risk. The maximum risk can be determined in the same manner as demonstrated above for two-legged spreads. In this example, the net intrinsic values would be calculated at assumed prices for the underlying security or instrument of \$50, \$60 and \$70, which are the exercise prices found in the butterfly spread. The greatest loss, if any, from among the net intrinsic values is the margin requirement. For this particular butterfly spread, there is no loss in terms of net intrinsic values at any of the assumed underlying prices (\$50, \$60 or \$70). Therefore, there is no margin requirement. However, the net debit incurred to establish this butterfly spread must be paid for in full.

In a box spread, a two-legged call spread is combined with a two-legged put spread. The exercise prices of the long and short put options are the reverse of the call spread. All options have the same underlying security or instrument and expiration date. An example is as follows:

Long 1 XYZ May2011 50 call  
Short 1 XYZ May2011 60 call

Long 1 XYZ May2011 60 put  
Short 1 XYZ May2011 50 put<sup>10</sup>

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<sup>9</sup> This configuration represents a long butterfly spread. The opposite (*i.e.*, short 1 XYZ May2011 50 call, long 2 XYZ May2011 60 calls and short 1 XYZ May2011 70 call) would be a short butterfly spread.

<sup>10</sup> This configuration represents a long box spread. The opposite (*i.e.*, short 1 XYZ May2011 50 call, long 1 XYZ May2011 60 call, short 1 XYZ May2011 60 put and long 1 XYZ May2011 50 put) would be a short box spread.

The margin requirement for a box spread, unless all options are European style, is its maximum risk. The maximum risk of a box spread can be determined in the same manner as demonstrated above for two-legged spreads and butterfly spreads. In this example, the net intrinsic values would be calculated at assumed prices for the underlying security or instrument of \$50 and \$60, which are the exercise prices found in the box spread. The greatest loss, if any, from among the net intrinsic values is the margin requirement. For this particular box spread (long box spread), there is no loss in terms of net intrinsic values at either of the assumed underlying prices (\$50 or \$60). Therefore, there is no margin requirement. However, the net debit incurred to establish this box spread must be paid for in full. In the case of a long box spread where all options are European style, the margin requirement is 50% of the difference in the exercise prices (in aggregate).<sup>11</sup>

On August 13, 2003, the Exchange issued a Regulatory Circular (RG03-066) to define additional types of multi-leg option spreads, and to set margin requirements for these spreads through interpretation of Exchange margin rules. The Regulatory Circular had been filed with the Commission and was approved on August 8, 2003, on a one year pilot basis.<sup>12</sup> The Regulatory Circular was reissued as RG04-90 (dated August 16, 2004) and RG05-37 (dated

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<sup>11</sup> A 50% margin requirement is allowed because a long box spread has an intrinsic value at expiration equal to the difference in the exercise prices (in aggregate), which will more than cover the net debit incurred to establish the spread. A long box spread is, essentially, a riskless position. The difference between the value of the long box spread realizable at expiration and the lower cost to establish the spread represents a risk-free rate of return.

<sup>12</sup> See Securities Exchange Act Release No. 48306 (Aug. 8, 2003), 68 FR 48974 (Aug. 15, 2003) (SR-CBOE-2003-24).

April 6, 2005) pursuant to one year extensions of the pilot granted by the Commission on August 6, 2004, and March 22, 2005, respectively.<sup>13</sup>

The Regulatory Circular identified seven spread strategies by presenting an example of each spread's configuration, and numbering each configuration, rather than designating the configurations by names commonly used in the industry. The seven configurations would be referred to in the industry as:

Long Condor Spread,  
Short Iron Butterfly Spread,  
Short Iron Condor Spread,  
Long Calendar Butterfly Spread,  
Long Calendar Condor Spread,  
Short Calendar Iron Butterfly Spread and  
Short Calendar Iron Condor Spread.

On July 30, 2004, the Exchange filed proposed rule amendments with the Commission to codify the provisions of the Regulatory Circular in Exchange margin rules. Included in the proposal were definitions of Long Condor Spread (which includes a Long Calendar Condor Spread), Short Iron Butterfly Spread (which includes a Short Calendar Iron Butterfly Spread), and Short Iron Condor Spread (which includes a Short Calendar Iron Condor Spread). In addition, it was proposed that the existing definition of Long Butterfly Spread be amended to include a Long Calendar Butterfly Spread. The margin requirements, specific to each type of spread, as had been set-forth in the Regulatory Circulars, were also proposed for inclusion in Exchange margin rules.<sup>14</sup> Contemporaneously, the New York Stock Exchange filed similar

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<sup>13</sup> See Securities Exchange Act Release No. 50164 (Aug. 6, 2004), 69 FR 50405 (Aug. 16, 2004) and Securities Exchange Act Release No. 51407 (Mar. 22, 2005), 70 FR 15669 (Mar. 28, 2005).

<sup>14</sup> See Securities Exchange Act Release No. 52739 (Nov. 4, 2005), 70 FR 69173 (Nov. 14, 2005) (SR-CBOE-2004-53). This release also noticed a partial amendment (Amendment No. 1) that was filed on August 23, 2005 (in coordination with the New York Stock Exchange).

margin rule proposals with the Commission.<sup>15</sup> CBOE's proposed rule amendment was approved by the Commission on December 14, 2005.<sup>16</sup>

Because a number of variations are possible for each basic type of multi-leg option spread strategy, it is problematic to maintain margin rules specific to each.<sup>17</sup> It becomes difficult to continually designate each variation by name, and define and specify a margin requirement for it in the rules. For example, consider the following spreads:

Long 10 XYZ May2011 50 call  
Short 10 XYZ May2011 55 call

Long 5 XYZ May2011 70 call  
Short 5 XYZ May2011 60 call

These two spreads combined are a variation of a condor spread. In a basic condor spread, the number of option contracts would be equal across all option series and the interval between the exercise prices of each spread would be equal. In the above variation, there is a 10-by-10 contract spread vs. a 5-by-5 contract spread, and a spread with a 5 point interval between exercise prices vs. a spread with a 10 point interval between exercise prices. The two spreads in the above example offset each other in terms of risk, and no margin requirement is necessary. However, margin of \$5,000 is required under the Exchange's current margin rules, because this variation of the condor spread is not specified in the rules. Because it is not recognized in

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<sup>15</sup> See Securities Exchange Act Release No. 52738 (Nov. 4, 2005), 70 FR 68501 (Nov. 10, 2005) (SR-NYSE-2004-39). For approval order, see Securities Exchange Act Release No. 52951 (Dec. 14, 2005), 70 FR 75523 (Dec. 20, 2005).

<sup>16</sup> See Securities Exchange Act Release 52950 (Dec. 14, 2005), 70 FR 75512 (Dec. 20, 2005).

<sup>17</sup> A long calendar butterfly spread is an example of a variation. The basic type would be a butterfly spread. In a long calendar butterfly spread, one of the long options expires after the other two options expire concurrently, whereas in the basic butterfly spread, all options expire concurrently. Another example of a variation of a butterfly spread would be a configuration where the intervals between the exercise prices involved are not equal. In a basic butterfly spread, the intervals are equal (i.e., symmetric).

Exchange margin rules, the two spreads must be treated as separate, unrelated spread strategies for margin purposes. As a result, spread margin of \$5,000 is required (on the May2011 70 / May2011 60 call spread) versus no requirement (other than pay for the net debit in full), if the two spreads could be recognized as one strategy.

The Exchange proposed a single, universal definition of a spread and one spread margin requirement that consists of a universal margin requirement computation methodology. In this manner, the margin requirement for all types of option spreads would be covered by a single rule, without regard to the number of option series involved or the term commonly used in the industry to refer to the spread. This would eliminate the need to define, and refer to, particular spreads by monikers commonly used in the industry. Therefore, this rule filing would eliminate definitions of each particular spread strategy (e.g., butterfly, condor, iron butterfly, iron condor, etc.), with one exception.

The one exception would be “Box Spreads.” A definition for “Box Spread” would be retained because loan value is permitted under Exchange margin rules for box spreads. Box spreads are the only type of spread that is eligible for loan value. They, therefore, need to be specially identified in the rules.

Additionally, the proposed rule changes would automatically enable variations not currently recognized in Exchange margin rules (because only a limited number of specific spread strategies are defined) to receive spread margin treatment.

The Exchange proposed a new definition of a spread as CBOE Rule 12.3(a)(5). The key to the definition is that it designates a spread as being an equivalent long and short position in different call option series and/or equivalent long and short positions in different put option

series, or a combination thereof.<sup>18</sup> With respect to equivalency of long and short positions, the definition further requires that the long and short positions be equal in terms of the aggregate value of the underlying security or instrument covered by each leg. The aggregate value equivalency is included so that it is clear that a spread composed of one standard option contract and one reduced value option contract covering the same underlying security or instrument would be permissible. For example, if reduced value options, equal to 1/10th the value of a standard option contract are trading, a spread consisting of 10 reduced value contracts vs. one standard contract would be permissible.<sup>19</sup> As with spreads under the current rule, the proposed rule further requires that the long option(s) expire after, or at the same time as, the short option(s). Additionally, under the proposed rule definition, all options in a spread must have the same exercise style (American or European) and either be composed of all listed options or all over-the-counter (OTC) options. Spreads that do not conform to the definition would be ineligible for spread margin treatment.

Amendments to CBOE Rule 12.3(c)(5)(C)(4) would implement language specifying how a margin requirement is to be computed for any spread that meets the definition, and limit eligibility for spread margin treatment to spreads that meet the definition. The computational method would require that the intrinsic value of each option series contained in a spread be calculated for assumed prices of the underlying security or instrument. The exercise prices of the option series contained in the spread would be required to be used as the assumed prices of the underlying security or instrument. For each assumed price of the underlying, the intrinsic values

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<sup>18</sup> An option series means particular exercise price and expiration date with respect to a put or call option.

<sup>19</sup> Currently, spreads consisting of standard contracts and reduced value contracts are permitted by the rules, although the current rule does not go into detail to require equivalent aggregate underlying value between the long and short legs.

would be netted. The greatest loss from among the netted intrinsic values would be the spread margin requirement. As an example, consider the following spread:

Long 1 XYZ May2011 50 put  
Short 1 XYZ May2011 60 put  
Short 1 XYZ May2011 65 call  
Long 1 XYZ May2011 70 call

This spread is a variation of an iron condor spread. It consists of a put spread and a call spread, with all options covering the same underlying security or instrument. There are an equal number of contracts long and short in both the put spread and call spread. The short options expire with or after the long options (with, in this case). It is assumed that all options are of the same exercise style (American or European). This spread would, therefore, be eligible for the spread margin requirement computation in this proposed rule amendment.

Note that in this example, the interval between the exercise prices in the put spread is greater than the interval in the call spread. In a basic iron condor spread, these intervals are equal. This particular configuration is not recognized under current Exchange margin rules. Therefore the component put spread and call spread must be viewed as separate, unrelated strategies for margin purposes. Under current Exchange margin rules, there is a \$1,000 margin requirement on the put spread and \$500 margin requirement on the call spread. However, there are offsetting properties between the two spreads, and, if viewed collectively, a total margin requirement of \$1,500 is not necessary. Using the proposed computational methodology, a margin requirement would be calculated as follows:

INTRINSIC VALUES for ASSUMED  
PRICES of the UNDERLYING

<u>SPREAD</u>	<u>\$50</u>	<u>\$60</u>	<u>\$65</u>	<u>\$70</u>
Long 1 XYZ May2011 50 put	0	0	0	0
Short 1 XYZ May2011 60 put	\$(1,000)	0	0	0
Short 1 XYZ May2011 65 call	0	0	0	\$(500)
Long 1 XYZ May2011 70 call	0	0	0	0
Net intrinsic values	\$(1,000)	0	0	\$(500)

The greatest loss from among the netted intrinsic values is \$1,000.<sup>20</sup> Under the proposed rule amendments, this would be the margin requirement. This spread margin requirement is \$500 less than that required under current Exchange margin rules. Note that under both the current and proposed rules, any net debit incurred when establishing the spread is required to be paid for in full.

It can be intuitively shown that the put spread and call spread in the example do not have \$1,500 of risk when viewed collectively. If the price of the underlying security or instrument is at or above \$60, the put spread would have no intrinsic value. At or below \$65, the call spread would have no intrinsic value. Thus, both spreads would never be at risk at any given price of the underlying security or instrument. Therefore, margin need be required on only one of the spreads – the one with the highest risk. In this example, the put spread has the highest risk (\$1,000), and that is the risk (and margin requirement) that would be rendered by the proposed computational methodology.

In summary, the proposed rule amendments would enable the Exchange, for margin purposes, to accommodate the many types of spread strategies utilized in the industry today in a fair and efficient manner.

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<sup>20</sup> Again, depending on the type of spread strategy, there may be no loss among the netted intrinsic values, in which case there would be no margin requirement.

### III. Discussion and Commission's Findings

After careful review of the proposed rule change, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange.<sup>21</sup> In particular, the Commission finds that the proposal is consistent with Section 6(b)(5) of the Act,<sup>22</sup> which requires, among other things, that the rules of an exchange be designed to promote just and equitable principles of trade, remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest. More specifically, the Commission believes that the proposed rule change modernizes the treatment of option spread strategies while maintaining margin requirements that are commensurate with the risk of those strategies. Further, because it is consistent with changes being made to FINRA Rule 4210,<sup>23</sup> the proposed rule change will provide for a more uniform application of margin requirements for similar products.

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<sup>21</sup> In approving this proposed rule change, the Commission notes that it has considered the proposed rule's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

<sup>22</sup> 15 U.S.C. 78f(b)(5).

<sup>23</sup> See Securities Exchange Act Release No. 67751 (Aug. 29, 2012) (SR-FINRA-2012-024) (order approving changes to FINRA Rule 4210 relating to spread margin requirements).

IV. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act,<sup>24</sup> that the proposed rule change (SR-CBOE-2012-043) is approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>25</sup>

Kevin M. O'Neill  
Deputy Secretary

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<sup>24</sup> 15 U.S.C. 78s(b)(2).

<sup>25</sup> 17 CFR 200.30-3(a)(12).