SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-90101; File No. SR-FICC-2020-010)

October 6, 2020

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Order Approving a Proposed Rule Change to Describe Key Components of the Mortgage-Backed Securities Division Stress Testing Program

I. Introduction

On August 11, 2020, Fixed Income Clearing Corporation (“FICC”) filed with the Securities and Exchange Commission (“Commission”) proposed rule change SR-FICC-2020-010, pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)\(^1\) and Rule 19b-4 thereunder.\(^2\) The proposed rule change was published for comment in the Federal Register on August 25, 2020.\(^3\) The Commission did not receive any comment letters on the proposed rule change. For the reasons discussed below, the Commission is approving the proposed rule change.\(^4\)

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II. Description of the Proposed Rule Change

The proposed rule change consists of a proposal to amend the FICC Mortgage-Backed Securities Division ("MBSD") Clearing Rules ("MBSD Rules")\(^5\) to include a new section that would describe the purpose and the key components of MBSD’s stress testing program. The proposed rule change would also provide that vendor-supplied data would be used in the stress testing program, and that a back-up calculation would be used in the event the vendor fails to provide FICC with the vendor-sourced data. The proposed changes are further described below.

A. Background

MBSD provides trade comparison, netting, risk management, settlement, and central counterparty services for the U.S. mortgage-backed securities market. FICC manages its credit exposures to its Clearing Members by collecting an appropriate amount of margin (referred to in the MBSD Rules as Required Fund Deposit) from each Clearing Member.\(^6\) The aggregate of all Clearing Members’ margin amounts (together with certain other deposits required under the MBSD Rules) constitutes MBSD’s Clearing Fund, which FICC would access should a Clearing Member default with insufficient margin to satisfy any FICC losses caused by the liquidation of the defaulting Clearing Member’s portfolio.\(^7\)

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\(^5\) Capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the MBSD Rules, available at: www.dtcc.com/legal/rules-and-procedures.aspx.

\(^6\) See MBSD Rule 4, supra note 5.

\(^7\) Id.
FICC uses stress testing to test the sufficiency of its prefunded financial resources. In contrast to FICC’s margin methodologies, which are designed to limit FICC’s credit exposures under normal market conditions, FICC’s stress testing methodologies are designed to quantify FICC’s potential losses under extreme but plausible market conditions. Therefore, stress testing is designed to help FICC identify credit risks beyond those contemplated by FICC’s margin methodologies, including credit exposures that might result from the realization of potential stress scenarios, such as extreme price changes, multiple defaults, or changes in other valuation inputs and assumptions. As a result, stress testing helps FICC identify the amount of financial resources necessary to cover its credit exposure under stress scenarios in extreme but plausible market conditions.

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10 See Stress Testing Framework Order, supra note 8 at 61083; Notice, supra note 3 at 52388.


12 See Stress Testing Framework Order, supra note 8 at 61083; Notice, supra note 3 at 52388.
The purpose and the key components of MBSD’s stress testing program, among others, are provided in the Stress Testing Framework.\textsuperscript{13} FICC’s stress testing methodologies have three key components: risk identification, scenario development, and risk measurement and aggregation. The key components generally provide that FICC identifies the principal credit risk drivers, develops sets of extreme but plausible historical and hypothetical stress scenarios for the identified risk drivers, and calculates risk metrics for each Clearing Member’s actual portfolio to estimate the profits and losses in connection with such Clearing Member’s close-out under the chosen stress scenarios.\textsuperscript{14}

B. MBSD’s Stress Testing Program

FICC proposes to include a new section in the MBSD Rules to provide the purpose and the key components of FICC’s stress testing program.\textsuperscript{15} By including such description of the stress testing program in the MBSD Rules, which is a public document, FICC intends to make the current stress testing program transparent to its Clearing Members.\textsuperscript{16} Specifically, the proposed rule change provides that FICC uses stress testing to (1) test the sufficiency of the Clearing Fund against FICC’s potential losses assuming the default of a Clearing Member with the largest credit exposure and its entire Affiliated Family under extreme but plausible market conditions, and (2) identify both (x) Clearing

\textsuperscript{13} See Stress Testing Framework Order, supra note 8 at 61082-83.

\textsuperscript{14} See Stress Testing Framework Order, supra note 8 at 61083; Notice, supra note 3 at 52388.

\textsuperscript{15} The changes described in Section II.B. are consistent with the existing Framework.

\textsuperscript{16} See Notice, supra note 3 at 52388.
Members who may pose a greater market risk under certain market conditions, and (y) potential weaknesses in FICC’s margin methodologies. The proposed rule change also provides that FICC’s stress testing program has three key components. First, FICC analyzes the securities and risk exposures in its Clearing Members’ portfolios to identify the principal market risk drivers and capture the risk sensitivity of the portfolios under stressed market conditions. Second, FICC develops a comprehensive set of scenarios including historical scenarios and hypothetical stress scenarios. Third, FICC calculates risk metrics for each Clearing Member’s actual portfolio to estimate the profits and losses in connection with such Clearing Member’s close out under the chosen stress scenarios.

C. Vendor-supplied Data in MBSD’s Stress Testing Program

In connection with FICC’s stress testing program, FICC proposes to use vendor-supplied data in MBSD’s scenario development process, which is the second component of FICC’s stress testing program, and the risk measurement and aggregation process, which is the third component of FICC’s stress testing program.

(1) Historical Data in the Scenario Development Component

The scenario development component involves FICC’s construction of comprehensive and relevant sets of extreme but plausible historical and hypothetical stress scenarios for identified risk drivers. In its development of historical stress scenarios, FICC proposes to examine vendor-supplied historical risk factor\(^{18}\) time

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\(^{17}\) See id.

\(^{18}\) Generally, the term “risk factor” (or “risk driver”) means an attribute, characteristic, variable or other concrete determinant that influences the risk profile of a system, entity, or financial asset. Risk factors may be causes of risk or merely correlated with risk.
series data ("Historical Data") to identify the largest historical changes of risk factors that influence the pricing of mortgage-backed securities.

FICC proposes to use Historical Data because it believes that this data would explain the market price changes of To-Be-Announced ("TBA") securities transactions cleared by MBSD.\textsuperscript{19} In addition, FICC believes that the data would (1) identify stress risk exposures under broad and varied market conditions, and (2) provide MBSD with a capability to design transparent scenarios.\textsuperscript{20}

\textbf{(2) Historical Data and Security-Level Data in the Risk Measurement and Aggregation Component}

FICC represents that the risk measurement and aggregation process calculates risk metrics for each Clearing Member’s actual portfolio to estimate the profits and losses in connection with such Clearing Member’s close out under chosen stress scenarios.\textsuperscript{21} In connection with this calculation, FICC proposes to use a financial profit-and-loss calculation that leverages the Historical Data and the vendor-supplied security-level risk sensitivity\textsuperscript{22} data ("Security-Level Data"). The Security-Level Data is generated using the vendor’s suite of security valuation models that includes an agency mortgage

\textsuperscript{19} See Notice, \textit{supra} note 3 at 52389.

\textsuperscript{20} See \textit{id}.

\textsuperscript{21} See \textit{id}.

\textsuperscript{22} The term “sensitivity” means the percentage value change of a security given each risk factor change.
A prepayment model captures cash flow uncertainty as a result of unscheduled payments of principal (prepayments). An interest rate term structure model describes the relationship between interest rates of different maturities. 23

FICC believes that the vendor’s approach generates stable and robust Security-Level Data. 24 Because the stress profits and losses calculation would include Security-Level Data, FICC believes that the calculated results would reflect results that are close to actual price changes for TBA securities during larger market moves, which are typical of stress testing scenarios. 25

D. Back-up Stress Testing Calculation

Finally, FICC proposes to implement a back-up calculation that it would use in the event the vendor fails to provide FICC with the vendor-sourced data described above. Specifically, if the vendor fails to provide any data or a significant portion of the data in accordance with the timeframes to which FICC and the vendor agreed, FICC would use the most recently available data on the first day that such disruption occurs. If FICC and the vendor expect that the vendor would resume providing data within five business days, FICC would determine whether to calculate the daily stress testing calculation using the most recently available data or a back-up calculation, described below. If FICC and the vendor expect that the data disruption would extend beyond five days, FICC would utilize the back-up calculation.

E. Delayed Implementation of the Proposed Rule Change

FICC proposes to implement the proposed rule change within 45 Business Days after the Commission’s approval of this proposed rule change. Prior to the effective date,

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23 A prepayment model captures cash flow uncertainty as a result of unscheduled payments of principal (prepayments). An interest rate term structure model describes the relationship between interest rates of different maturities.

24 See Notice, supra note 3 at 52389.

25 See id.
FICC would add legends to the MBSD Rules to state that the specified changes to the MBSD Rules have been approved but not yet implemented, and to provide the date such approved changes would be implemented. The legends would also include the file number of the approved proposed rule change and state that once implemented, the legends would automatically be removed from the MBSD Rules.

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. After careful consideration, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to FICC. In particular, the Commission finds that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Act, as well as Rule 17Ad-22(e)(4)(iii) and (iv) thereunder for the reasons described below.

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

Section 17A(b)(3)(F) of the Act requires, in part, that the rules of a registered clearing agency, such as FICC, be designed to promote the prompt and accurate clearance and settlement of securities transactions, and, in general, to protect investors and the public interest.

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28 17 CFR 240.17Ad-22(e)(4)(iii) and (iv).
29 Id.
First, as described in Section II.B., the proposed rule change would incorporate a new section explaining the purpose and the three key components of the stress testing program, which is currently included in the Stress Testing Framework. By incorporating the purpose and the key components of the stress testing program in the MBSD Rules, the proposed rule change would provide FICC stakeholders with a better understanding of what the stress testing program is designed to accomplish and how FICC manages its credit exposures. The Commission therefore believes that this aspect of the proposed rule change is consistent with Section 17A(b)(3)(F), in that this increased transparency would protect investors and the public interest.

Second, as described in Section II.C., FICC proposes to use vendor-supplied data in MBSD’s scenario development process and the risk measurement and aggregation process. The Commission believes that vendor-supplied data should allow FICC to identify and analyze risk exposures under a broad and varied range of stressed market conditions, which should, in turn, help FICC identify the amount of financial resources necessary to cover its credit exposure under stress scenarios in extreme but plausible market conditions. The Commission further believes that the use of vendor-supplied data should enable FICC to perform a robust assessment of the stress profits and losses calculation, identify and address potential risks with risks with respect to specific Clearing Members and their affiliates, and in turn, should help FICC ensure that it is collecting adequate prefunded financial resources to cover its potential losses resulting from the default of clearing members and their affiliates under extreme but plausible market conditions.
Moreover, as described in Section II.D., FICC proposes to use a back-up calculation in the event the vendor fails to provide FICC with the vendor-sourced data. The Commission believes that the back-up calculation is designed to provide FICC with a reasonable alternative method for calculating stress profit-and-loss in the event of an interruption in the vendor-sourced data feed. By providing FICC with a reasonable alternative method for conducting stress testing, the Commission believes that the proposed back-up calculation is designed to help FICC avoid gaps in assessing the sufficiency of its prefunded financial resources due to the inability of particular data.

Taken together, the Commission believes that these aspects of the proposed rule change, as described in Sections I.I.C. and I.I.D., should better enable FICC to evaluate and manage the credit risk presented by its Clearing Members. The Commission believes that the proposed rule change is designed to improve FICC’s ability to meet its requirement to maintain sufficient prefunded financial resources at a minimum to enable FICC to cover the default of the Clearing Member (including relevant affiliates) that would potentially cause the largest aggregate credit exposure for FICC in extreme but plausible conditions, as required under Rule 17Ad-22(e)(4)(iii).30 Accordingly, the Commission believes that the proposed rule change should help FICC to continue providing prompt and accurate clearance and settlement of securities transactions even in extreme but plausible historical and hypothetical stress scenarios, consistent with Section 17A(b)(3)(F) of the Act.31

30 17 CFR 240.17Ad-22(e)(4).
31 Id.
B. **Consistency with Rule 17Ad-22(e)(4)(iii) and (vi)**

Rule 17Ad-22(e)(4)(iii) requires that a covered clearing agency, such as FICC, establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, by maintaining additional financial resources at the minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the participant family that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions.\(^{32}\) Rule 17Ad-22(e)(4)(vi) requires that a covered clearing agency, such as FICC, effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, by testing the sufficiency of its total financial resources available by conducting stress testing of its total financial resources once each day using standard predetermined parameters and assumptions.\(^{33}\)

As described in Section II.C., FICC proposes to use vendor-supplied data, including Historical Data and Security-Level Data, in MBSD’s scenario development process and the risk measurement and aggregation process. Historical Data would identify stress risk exposures under broad and varied market conditions and provide FICC with an enhanced capability to design more transparent scenarios.\(^{34}\) Security-Level Data

\(^{32}\) 17 CFR 240.17Ad-22(e)(4)(iii).

\(^{33}\) 17 CFR 240.17Ad-22(e)(4)(vi).

\(^{34}\) See Notice, *supra* note 3 at 52389.
would provide stable and robust data that would enable FICC to calculate stress profits and losses that is more accurate. In addition, as described in Section II.D., FICC proposes to use a back-up calculation in the event the vendor fails to provide data to FICC.

The Commission believes that the proposal is consistent with Rule 17Ad-22(e)(4)(iii) because it should better enable FICC to assess its ability to maintain sufficient financial resources to cover a wide range of foreseeable stress scenarios that include the default of the member (including relevant affiliates) that would potentially cause FICC’s largest aggregate credit exposure in extreme but plausible conditions. Additionally, the Commission believes FICC’s proposed stress testing methodology is consistent with Rule 17Ad–22(e)(4)(vi) because it should enable FICC to test the sufficiency of its minimum financial resources by conducting stress testing using standard predetermined parameters and assumptions.  

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 and the rules and regulations promulgated thereunder.

35 See id.
IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act\textsuperscript{39} that proposed rule change SR-FICC-2020-010, be, and it hereby is, APPROVED.\textsuperscript{40}

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.\textsuperscript{41}

J. Matthew DeLesDernier
Assistant Secretary


\textsuperscript{40} In approving the proposed rule change, the Commission considered the proposals’ impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

\textsuperscript{41} 17 CFR 200.30-3(a)(12).