

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-82785; File No. SR-OCC-2017-011)

February 27, 2018

Self-Regulatory Organizations; The Options Clearing Corporation; Order Approving Proposed Rule Change Related to The Options Clearing Corporation's Model Risk Management Policy

I. Introduction

On December 28, 2017, The Options Clearing Corporation ("OCC") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities and Exchange Act of 1934 ("Act"),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change (SR-OCC-2017-011) to formalize and update OCC's Model Risk Management Policy ("MRM Policy"). The proposed rule change was published for comment in the Federal Register on January 16, 2018.<sup>3</sup> The Commission did not receive any comments regarding the proposed rule change. For the reasons discussed below, the Commission is approving the proposed rule change.

II. Description of the Proposed Rule Change<sup>4</sup>

OCC uses quantitative methods to make estimates, forecasts, and projections.<sup>5</sup> Specifically, OCC employs such methods in the context of its credit risk models, margin system

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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. 82473 (Jan. 9, 2018), 83 FR 2271 (Jan. 16, 2018) (SR-OCC-2017-011) ("Notice").

<sup>4</sup> All terms with initial capitalization that are not otherwise defined herein have the same meaning as set forth in the OCC By-Laws and Rules.

<sup>5</sup> Notice, 83 FR at 2271, n. 6.

and related models, and liquidity risk models.<sup>6</sup> OCC refers to the use of such quantitative methods in this context as Risk Models.<sup>7</sup> OCC's use of models inherently exposes OCC to model risk.<sup>8</sup> Such risk includes the consequences of decisions based on incorrect or misused model outputs.<sup>9</sup> The proposed MRM Policy will apply to all Risk Models that OCC uses to determine, quantify, or measure actual or potential risk exposures or risk mitigating actions.<sup>10</sup>

The MRM Policy details the general framework for OCC's model risk management practices, including describing and outlining the roles and responsibilities of OCC's Quantitative Risk Management department ("QRM"), Model Validation Group ("MVG"), and Model Risk Working Group ("MRWG").<sup>11</sup> The MRM Policy also addresses the roles of OCC's Legal department, Management Committee ("MC") and Board Risk Committee ("RC") in the review and approval of OCC's Risk Models.<sup>12</sup> The proposed rule change would formalize and update OCC's MRM Policy.

Under the MRM Policy, QRM will be responsible for developing, implementing, and monitoring OCC's Risk Models.<sup>13</sup> Regarding model development, QRM will maintain documentation of the design, theory, and logic of each Risk Model, including a description of the

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<sup>6</sup> Id.

<sup>7</sup> Id.

<sup>8</sup> Notice, 83 FR at 2271.

<sup>9</sup> Notice, 83 FR at 2271, n. 5.

<sup>10</sup> Notice, 83 FR at 2271.

<sup>11</sup> Id.

<sup>12</sup> Notice, 83 FR at 2272.

<sup>13</sup> Notice, 83 FR at 2272-73.

model, its intended purpose, assumptions, supporting data, limitations, and other details.<sup>14</sup> As part of model implementation, QRM will review, evaluate, and propose model changes, including model decommissioning, make recommendations to the MRWG for approval of changes, and seek review by the Legal department regarding the regulatory filing requirements related to proposed model changes.<sup>15</sup> The MC will review, and as appropriate, recommend model change proposals to the RC for review and, if appropriate, to OCC's Board for final approval.<sup>16</sup> Finally, QRM will monitor the use and performance of Risk Models, and will report its findings to the MRWG for potential escalation to the MC or RC as necessary.<sup>17</sup>

Under the MRM Policy, MVG will be responsible for maintaining an inventory of OCC's Risk Models, and validating such models no less than annually.<sup>18</sup> Each model validation must include a review of the model's performance, parameters, and assumptions.<sup>19</sup> Such validations must be independent, which is defined by the MRM Policy as an evaluation performed by a qualified person who is free from influence from the persons responsible for the development or operation of the models being validated.<sup>20</sup> Under the proposed MRM Policy, the MRWG is responsible for assisting the MC to oversee and govern OCC's model-related risk issues.<sup>21</sup>

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<sup>14</sup> Notice, 83 FR at 2272.

<sup>15</sup> Id.

<sup>16</sup> Notice, 83 FR at 2273.

<sup>17</sup> Id.

<sup>18</sup> Id.

<sup>19</sup> Id.

<sup>20</sup> Notice, 83 FR at 2273, n. 15.

<sup>21</sup> Notice, 83 FR at 2273.

Specifically, the MRM Policy requires MRWG to provide, among other things, adequate support and legal expertise as it relates to model risk.<sup>22</sup>

Additionally, the MRM Policy provides arrangements governing updates and exceptions to, as well as violations of, the MRM Policy.<sup>23</sup> Specifically, updates to the MRM Policy may be approved by the RC upon recommendation from the MC. Exceptions to the MRM Policy require written approval from OCC's Office of the Executive Chairman.<sup>24</sup> Finally, all violations of the MRM Policy must be reported to OCC's Chief Compliance Officer.<sup>25</sup>

### III. Discussion and Commission Findings

Section 19(b)(2)(C) of the Act directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that such proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to such organization.<sup>26</sup> After carefully considering the proposed rule change, the Commission finds the proposal is consistent with the requirements of the Act and the rules and regulations thereunder applicable to OCC. More specifically, the Commission finds that the proposal is consistent with Section 17A(b)(3)(F) of the Act<sup>27</sup> and Rules 17Ad-22(e)(2)<sup>28</sup> 17Ad-22(e)(4)(vii),<sup>29</sup> 17Ad-22(e)(6)(vii),<sup>30</sup> and 17Ad-22(e)(7)(vii)<sup>31</sup> thereunder.

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<sup>22</sup> Id.

<sup>23</sup> Notice, 83 FR at 2273-74.

<sup>24</sup> Notice, 83 FR at 2274.

<sup>25</sup> Id. Violations involving the Chief Compliance Officer must be reported to the head of Internal Audit or a member of the Office of the Executive Chairman.

<sup>26</sup> 15 U.S.C. 78s(b)(2)(C).

<sup>27</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>28</sup> 17 CFR 240.17Ad-22(e)(2).

A. Consistency with Section 17A(b)(3)(F) of the Act

Section 17A(b)(3)(F) of the Act requires that the rules of a registered clearing agency be designed to, among other things, assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible.<sup>32</sup>

As described above, the MRM Policy is designed to reduce the model risk inherent in OCC's use of credit risk models, margin models, and liquidity risk models. Such model risk includes the consequences of decisions based on incorrect or misused model outputs. The Commission believes that decisions based on incorrect or misused model outputs could lead OCC to suffer credit losses or liquidity shortfalls arising out of the default of a clearing member, and that such losses or shortfalls could negatively affect the securities and funds that have been posted by non-defaulting clearing members and are within OCC's custody or control. For example, if an OCC risk model were to underestimate the risks posed by a clearing member's positions, the default of such a clearing member could cause OCC to face losses in excess of the collateral collected from the defaulting clearing member. Where OCC faces losses in excess of a defaulter's collateral, it may be forced to cover such losses with the securities and funds posted as collateral by non-defaulting clearing members.

The Commission believes that measures that reduce model risk may allow OCC to better manage its credit and liquidity risk exposures by more accurately estimating the collateral OCC must collect from its clearing members to cover those risks. Such increased accuracy may, in

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<sup>29</sup> 17 CFR 240.17Ad-22(e)(4)(vii).

<sup>30</sup> 17 CFR 240.17Ad-22(e)(6)(vii).

<sup>31</sup> 17 CFR 240.17Ad-22(e)(7)(vii).

<sup>32</sup> 15 U.S.C. 78q-1(b)(3)(F).

turn, help OCC avoid credit losses or liquidity shortfalls in excess of collateral posted by a clearing member in the event of a default, and, thus, avoid the need to use non-defaulting clearing members' collateral to cover such losses or shortfalls. Therefore, because the formalization of the MRM Policy would incorporate into OCC's rules measures intended to reduce the likelihood that OCC would have to use non-defaulting clearing members' collateral to manage a clearing member default, the Commission finds that proposal is consistent with Section 17A(b)(3)(F) of the Act.<sup>33</sup>

B. Consistency with Rule 17Ad-22(e)(2)

Rule 17Ad-22(e)(2) under the Act requires, among other things, that a covered clearing agency establish, implement, maintain, and enforce written policies and procedures reasonably designed to provide for governance arrangements that are clear and transparent and specify clear and direct lines of responsibility.<sup>34</sup>

As described above, the MRM Policy provides for arrangements governing updates and exceptions to, as well as violations of, the MRM Policy. Such arrangements provide clarity to OCC staff regarding the operation of the MRM Policy generally, and provide for unforeseen circumstances requiring changes to OCC's practices. Because formalization of the MRM Policy would incorporate into OCC's rules a policy intended to provide such clarity, the Commission finds that the proposal is consistent with Rule 17Ad-22(e)(2)(i).<sup>35</sup>

As described above, the MRM Policy outlines the roles and responsibilities of departments, a working group, and management and board committees within the framework of

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<sup>33</sup> Id.

<sup>34</sup> 17 CFR 240.17Ad-22(e)(2)(i) and (v).

<sup>35</sup> 17 CFR 240.17Ad-22(e)(2)(i).

OCC's model risk management practices. The MRM Policy states that the Board has final authority to approve changes to OCC's Risk Models. The MRM Policy also describes the escalation path for issues arising out of routine performance monitoring. The Commission believes that this aspect of the MRM Policy, which defines approval authority and escalation processes within OCC's governance structure, supports the specification of clear and direct lines of responsibility, and, therefore, is consistent with Rule 17Ad-22(e)(2)(v).<sup>36</sup>

C. Consistency with Rules 17Ad-22(e)(4)(vii), (e)(6)(vii) and 17Ad-22(e)(7)(vii)

Rules 17Ad-22(e)(4)(vii), (e)(6)(vii) and (e)(7)(vii) under the Act require a covered clearing agency to establish, implement, maintain, and enforce written policies and procedures reasonably designed to, among other things, require the performance of a model validation for its credit risk models, margin system and related models, and liquidity risk models not less than annually, or more frequently as may be contemplated by the covered clearing agency's risk management framework established pursuant to Rule 17Ad-22(e)(3) under the Act.<sup>37</sup>

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<sup>36</sup> 17 CFR 240.17Ad-22(e)(2)(v).

<sup>37</sup> 17 CFR 240.17Ad-22(e)(4)(vii), (e)(6)(vii) and (e)(7)(vii). The requirements of Rule 17Ad-22(e)(4) pertain to the effective identification, measurement, monitoring, and management of credit exposures. 17 CFR 240.17Ad-22(e)(4). The requirements of Rule 17Ad-22(e)(6), which apply to a covered clearing agency that performs central counterparty services, pertain to the covering of a covered clearing agency's credit exposures to its participants. 17 CFR 240.17Ad-22(e)(6). The requirements of Rule 17Ad-22(e)(7) pertain to the effective measurement, monitoring, and management of liquidity risk. 17 CFR 240.17Ad-22(e)(7).

Rule 17Ad-22 defines model validation to mean an evaluation of the performance of each material risk management model used by a covered clearing agency (and the related parameters and assumptions associated with such models), including initial margin models, liquidity risk models, and models used to generate clearing or guaranty fund requirements, performed by a qualified person who is free from influence from the persons responsible for the development or operation of the models or policies being validated. 17 CFR 240.17Ad-22(a)(9).

As described above, the MRM Policy provides for the annual validation of OCC's Risk Models, which include credit risk, margin, and liquidity risk models. Under the MRM Policy, a model validation must include a review of the model's performance, parameters, and assumptions. Further, the MRM Policy clarifies that each model validation must be performed by a qualified person who is free from influence from the persons responsible for the development or operation of the models being validated. Therefore, because the Commission believes that the MRM Policy requires the annual validations of the performance, parameters, and assumptions of OCC's credit risk, margin, and liquidity risk models, the Commission finds that the proposed rule change is consistent with Rules 17Ad-22(e)(4)(vii), (e)(6)(vii), and (e)(7)(vii).



IV. Conclusion

On the basis of the foregoing, the Commission finds that the proposed rule change is consistent with the requirements of the Act, and in particular, with the requirements of Section 17A of the Act<sup>38</sup> and the rules and regulations thereunder.

IT IS THEREFORE ORDERED pursuant to Section 19(b)(2) of the Act<sup>39</sup> that the proposed rule change (SR-OCC-2017-011) be, and hereby is, approved.

For the Commission by the Division of Trading and Markets, pursuant to delegated authority.<sup>40</sup>

Eduardo A. Aleman  
Assistant Secretary

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<sup>38</sup> In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

<sup>39</sup> 15 U.S.C. 78s(b)(2).

<sup>40</sup> 17 CFR 200.30-3(a)(12).