

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-68498; File No. AN-FICC-2012-09)

December 20, 2012

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Notice of Filing of Advance Notice and Notice of No Objection Relating to the Replacement of the Prepayment Component of the Value-at-Risk Charge

Pursuant to Section 806(e)(1) of the Payment, Clearing, and Settlement Supervision Act of 2012 (“Clearing Supervision Act”)<sup>1</sup> and Rule 19b-4(n)(1)(i),<sup>2</sup> notice is hereby given that on November 14, 2012, the Fixed Income Clearing Corporation (“FICC”) filed with the Securities and Exchange Commission (“Commission”) the advance notice described in Items I and II below, which Items have been prepared primarily by FICC. This publication serves as notice of no objection to the advance notice and solicits comments on the advance notice from interested persons.

I. Clearing Agency’s Statement of the Terms of Substance of the Advance Notice

FICC is proposing to replace the prepayment model component (“Prepayment Model Change”) of the Mortgage-Backed Securities Division (“MBSD”) Value-at-Risk charge (“VaR Charge”).

II. Clearing Agency’s Statement of the Purpose of, and Statutory Basis for, the Advance Notice

In its filing with the Commission, FICC included statements concerning the purpose of and basis for the advance notice and discussed any comments it received on the proposed rule change and advance notice. The text of these statements may be examined at the places

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<sup>1</sup> 12 U.S.C. 5465(e)(1).

<sup>2</sup> 17 CFR 240.19b-4(n)(1)(i).

specified in Item IV below. FICC has prepared summaries, set forth in sections A and B below, of the most significant aspects of such statements.<sup>3</sup>

(A) Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Advance Notice

Description of Change

(i) Overview

A key component of each MBSD clearing member's Required Fund Deposit (e.g., margin) is the VaR Charge.<sup>4</sup> The VaR Charge is based on simulating to-be-announced ("TBA") price returns which are dependent on projecting interest rates and prepayment levels. FICC maps TBA eligible pools into TBA CUSIPS for cash flow calculations. The cash flow of a TBA CUSIP is the sum of all discounted future monthly cash flows. The future cash flows include the projected monthly principal payment (both scheduled payment and prepayment) and interest rate expense on the estimated outstanding balance.

The MBSD currently uses a prepayment model developed by the Office of Thrift Supervision ("OTS"); this particular model is no longer being supported with parameter updates. Therefore, the MBSD is proposing to replace the current model it is using with a new one which it has developed.

(ii) Structure of the New Model

The proposed new prepayment model would rely on market-observed data that would allow calibration to occur on a regular basis to capture the prepayment risk of the mortgage pools underlying the TBAs. Model parameters will be updated daily using a rolling window of 252-day historical two-year swap rates, ten-year swap rates, and mortgage current coupons for a given product category.

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<sup>3</sup> The Commission has modified the text of the summaries prepared by FICC.

<sup>4</sup> See MBSD Rule 4.

The two-year benchmark would allow FICC to estimate the potential prepayment impact from refinance opportunities offered by the adjustable rate mortgage market. The ten-year swap rate is a standard benchmark for fixed rate mortgages. The current coupon rates are implied from the TBA market prices. Therefore, the FICC believes that the new model will be more responsive to changing market conditions than the current prepayment model.

A key component of any prepayment model is a mortgage rate model which estimates the current coupon (the secondary mortgage rate) for the TBA mortgage pools under various interest rate scenarios. The monthly prepayment speed will be estimated based on intensity function based on the refinancing incentive, loan age, and burnout (percentage of loans that fail to prepay despite apparent refinance incentives). This monthly prepayment speed is used to simulate TBA price returns for the VaR Charge component of the MBSD margin calculation. In the OTS model, the concept of “seasonality” is directly incorporated into the prepayment model. The factor is less of a driver of mortgage prepayment activity and FICC does not believe that it is necessary to incorporate this as a distinct assumption in the new prepayment model. There is a minor effect of seasonality through the pool factor.

During the analysis and design phase of the new prepayment model, FICC considered whether to utilize a “security level” model versus a “loan level” model. Loan level models focus on loan-to-value ratio, credit score, and spread at origination, which are aspects of hedging and risk assessment – particularly in evaluating exposure to involuntary prepayments (foreclosure, work-outs, etc.) that typically arise beyond TBA settlement cycle (less than 90 days). Loan level models are generally used by firms that trade and initiate mortgage-backed securities. FICC, whose processing activity at the MBSD spans a short horizon, chose a security level prepayment model which measures security level attributes that can measure short-term prepayment speed, i.e., the spread between the current coupon and the TBA coupon, seasoning, and average maturity. These are key attributes of voluntary prepayments that can impact TBA prices during the settlement cycle. FICC’s external model validation

team concluded that the proposed prepayment model is appropriate in measuring short-term prepayment speeds.

Anticipated Effect on and Management of Risks

FICC believes that the proposed Prepayment Model Change will enhance the risk management of the positions cleared at the MBSD. First, FICC believes that the proposed Prepayment Model Change will enhance risk management because the current prepayment model is no longer being supported with parameter updates, and thus relies on stale information and produces possibly inaccurate results. Second, as part of the migration to the new model, several steps were taken to reduce the potential risks to FICC and its members, including: validation of the proposed model by an external party, back-testing to validate model performance and analysis to determine the impact of the changes to the VaR requirements for the MBSD Members. Results of FICC's analysis indicate that the proposed Prepayment Model Change will be more responsive to changing market dynamics and FICC believes it will not negatively impact FICC and its members.

(B) Clearing Agency's Statement on Comments on the Advance Notice Received from Members, Participants, or Others

No written comments were solicited or received with respect to the proposed change.

III. Date of Effectiveness of the Advance Notice and Timing for Commission Action

The proposed changes contained in the advance notice may be implemented pursuant to Section 806(e)(1)(G) of Clearing Supervision Act<sup>5</sup> if the Commission does not object to the proposed changes within 60 days of the later of (i) the date that the Commission receives the notice of the proposed changes or (ii) the date the Commission receives any further information it requests for consideration of the notice. The clearing agency shall not implement the proposed

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<sup>5</sup> 12 U.S.C. 5465(e)(1)(G).

changes contained in the advance notice if the Commission objects to the proposed changes.<sup>6</sup>

The Commission may extend the period for review by an additional 60 days if the proposed changes raise novel or complex issues, subject to the Commission providing the clearing agency with prompt written notice of the extension.<sup>7</sup> Proposed changes may be implemented in fewer than 60 days from the receipt of the advance notice, or the date the Commission receives any further information it requested, if the Commission notifies the clearing agency in writing that it does not object to the proposed changes and authorizes the clearing agency to implement the proposed changes on an earlier date, subject to any conditions imposed by the Commission.<sup>8</sup>

The clearing agency shall post notice on its web site of proposed changes that are implemented.<sup>9</sup>

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing. 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

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<sup>6</sup> 12 U.S.C. 5465(e)(1)(F).

<sup>7</sup> 12 U.S.C. 5465(e)(1)(H).

<sup>8</sup> 12 U.S.C. 5465(e)(1)(I).

<sup>9</sup> 17 CFR 240.19b-4(n)(1)(i).

- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number AN-FICC-2012-09 on the subject line.

Paper Comments:

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street, N.E., Washington, DC 20549-1090.

All submissions should refer to File Number AN-FICC-2012-09. 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 advance notice that are filed with the Commission, and all written communications relating to the advance notice 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, N.E., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filings also will be available for inspection and copying at the principal office of FICC and on FICC's website at

[http://www.dtcc.com/downloads/legal/rule\\_filings/2012/ficc/FICC-AN-2012-09.pdf](http://www.dtcc.com/downloads/legal/rule_filings/2012/ficc/FICC-AN-2012-09.pdf).

All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number AN-FICC-2012-09 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

## V. Commission Findings and Notice of No Objection

### (A) Standard of Review

Although Title VIII does not specify a standard that the Commission must apply to determine whether to object to an advance notice, the Commission believes that the purpose of Title VIII, as stated under Section 802(b),<sup>10</sup> is relevant to the review of advance notices.

The stated purpose of Title VIII is to mitigate systemic risk in the financial system and promote financial stability, by (among other things) authorizing the Federal Reserve Board to promote uniform risk management standards for systemically important FMUs, and providing an enhanced role for the Federal Reserve Board in the supervising of risk management standards for systemically important FMUs.<sup>11</sup> Therefore, the Commission believes that when reviewing advance notices for FMUs, the consistency of an advance notice with Title VIII may be judged principally by reference to the consistency of the advance notice with applicable rules of the Federal Reserve Board governing payment, clearing, and settlement activity of the designated FMU.<sup>12</sup>

Section 805(a) requires the Federal Reserve Board and authorizes the Commission to prescribe standards for the payment, clearing, and settlement activities of FMUs designated as systemically important, in consultation with the supervisory agencies. Section 805(b) of the

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<sup>10</sup> 12 U.S.C. 5461(b).

<sup>11</sup> 12 U.S.C. 5461(b).

<sup>12</sup> See Financial Market Utilities, 77 FR 45907 (Aug. 2, 2012).

Clearing Supervision Act<sup>13</sup> requires that the objectives and principles for the risk management standards prescribed under Section 805(a) shall be to:

- Promote robust risk management;
- Promote safety and soundness;
- Reduce systemic risks; and
- Support the stability of the broader financial system.

The relevant rules of the Federal Reserve Board prescribing risk management standards for designated FMUs by their terms do not apply to designated FMUs that are clearing agencies registered with the Commission.<sup>14</sup> Therefore, the Commission believes that the objectives and principles by which the Federal Reserve Board is required and the Commission is authorized to promulgate such rules, as expressed in Section 805(b) of Title VIII,<sup>15</sup> are the appropriate standards at this time by which to evaluate advance notices.<sup>16</sup> Accordingly, the analysis set forth below is organized by reference to the stated objectives and principles in Section 805(b).

(B) Discussion of Advance Notice

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<sup>13</sup> 12 U.S.C. 5464(b).

<sup>14</sup> 12 CFR 234.1(b).

<sup>15</sup> 12 U.S.C. 5464(b).

<sup>16</sup> The risk management standards that have been adopted by the Commission in Rule 17Ad-22 are substantially similar to those of the Federal Reserve Board applicable to designated FMUs other than those designated clearing organizations registered with the CFTC or clearing agencies registered with the Commission. See Clearing Agency Standards, Exchange Act Release No. 34-68080 (Oct.22, 2012). To the extent such Commission standards are in effect at the time advance notices are reviewed in the future, the standards would be relevant to the analysis. Moreover, the analysis of clearing agency rule filings under the Exchange Act would incorporate such standards directly.

The modeling of Prepayment Risk could significantly affect the risk management functions of the clearing agency that are related to systemic risk. The output of a prepayment model becomes an input into the calculation of the VaR Charge, which in turn determines a member's required clearing fund deposit. Weaknesses in the model could lead to the clearing fund being inappropriately low, and thus exposing the clearing agency to greater risk should a member default.

The OTS Model is no longer supported by parameter updates and has not been supported by such updates since December 31, 2011. The current model's reliance on stale parameters results in a potentially inaccurate determination of the speed of prepayments and thus a potentially inaccurate VaR Charge. This lack of calibration makes the OTS Model unreliable and increases the risk that MBSD is not collecting sufficient margin given market conditions. Moving to the FICC Model that can be updated as the economic environment changes promotes robust risk management and reduces systemic risk because these changes can be more accurately reflected in margin calculations.

The Commission is conditioning its notice of no objection on FICC implementing policies and procedures reasonably designed to ensure that FICC timely analyzes and monitors the performance and appropriateness of the FICC Model. As discussed above, the OTS model directly incorporates the concept of seasonality, while the FICC model does not. In addition, the FICC model relies on market-observed data to capture the prepayment risk of the mortgage pools underlying the TBAs. The Commission understands that the OTS and many industry models use historical data on actual prepayments to determine the level of prepayment risk. The Commission believes it is important for both FICC and the Commission to observe how the FICC model compares to actual seasonality and prepayment history, two parameters that had

previously informed the OTS model. As a result, the Commission would expect such policies and procedures to assess the performance of the FICC Model as compared to other published or calculated prepayment rate forecasts and to analyze the VaR coverage resulting from the use of the FICC Model as compared to the coverage that would be obtained after applying alternate VaR methodologies, such as the index-based haircut methodology already utilized by FICC. The Commission expects that this analysis would be disseminated to the Commission on a monthly basis.

The Commission believes that the replacement of the OTS Model with the FICC Model, subject to the conditions described above, meets the objectives and principles for the risk management standards prescribed under Section 805(a). The ability for FICC to update the FICC Model in response to changing economic conditions allows FICC to more appropriately calculate and collect margin, which better enables FICC to respond in the event that a member defaults. This in turn promotes robust risk management and safety and soundness, reduces systemic risk and supports the stability of the broader financial system.

Conclusion

IT IS THEREFORE NOTICED, pursuant to Section 806(e)(1)(I) of the Clearing Supervision Act,<sup>17</sup> that, the Commission DOES NOT OBJECT to the Prepayment Model Change (File No. AN-FICC-2012-09) and that FICC be and hereby is AUTHORIZED to implement the Prepayment Model Change (File No. AN-FICC-2012-09) subject to FICC implementing policies and procedures reasonably designed to ensure that FICC timely analyzes and monitors the performance and appropriateness of the FICC Model.

By the Commission.

Kevin O'Neill  
Deputy Secretary

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<sup>17</sup> 12 U.S.C. 5465(e)(1)(I).