

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-90139; File No. SR-OCC-2020-012)

October 8, 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 ("Exchange Act" or "Act"),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on September 30, 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 primarily by OCC. OCC filed the proposed rule change pursuant to Section 19(b)(3)(A)<sup>3</sup> of the Exchange 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 expand the 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-2020-012. Material proposed to be added to the Margins Methodology as currently in effect is underlined and material proposed to be

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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).

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 adopt an enhanced 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: <https://www.theocc.com/Company-Information/Documents-and-Archives/By-Laws-and-Rules>.

<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 accommodate negative prices and interest rates.

On July 10, 2020, OCC filed a proposed rule change to expand the use of the model, currently known as the “Synthetic Futures Model,” to Cboe’s AMERIBOR Futures.<sup>11</sup> OCC now proposes to expand the use of the Synthetic Futures Model to certain products planned to be listed by Small Exchange Inc. (“Small”).

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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> See Securities Exchange Act Release No. 89392 (July 24, 2020), 85 FR 45938 (July 30, 2020) (SR-OCC-2020-007). AMERIBOR Futures are futures on the American Interbank Offered Rate disseminated by the American Financial

## Proposed Changes

On December 6, 2019, OCC filed a proposed rule change to execute an Agreement for Clearing and Settlement Services between OCC and Small in connection with Small's intention to operate as a designated contract market regulated by the Commodity Futures Trading Commission.<sup>12</sup> Small plans to launch new futures products linked to indexes comprised of continuous yields based on the most recently issued (i.e., "on-the-run") U.S. Treasury notes ("Small Treasury Yield Index Futures").<sup>13</sup> OCC proposes to extend the use of its Synthetic Futures Model to these Small Treasury Yield Index Futures.

The Synthetic Futures model maps the price risk factor of a traded futures product to a synthetic time series constructed from the traded prices of similar tenor futures in history. This allows the model to capture differences in volatility of futures across the term structure. Such differences in volatility are exhibited for futures products whose underlying deliverable is linked to a different tenor of a market observable risk factor such as interest rates or volatility. The initial Small Treasury Yield Futures will be based on the underlying yield of the on-the-run 10 year U.S. Treasury notes and hence the volatility of the future will depend on the volatility of the forward value of the on-the-run treasury yield at future expiry. As a result, OCC believes that the Synthetic Futures

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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>12</sup> See Securities Exchange Act Release No. 87774 (December 17, 2019), 84 FR 70602 (December 23, 2019) (SR-OCC-2019-011).

<sup>13</sup> See <https://smallexchange.com/products/s10y>.

Model would provide more appropriate margin coverage for Small Treasury Yield Index Futures than other models in OCC's inventory.<sup>14</sup>

OCC proposes to make certain modifications to its Margins Methodology to implement the proposed change. Specifically, the Margins Methodology would be revised to clarify that certain products with limited price history, such as the Small Treasury Yield Index Futures, may use proxy data to generate price scenarios for the synthetic futures. In addition, OCC would revise the Margins Methodology to note that for Small Treasury Yield Index Futures, OCC would use a fixed NRIX asymmetry parameter, which OCC believes is better suited to the risk profile of the product as the asymmetry of returns is primarily on the left-tail (or negative returns) and already captured by the GARCH model specifications. Consistent with the original implementation of the Synthetic Futures Model, the Small Treasury Yield Index Futures will also use proportional returns in the calibration. Finally, the Margins Methodology would also be revised to note that OCC would initially use a fixed scale factor for purposes of determining the long-run variance floor until sufficient data for the Small Treasury Yield Index Futures is available for this scale factor to be calibrated on a regular basis. The scale factor setting will be reviewed periodically based on the futures data and adjusted, if appropriate.

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<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 can be used to model certain interest rates futures. This model has certain limitations (e.g., the model cannot currently accommodate negative prices and rates).

(2) Statutory Basis

OCC believes the proposed rule change is consistent with Section 17A of the Act<sup>15</sup> and the rules thereunder applicable to OCC. Section 17A(b)(3)(F) of the Act<sup>16</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 Small Treasury Yield Index 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>17</sup>

Exchange Act Rules 17Ad-22(e)(6)(i), (iii), and (v)<sup>18</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>15</sup> 15 U.S.C. 78q-1.

<sup>16</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>17</sup> Id.

<sup>18</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 Small Treasury Yield Index 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 Small Treasury Yield Index Futures.<sup>19</sup> 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>20</sup>

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

Section 17A(b)(3)(I) of the Act<sup>21</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. The Synthetic Futures Model would be used for Small Treasury Yield Index Futures for all Clearing Members upon the launch of the new products. 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 believe that the proposed rule change would

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<sup>19</sup> OCC has provided backtesting analysis for the proposed change in confidential Exhibit 3 to filing SR-OCC-2020-012.

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

<sup>21</sup> 15 U.S.C. 78q-1(b)(3)(I).

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>22</sup> and Rule 19b-4(f)(4)(ii) thereunder,<sup>23</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>24</sup>

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<sup>22</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>23</sup> 17 CFR 240.19b-4(f)(4)(ii).

<sup>24</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 Exchange 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-2020-012 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-2020-012. 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-2020-012 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>25</sup>

J. Matthew DeLesDernier  
Assistant Secretary

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