

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-89392; File No. SR-OCC-2020-007)

July 24, 2020

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Concerning The Options Clearing Corporation's Synthetic Futures Model

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act" or "Exchange Act"),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on July 10, 2020, the Options Clearing Corporation ("OCC") 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 OCC. OCC filed the proposed rule change pursuant to Section 19(b)(3)(A)<sup>3</sup> of the Act and Rule 19b-4(f)(4)(ii)<sup>4</sup> thereunder so that the proposal was effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Clearing Agency's Statement of the Terms of Substance of the Proposed Rule Change

OCC is filing a proposed rule change to clarify the intended scope of use of an existing OCC margin model. The proposed changes to OCC's Margins Methodology are contained in confidential Exhibit 5 of filing SR-OCC-2020-007. Material proposed to be added to the Margins Methodology as currently in effect is underlined and material

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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> 15 U.S.C. 78s(b)(3)(A).

<sup>4</sup> 17 CFR 240.19b-4(f)(4)(ii).

proposed to be deleted is marked in strikethrough text. All capitalized terms not defined herein have the same meaning as set forth in the OCC By-Laws and Rules.<sup>5</sup>

II. Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, OCC included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. OCC has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of these statements.

(A) Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

(1) Purpose

**Background**

On May 15, 2019, the Commission issued a Notice of No Objection to an advance notice filing by OCC to enhance its margin model for Volatility Index Futures.<sup>6</sup> On May 16, 2019, the Commission approved a proposed rule change by OCC concerning the same changes.<sup>7</sup> The model enhancements included: (1) the daily re-estimation of prices

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<sup>5</sup> OCC's By-Laws and Rules can be found on OCC's public website: <http://optionsclearing.com/about/publications/bylaws.jsp>.

<sup>6</sup> See Securities Exchange Act Release No. 85870 (May 15, 2019), 84 FR 23096 (May 21, 2019) (SR-OCC-2019-801). Certain indices are designed to measure the volatility implied by the prices of options on a particular reference index or asset ("Volatility Indexes"). For example, the Cboe Volatility Index ("VIX") is designed to measure the 30-day expected volatility of the Standard & Poor's 500 index ("SPX"). OCC clears futures contracts on Volatility Indexes. These futures contracts are referred to herein as "Volatility Index Futures."

<sup>7</sup> See Securities Exchange Act Release No. 85873 (May 16, 2019), 84 FR 23620 (May 16, 2019) (SR-OCC-2019-002).

and correlations using “synthetic” futures;<sup>8</sup> (2) an enhanced statistical distribution for modeling price returns for synthetic futures (i.e., an asymmetric Normal Reciprocal Inverse Gaussian (or “NRIG”) distribution); and (3) a new anti-procyclical floor for variance estimates. The main feature of the enhanced model was the replacement of the use of the underlying index itself as a risk factor<sup>9</sup> (e.g., the VIX) with risk factors that are based on observed futures prices (i.e., the “synthetic” futures contracts). These risk factors are then used in the generation of Monte Carlo scenarios for the futures by using volatility and correlations obtained from the existing simulation models in OCC’s propriety margin system, the System for Theoretical Analysis and Numerical Simulations (“STANS”).<sup>10</sup> Additionally, the model has the ability to capture the “Samuelson effect,”<sup>11</sup> when appropriate for a product, thus offering more accurate margins across the term structure.

The enhanced model was initially adopted to replace OCC’s former model for Volatility Index Futures, which modeled the potential final settlement prices of Volatility

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<sup>8</sup> A “synthetic” futures time series, for the intended purposes of OCC, relates to a uniform substitute for a time series of daily settlement prices for actual futures contracts, which persists over many expiration cycles and thus can be used as a basis for econometric analysis.

<sup>9</sup> A “risk factor” within OCC’s margin system may be defined as a product or attribute whose historical data is used to estimate and simulate the risk for an associated product.

<sup>10</sup> See Securities Exchange Act Release No. 53322 (February 15, 2006), 71 FR 9403 (February 23, 2006) (SR-OCC-2004-20). A detailed description of the STANS methodology is available at <http://optionsclearing.com/risk-management/margins/>.

<sup>11</sup> The Samuelson effect is a term used to describe the observation that shorter tenor contracts tend to be more volatile than back tenor contracts. See Samuelson, Paul A., “Proof that Properly Anticipated Prices Fluctuate Randomly,” *Industrial Management Review*, Vol. 6 (1965).

Index Futures using the underlying index as the risk factor.<sup>12</sup> However, this enhanced model is also fit for use for Cboe’s AMERIBOR Futures<sup>13</sup> because the model is better able to capture the correlation and idiosyncrasy in futures contracts where coverages across the term structure may potentially be different.<sup>14</sup>

### **Proposed Changes**

OCC proposes to revise its Margins Methodology to clarify the intended scope and use of its “Volatility Index Futures Model,” which would be renamed the “Synthetic Futures Model.” Under the proposed rule change, the Synthetic Futures Model would be available for use for the AMERIBOR Futures cleared by OCC. OCC also proposes to modify the Margins Methodology to describe certain model parameter calibrations more generally for a given futures product. For example, the proposed rule change would allow OCC to adjust certain features of the model involving the use of logarithmic returns and seasonal adjustments so it can be appropriately calibrated for AMERIBOR Futures, which do not exhibit the Samuelson effect observed with Volatility Index Futures. In

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<sup>12</sup> OCC’s former model for Volatility Index Futures was subject to certain limitations, which were addressed by the enhanced model. For example, Volatility Indexes, unlike futures contracts, are not investible (*i.e.*, they cannot be replicated by static portfolios of traded contracts). In addition, the futures market has a term structure that cannot be modeled using just the underlying index.

<sup>13</sup> AMERIBOR Futures are futures on the American Interbank Offered Rate disseminated by the American Financial Exchange, LLC, which is a transactions-based interest rate benchmark that represents market-based borrowing costs (<http://www.cboe.com/products/futures/ameribor-futures>).

<sup>14</sup> For example, OCC also maintains a “Generic Futures Model,” which is a simple model based on the cost of carry that is primarily used to margin equity-like futures such as SPX futures and interest rates futures such as AMERIBOR Futures. This model also has certain limitations (*e.g.*, the model does not consider the volatility term structure of futures contracts by assuming a flat volatility for all contracts, and it assumes a perfect correlation among different futures contracts on the same underlying asset).

addition, the methodology would be revised for AMERIBOR Futures to provide flexibility in applying the anti-procyclical floor currently used for Volatility Index Futures. OCC adopted a scaled variance floor for Volatility Index Futures, where the scaling is calculated based on the underlying Volatility Index, to ensure the model had an effective floor to address anti-procyclicality. Based on the characteristics of AMERIBOR Futures, OCC proposes to use the unconditional variance from the 500-days of synthetic futures data to estimate the procyclical floor and the scale factor applied to the variance floor would be set to 1.

OCC also proposes other clean-up changes to the Margins Methodology. Specifically, OCC would clarify that OCC no longer uses a Student's t-distribution for univariate modeling for most risk factors<sup>15</sup> and remove redundant language used to describe how estimations for synthetic futures are done on a daily basis (i.e., are designated as "non-pending"). OCC also proposes to remove statements related to OCC's old Clearing Fund methodology, which was replaced in September 2018.<sup>16</sup>

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<sup>15</sup> See Securities Exchange Act Release No. 83326 (May 24, 2018), 83 FR 25081 (May 31, 2018) (SR-OCC-2017-022) and Securities Exchange Act Release No. 83305 (May 23, 2018), 83 FR 24536 (May 29, 2018) (SR-OCC-2017-811).

<sup>16</sup> On July 26, 2018, the SEC issued a Notice of No Objection to an advance notice by OCC concerning the adoption of a new stress testing and Clearing Fund methodology. See Securities Exchange Act Release No. 83714 (July 26, 2018), 83 FR 37570 (August 1, 2018) (SR-OCC-2018-803). On July 27, 2018, the SEC approved a proposed rule change by OCC concerning the same proposal. See Securities Exchange Act Release No. 83735 (July 27, 2018), 83 FR 37855 (August 2, 2018) (SR-OCC-2018-008).

(2) Statutory Basis

OCC believes the proposed rule change is consistent with Section 17A of the Act<sup>17</sup> and the rules thereunder applicable to OCC. Section 17A(b)(3)(F) of the Act<sup>18</sup> requires, in part, that the rules of a clearing agency be designed to promote the prompt and accurate clearance and settlement of derivative agreements, contracts, and transactions. The proposed rule change would make minor changes to OCC's Margins Methodology so that the Synthetic Futures Model can be used to model Cboe's AMERIBOR Futures. OCC believes the Synthetic Futures Model may provide better margin coverage for these products than other margin models maintained by OCC. OCC uses the margin it collects from a defaulting Clearing Member to protect other Clearing Members from losses as a result of the default and ensure that OCC is able to continue the prompt and accurate clearance and settlement of its cleared products. OCC therefore believes that the proposed rule change is designed to promote the prompt and accurate clearance and settlement derivatives transactions in accordance with Section 17A(b)(3)(F) of the Act.<sup>19</sup>

Exchange Act Rules 17Ad-22(e)(6)(i), (iii), and (v)<sup>20</sup> further require that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, among other things: (1) considers, and produces margin levels commensurate with, the risks and particular attributes of each

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<sup>17</sup> 15 U.S.C. 78q-1.

<sup>18</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>19</sup> Id.

<sup>20</sup> 17 CFR 240.17Ad-22(e)(6)(i), (iii), and (v).

relevant product, portfolio, and market; (2) calculates margin sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default; and (3) uses an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products. OCC believes that using the Synthetic Futures Model for AMERIBOR Futures would produce margin levels commensurate with the risks and particular attributes of product in question, generate margin requirements to cover OCC's potential future exposure to its participants, and appropriately take into account relevant product risk factors for AMERIBOR Futures. In this way, OCC believes the proposed rule change is consistent with the requirements of Rules 17Ad-22(e)(6)(i), (iii), and (v).<sup>21</sup>

(B) Clearing Agency's Statement on Burden on Competition

Section 17A(b)(3)(I) of the Act<sup>22</sup> requires that the rules of a clearing agency not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. OCC does not believe that the proposed rule change would have any impact or impose a burden on competition. Recent impact analysis by OCC indicates that the impact on margin requirements for currently affected Clearing Members would be relatively minimal, both in terms of absolute dollars and as a percentage of aggregate account-level margin requirements.<sup>23</sup> As a result, OCC does not believe that the proposed rule change would unfairly inhibit access to OCC's services or disadvantage or favor any particular user in relationship to another user. Accordingly, OCC does not

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<sup>21</sup> 17 CFR 240.17Ad-22(e)(6)(i), (iii), and (v).

<sup>22</sup> 15 U.S.C. 78q-1(b)(3)(I).

<sup>23</sup> OCC has provided impact analysis of the proposed change in confidential Exhibit 3 to filing SR-OCC-2020-007.

believe that the proposed rule change would have any impact or impose a burden on competition.

(C) Clearing Agency's Statement on Comments on the Proposed Rule Change Received from Members, Participants or Others

Written comments on the proposed rule change were not and are not intended to be solicited with respect to the proposed rule change and none have been received.

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

Pursuant to Section 19(b)(3)(A) of the Act,<sup>24</sup> and Rule 19b-4(f)(4)(ii) thereunder,<sup>25</sup> the proposed rule change is filed for immediate effectiveness because it effects a change in an existing service of OCC that (i) primarily affects the clearing operations of OCC with respect to products that are not securities and (ii) does not significantly affect any securities clearing operations of OCC or any rights or obligations of OCC with respect to securities clearing or persons using such securities clearing services.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.<sup>26</sup>

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<sup>24</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>25</sup> 17 CFR 240.19b-4(f)(4)(ii).

<sup>26</sup> Notwithstanding its immediate effectiveness, implementation of this rule change will be delayed until this change is deemed certified under CFTC Rule 40.6.



#### 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](mailto:rule-comments@sec.gov). Please include File Number SR-OCC-2020-007 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-OCC-2020-007. 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 such filing also will be available for inspection and copying at the principal office of OCC and on OCC's website at

<https://www.theocc.com/about/publications/bylaws.jsp>.

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-OCC-2020-007 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.<sup>27</sup>

J. Matthew DeLesDernier  
Assistant Secretary

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<sup>27</sup> 17 CFR 200.30-3(a)(12).