

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-92145; File No. SR-FICC-2020-804)

June 10, 2021

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Notice of No Objection to Advance Notice to Modify the Calculation of the MBS VaR Floor to Incorporate a Minimum Margin Amount

On November 27, 2020, Fixed Income Clearing Corporation (“FICC”) filed with the Securities and Exchange Commission (“Commission”) advance notice SR-FICC-2020-804 (“Advance Notice”) pursuant to Section 806(e)(1) of Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, entitled Payment, Clearing and Settlement Supervision Act of 2010 (“Clearing Supervision Act”),¹ and Rule 19b-4(n)(1)(i)² under the Securities Exchange Act of 1934 (“Exchange Act”).³ In the Advance Notice, FICC proposes to add a minimum margin amount calculation to its margin methodology to enhance FICC’s margin collections as needed in response to periods of extreme market volatility, as described more fully below. The Advance Notice was published for public comment in the Federal Register on January 6, 2021.⁴ Upon

¹ 12 U.S.C. 5465(e)(1).

² 17 CFR 240.19b-4(n)(1)(i).

³ 15 U.S.C. 78a et seq.

⁴ Securities Exchange Act Release No. 90834 (December 31, 2020), 86 Fed. Reg. 584 (January 6, 2021) (File No. SR-FICC-2020-804) (“Notice of Filing”). FICC also filed a related proposed rule change with the Commission pursuant to Section 19(b)(1) of the Exchange Act and Rule 19b-4 thereunder. 15 U.S.C. 78s(b)(1) and 17 CFR 240.19b-4, respectively. FICC seeks approval of the proposed changes to its rules necessary to implement the Advance Notice (the “Proposed Rule Change”). The Proposed Rule Change was published in the Federal Register on December 10, 2020. Securities Exchange Act Release No. 90568 (December 4, 2020), 85 Fed. Reg. 79541 (December 10, 2020) (SR-FICC-2020-017). On December 30, 2020, the Commission published a notice designating a longer

publication of the Notice of Filing, the Commission extended the review period of the Advance Notice for an additional 60 days because the Commission determined that the Advance Notice raised novel and complex issues.⁵ On March 12, 2021, the Commission, by the Division of Trading and Markets, pursuant to delegated authority,⁶ requested additional information from FICC pursuant to Section 806(e)(1)(D) of the Act.⁷ The request for information tolled the Commission's period of review of the Advance Notice until 60 days from the date of the Commission's receipt of the information requested from FICC, absent an additional information request.⁸

period of time for Commission action and a longer period for public comment on the Proposed Rule Change. Securities Exchange Act Release No. 90794 (December 23, 2020), 85 Fed. Reg. 86591 (December 30, 2020) (SR-FICC-2020-017). On February 16, 2021, the Commission published an order instituting proceedings to determine whether to approve or disapprove the Proposed Rule Change. Securities Exchange Act Release No. 91092 (February 9, 2021), 86 Fed. Reg. 91092 (February 16, 2021) (SR-FICC-2020-017).

⁵ Pursuant to Section 806(e)(1)(H) of the Act, the Commission may extend the review period of an advance notice for an additional 60 days, if the changes proposed in the advance notice raise novel or complex issues, subject to the Commission providing the FMU with prompt written notice of the extension. 12 U.S.C. 5465(e)(1)(H); see also Notice of Filing, supra note 4 at 590 (explaining the Commission's rationale for determining that the proposed changes in the Advance Notice raised novel and complex issues because (1) the proposed changes to FICC's margin model are a direct response by FICC to address the unique circumstances that occurred during the pandemic-related market volatility in March and April 2020, and (2) the proposed changes potentially could impact the mortgage market).

⁶ 17 CFR 200.30-3(a)(93).

⁷ 12 U.S.C. 5465(e)(1)(D).

⁸ See 12 U.S.C. 5465(e)(1)(E)(ii) and (G)(ii); see Memorandum from the Office of Clearance and Settlement, Division of Trading and Markets, titled "Commission's Request for Additional Information," available at

The Commission has received comments on the changes proposed in the Advance Notice.⁹ In addition, the Commission received a letter from FICC responding to the comments.¹⁰ This publication serves as notice of no objection to the Advance Notice.

I. THE ADVANCE NOTICE

A. Background

FICC, through MBSD, serves as a central counterparty (“CCP”) and provider of clearance and settlement services for the mortgage-backed securities (“MBS”) markets. A key tool that FICC uses to manage its respective credit exposures to its members is the daily collection of margin from each member. The aggregated amount of all members’ margin constitutes the Clearing Fund, which FICC would access should a defaulted member’s own margin be insufficient to satisfy losses to FICC caused by the liquidation of that member’s portfolio.

Each member’s margin consists of a number of applicable components, including a value-at-risk (“VaR”) charge (“VaR Charge”) designed to capture the potential market price risk associated with the securities in a member’s portfolio. The VaR Charge is

<https://www.sec.gov/comments/sr-ficc-2020-804/srficc2020804-8490035-229981.pdf>.

⁹ Comments on the Advance Notice are available at <https://www.sec.gov/comments/sr-ficc-2020-804/srficc2020804.htm>. Comments on the Proposed Rule Change are available at <https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017.htm>. Because the proposals contained in the Advance Notice and the Proposed Rule Change are the same, all comments received on the proposal were considered regardless of whether the comments were submitted with respect to the Advance Notice or the Proposed Rule Change.

¹⁰ See Letter from Timothy J. Cuddihy, Managing Director of Depository Trust & Clearing Corporation Financial Risk Management, (March 5, 2021) (“FICC Letter”).

typically the largest component of a member's margin requirement. The VaR Charge is designed to provide an estimate of FICC's projected liquidation losses with respect to a defaulted member's portfolio at a 99 percent confidence level.

To determine each member's daily VaR Charge, FICC generally uses a model-based calculation designed to quantify the risks related to the volatility of market prices associated with the securities in a member's portfolio.¹¹ As an alternative to this calculation, FICC also uses a haircut-based calculation to determine the "VaR Floor," which replaces the model-based calculation to become a member's VaR Charge in the event that the VaR Floor is greater than the amount determined by the model-based calculation.¹² Thus, the VaR Floor currently operates as a minimum VaR Charge.

During the period of extreme market volatility in March and April 2020, FICC's current model-based calculation and the VaR Floor haircut-based calculation generated

¹¹ The model-based calculation, often referred to as the sensitivity VaR model, relies on historical risk factor time series data and security-level risk sensitivity data. Specifically, for TBAs, the model calculation incorporates the following risk factors: (1) key rate, which measures the sensitivity of a price change to changes in interest rates; (2) convexity, which measures the degree of curvature in the price/yield relationship of key interest rates; (3) spread, which is the yield spread added to a benchmark yield curve to discount a TBA's cash flows to match its market price; (4) volatility, which reflects the implied volatility observed from the swaption market to estimate fluctuations in interest rates; (5) mortgage basis, which captures the basis risk between the prevailing mortgage rate and a blended Treasury rate; and (6) time risk factor, which accounts for the time value change (or carry adjustment) over an assumed liquidation period. See Securities Exchange Act Release No. 79491 (December 7, 2016), 81 Fed. Reg. 90001, 90003-04 (December 13, 2016) (File No. SR-FICC-2016-007).

¹² FICC uses the VaR Floor to mitigate the risk that the model-based calculation does not result in margin amounts that accurately reflect FICC's applicable credit exposure, which may occur in certain member portfolios containing long and short positions in different asset classes that share a high degree of historical price correlation.

VaR Charge amounts that were not sufficient to mitigate FICC’s credit exposure to its members’ portfolios at a 99 percent confidence level. Specifically, during the period of extreme market volatility, FICC observed that its margin collections yielded backtesting deficiencies beyond FICC’s risk tolerance.¹³ FICC states that these deficiencies arose from a particular aspect of its margin methodology with respect to MBS (particularly, higher coupon TBAs¹⁴), i.e., that current prices may reflect higher mortgage prepayment risk than FICC’s margin methodology currently takes into account during periods of extreme market volatility. In the Advance Notice, FICC proposes to revise the margin methodology in its Rules¹⁵ and its quantitative risk model¹⁶ to better address the risks posed by member portfolios holding TBAs during such volatile market conditions.

B. Minimum Margin Amount

¹³ Backtesting is an ex-post comparison of actual outcomes (i.e., the actual margin collected) with expected outcomes derived from the use of margin models. See 17 CFR 240.17Ad-22(a)(1). FICC conducts daily backtesting to determine the adequacy of its margin assessments. MBSD’s monthly backtesting coverage ratio with respect to margin amounts was 86.6 percent in March 2020 and 94.2 percent in April 2020. See Notice of Filing, supra note 4 at 585.

¹⁴ The vast majority of agency MBS trading occurs in a forward market, on a “to-be-announced” or “TBA” basis. In a TBA trade, the seller agrees on a sale price, but does not specify which particular securities will be delivered to the buyer on settlement day. Instead, only a few basic characteristics of the securities are agreed upon, such as the MBS program, maturity, coupon rate, and the face value of the bonds to be delivered.

¹⁵ The MBSD Clearing Rules are available at <https://www.dtcc.com/legal/rules-and-procedures.aspx>.

¹⁶ As part of the Advance Notice, FICC filed Exhibit 5B – Proposed Changes to the Methodology and Model Operations Document MBSD Quantitative Risk Model (“QRM Methodology”). Pursuant to 17 CFR 240.24b-2, FICC requested confidential treatment of Exhibit 5B.

FICC proposes to introduce a new minimum margin amount into its margin methodology. Under the proposal, FICC would revise the existing definition of the VaR Floor to mean the greater of (1) the current haircut-based calculation, as described above, and (2) the proposed minimum margin amount, which would use a dynamic haircut method based on observed TBA price moves. Application of the minimum margin amount would increase FICC's margin collection during periods of extreme market volatility, particularly when TBA price changes would otherwise significantly exceed those projected by either the model-based calculation or the current VaR Floor calculation.

Specifically, the minimum margin amount would serve as a minimum VaR Charge for net unsettled positions, calculated using the historical market price changes of certain benchmark TBA securities.¹⁷ FICC proposes to calculate the minimum margin amount per member portfolio.¹⁸ The proposal would allow offsetting between short and

¹⁷ FICC would consider the MBSB portfolio as consisting of four programs: Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac") conventional 30-year mortgage-backed securities ("CONV30"), Government National Mortgage Association ("Ginnie Mae") 30-year mortgage-backed securities ("GNMA30"), Fannie Mae and Freddie Mac conventional 15-year mortgage-backed securities ("CONV15"), and Ginnie Mae 15-year mortgage-backed securities ("GNMA15"). Each program would, in turn, have a default benchmark TBA security.

FICC would map 10-year and 20-year TBAs to the corresponding 15-year TBA security benchmark. As of August 31, 2020, 20-year TBAs account for less than 0.5%, and 10-year TBAs account for less than 0.1%, of the positions in MBSB clearing portfolios. FICC states that these TBAs were not selected as separate TBA security benchmarks due to the limited trading volumes in the market. See Notice of Filing, supra note 4 at 586.

¹⁸ The specific calculation would involve the following: FICC would first calculate risk factors using historical market prices of the benchmark TBA securities. FICC would then calculate each member's portfolio exposure on a net position

long positions within TBA securities programs since the TBAs aggregated in each program exhibit similar risk profiles and can be netted together to calculate the minimum margin amount to cover the observed market price changes for each portfolio.

The proposal would allow a lookback period for those historical market price moves and parameters of between one and three years, and FICC would set the initial lookback period for the minimum margin amount calculation at two years.¹⁹ FICC states that the minimum margin amount would improve the responsiveness of its margin

across all products and for each securitization program (i.e., CONV30, GNMA30, CONV15 and GNMA15). Finally, FICC would multiply a “base risk factor” by the absolute value of the member’s net position across all products, plus the sum of each risk factor spread to the base risk factor multiplied by the absolute value of its corresponding position, to determine the minimum margin amount.

To determine the base risk factor, FICC would calculate an “outright risk factor” for GNMA30 and CONV30, which constitute the majority of the TBA market and of positions in MBSD portfolios. For each member’s portfolio, FICC would assign the base risk factor based on whether GNMA30 or CONV30 constitutes the larger absolute net market value in the portfolio. If GNMA30 constitutes the larger absolute net market value in the portfolio, the base risk factor would be equal to the outright risk factor for GNMA30. If CONV30 constitutes the larger absolute net market value in the portfolio, the base risk factor would be equal to the outright risk factor for CONV30.

For a detailed example of the minimum margin amount calculation, see Notice of Filing, supra note 4 at 586-87.

¹⁹ FICC would be permitted to adjust the lookback period within the range in accordance with FICC’s model risk management practices and governance procedures set forth in the Clearing Agency Model Risk Management Framework. See Securities Exchange Act Release No. 81485 (August 25, 2017), 82 Fed. Reg. 41433 (August 31, 2017) (SR-DTC-2017-008; SR-FICC-2017-014; SR-NSCC-2017-008); Securities Exchange Act Release No. 84458 (October 19, 2018), 83 Fed. Reg. 53925 (October 25, 2018) (SR-DTC-2018-009; SR-FICC-2018-010; SR-NSCC-2018-009); Securities Exchange Act Release No. 88911 (May 20, 2020), 85 Fed. Reg. 31828 (May 27, 2020) (SR-DTC-2020-008; SR-FICC-2020-004; SR-NSCC-2020-008).

methodology during periods of market volatility because it would have a shorter lookback period than the model-based calculation, which reflects a ten-year lookback period.²⁰

II. DISCUSSION AND COMMISSION FINDINGS

Although the Clearing Supervision Act does not specify a standard of review for an advance notice, the stated purpose of the Clearing Supervision Act is instructive: to mitigate systemic risk in the financial system and promote financial stability by, among other things, promoting uniform risk management standards for SIFMUs and strengthening the liquidity of SIFMUs.²¹

Section 805(a)(2) of the Clearing Supervision Act authorizes the Commission to prescribe regulations containing risk management standards for the payment, clearing, and settlement activities of designated clearing entities engaged in designated activities for which the Commission is the supervisory agency.²² Section 805(b) of the Clearing Supervision Act provides the following objectives and principles for the Commission's risk management standards prescribed under Section 805(a):²³

- to promote robust risk management;
- to promote safety and soundness;
- to reduce systemic risks; and

²⁰ Notice of Filing, supra note 4 at 586; FICC Letter at 5.

²¹ See 12 U.S.C. 5461(b).

²² 12 U.S.C. 5464(a)(2).

²³ 12 U.S.C. 5464(b).

- to support the stability of the broader financial system.

Section 805(c) provides, in addition, that the Commission’s risk management standards may address such areas as risk management and default policies and procedures, among others areas.²⁴

The Commission has adopted risk management standards under Section 805(a)(2) of the Clearing Supervision Act and Section 17A of the Exchange Act (the “Clearing Agency Rules”).²⁵ The Clearing Agency Rules require, among other things, each covered clearing agency to establish, implement, maintain, and enforce written policies and procedures that are reasonably designed to meet certain minimum requirements for its operations and risk management practices on an ongoing basis.²⁶ As such, it is appropriate for the Commission to review advance notices against the Clearing Agency Rules and the objectives and principles of these risk management standards as described in Section 805(b) of the Clearing Supervision Act. As discussed below, the Commission believes the proposals in the Advance Notice are consistent with the objectives and

²⁴ 12 U.S.C. 5464(c).

²⁵ 17 CFR 240.17Ad-22. See Securities Exchange Act Release No. 68080 (October 22, 2012), 77 Fed. Reg. 66220 (November 2, 2012) (S7-08-11). See also Securities Exchange Act Release No. 78961 (September 28, 2016), 81 Fed. Reg. 70786 (October 13, 2016) (S7-03-14) (“Covered Clearing Agency Standards”). FICC is a “covered clearing agency” as defined in Rule 17Ad-22(a)(5).

²⁶ Id.

principles described in Section 805(b) of the Clearing Supervision Act²⁷ and in the Clearing Agency Rules, in particular Rule 17Ad-22(e)(4)(i) and (e)(6)(i) and (v).²⁸

A. Consistency with Section 805(b) of the Clearing Supervision Act

The Commission believes that the Advance Notice is consistent with the stated objectives and principles of Section 805(b) of the Clearing Supervision Act.²⁹

Specifically, the Commission believes that the changes proposed in the Advance Notice are consistent with promoting robust risk management, promoting safety and soundness, reducing systemic risks, and supporting the broader financial system.³⁰

1. Promoting Robust Risk Management and Safety and Soundness

The Commission believes that adopting the proposed minimum margin amount would be consistent with the promotion of robust risk management and safety and

²⁷ 12 U.S.C. 5464(b).

²⁸ 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i).

²⁹ 12 U.S.C. 5464(b).

³⁰ Several of the issues raised by the commenters are directed at the Proposed Rule Change and will be addressed in that context. These comments generally relate to the proposal's impact on competition and its consistency with the Exchange Act. See Letter from James Tabacchi, Chairman, Independent Dealer and Trade Association, Mike Fratantoni, Chief Economist/Senior Vice President, Mortgage Bankers Association (January 26, 2021) ("IDTA/MBA Letter I") at 2-6; Letter from Christopher A. Iacovella, Chief Executive Officer, American Securities Association (January 28, 2021) ("ASA Letter") at 1-2; Letter from Christopher Killian, Managing Director, Securities Industry and Financial Markets Association (January 29, 2021) ("SIFMA Letter I") at 2-4 (commenting on impact on competition and the application of Section 17A(b)(3)(F) of the Exchange Act). The Commission's evaluation of the Advance Notice is conducted under the Clearing Supervision Act and, as noted above, generally considers whether the proposal would promote robust risk management, promote safety and soundness, reduce systemic risks, and support the broader financial system.

soundness at FICC. FICC proposes to add the minimum margin amount calculation to its margin methodology to better ensure that FICC collects sufficient margin amounts during periods of extreme market volatility to cover the costs that FICC might incur upon liquidating a defaulted member's portfolio.

Specifically, FICC designed the minimum margin amount calculation to better manage the risk of incurring costs associated with increased volatility in a defaulted member's portfolio that contains a large position in TBAs. As described above, during the period of extreme market volatility in March and April 2020, FICC's margin methodology generated margin amounts that were not sufficient to mitigate FICC's credit exposure to its members' portfolios at a 99 percent confidence level. The minimum margin amount would collect additional margin in such circumstances, i.e., when the market price volatility implied by both the current VaR Charge calculation and the current VaR Floor calculation is lower than the market price volatility from corresponding price changes of the proposed TBA securities benchmarks observed during the proposed lookback period.

The Commission believes that FICC's implementation of the minimum margin amount would result in margin levels that better reflect the risks and particular attributes of member portfolios holding positions in TBAs, including in times of increased market price volatility such as what occurred in March and April 2020. Accordingly, the Commission believes that the proposal is consistent with promoting robust risk management because the minimum margin amount would enable FICC to better manage the relevant risks.

Further, the Commission has reviewed and analyzed FICC's analyses regarding

how the proposal would improve FICC's backtesting coverage, which demonstrate that the proposal would result in less credit exposure for FICC to its members. By helping to ensure that FICC collects margin amounts sufficient to manage the risk associated with its members' portfolios holding large TBA positions during periods of extreme market volatility, the proposed minimum margin amount would help limit FICC's exposure in a member default scenario. The proposal would generally provide FICC with additional resources to manage potential losses arising out of a member default. Such an increase in FICC's available financial resources would decrease the likelihood that losses arising out of a member default would exceed FICC's prefunded resources and threaten the safety and soundness of FICC's ongoing operations. Accordingly, the Commission believes that the proposal is also consistent with promoting safety and soundness at FICC.

2. **Reducing Systemic Risks and Supporting the Stability of the Broader Financial System**

The Commission believes that the proposed minimum margin amount is consistent with reducing systemic risks and supporting the stability of the broader financial system. As discussed above, FICC would access its Clearing Fund should a defaulted member's own margin be insufficient to satisfy losses caused by the liquidation of the member's portfolio. FICC proposes to add the minimum margin amount calculation to its margin methodology to collect additional margin from members to cover such costs, and thereby better manage the potential costs of liquidating a defaulted member's portfolio. This could reduce the possibility that FICC would need to mutualize among the non-defaulting members a loss arising out of the close-out process. Reducing the potential for loss mutualization could, in turn, reduce the potential resultant effects on non-defaulting members, their customers, and the broader market arising out of a member

default. Accordingly, the Commission believes that adoption of the proposed minimum margin amount by FICC is consistent with the reduction of systemic risk and supporting the stability of the broader financial system.

One commenter argues that the proposed minimum margin amount is not necessary because despite FICC's March-April 2020 backtesting deficiencies, there were no failures that caused broader systemic problems.³¹ Another commenter argues that the proposed minimum margin amount is not necessary because mid-sized broker/dealers do not present significant risks to the broader financial system.³² The Commission disagrees with these comments, as they do not take into account FICC's regulatory requirements with respect to maintaining sufficient financial resources. As discussed more fully below, the standard under Rule 17Ad-22(e)(4) is not merely for FICC to maintain sufficient financial resources to avoid failures or systemic issues, but to cover its credit exposure to each participant fully with a high degree of confidence.³³ During periods of extreme market volatility, FICC has demonstrated that adding the minimum margin amount to its margin methodology would better enable FICC to manage its credit exposures to members by assessing appropriate margin charges. The Commission has reviewed and analyzed FICC's backtesting data, and agrees that the data demonstrate that the minimum margin amount would result in better backtesting coverage and, therefore, less credit exposure of FICC to its members. Accordingly, the Commission believes that the proposed minimum margin amount would enable FICC to better manage its credit

³¹ See SIFMA Letter I at 2.

³² See IDTA/MBA Letter I at 3.

³³ 17 CFR 240.17Ad-22(e)(4)(i).

risks resulting from periods of extreme market volatility. Moreover, as discussed here, the proposal should help FICC to contain the effects of a member default from spreading to other members and more broadly to other market participants, consistent with the objectives of reducing systemic risks and supporting the stability of the broader financial system.

For the reasons stated above, the Commission believes the changes proposed in the Advance Notice are consistent with Section 805(b) of the Clearing Supervision Act.³⁴

B. Consistency with Rule 17Ad-22(e)(4)(i)

Rule 17Ad-22(e)(4)(i) requires that 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, including by maintaining sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.³⁵

Several commenters question whether FICC has adequately demonstrated that the proposal in the Advance Notice is consistent with Rule 17Ad-22(e)(4)(i) under the Act, arguing that there are more effective methods that FICC could use to mitigate the relevant risks. Three commenters argue that the model-based calculation is well-suited to address FICC's credit risk in volatile market conditions, and instead of adding the minimum margin amount to its margin methodology, FICC should enhance this calculation to

³⁴ 12 U.S.C. 5464(b).

³⁵ 17 CFR 240.17Ad-22(e)(4)(i).

address periods of extreme market volatility such as occurred in March and April 2020.³⁶

In response to these comments, FICC explains that enhancing the model-based calculation would not be an effective approach towards mitigating the risk resulting from periods of extreme market volatility. Although the model-based calculation takes into account risk factors typical to TBAs, the extreme market volatility of March and April 2020 was caused by other factors (e.g., changes in the Federal Reserve purchase program) affecting the TBA markets, yet such factors are not accounted for in the model-based calculation.³⁷ To further demonstrate why the minimum margin amount is necessary, FICC relies upon the results of recent backtesting analyses demonstrating that its existing VaR Charge calculations did not respond effectively to the March and April 2020 levels of market volatility and economic uncertainty such that FICC's margin collections during that period did not meet its 99 percent confidence level.³⁸

The Commission believes that the proposal in the Advance Notice is consistent with Rule 17Ad-22(e)(4)(i) under the Exchange Act.³⁹ As described above, FICC's current VaR Charge calculations resulted in margin amounts that were not sufficient to mitigate FICC's credit exposure to its members' portfolios at FICC's targeted confidence level during periods of extreme market volatility, particularly when TBA price changes significantly exceeded those implied by the VaR model risk factors. Adding the

³⁶ See IDTA/MBA Letter I at 4-5; ASA Letter at 1; SIFMA Letter I at 2-3; SIFMA Letter II at 1-2.

³⁷ See FICC Letter at 2-3.

³⁸ See FICC Letter at 3.

³⁹ 17 CFR 240.17Ad-22(e)(4)(i).

minimum margin amount calculation to its margin methodology should better enable FICC to collect margin amounts that are sufficient to mitigate FICC's credit exposure to its members' portfolios.

In reaching this conclusion, the Commission thoroughly reviewed and analyzed the (1) Advance Notice, including the supporting exhibits that provided confidential information on the calculation of the proposed minimum margin amount, impact analyses (including detailed information regarding the impact of the proposed change on the portfolio of each FICC member over various time periods), and backtesting coverage results, (2) comments received, and (3) the Commission's own understanding of the performance of the current margin methodology, with which the Commission has experience from its general supervision of FICC, compared to the proposed margin methodology.⁴⁰ Specifically, as discussed above, the Commission has considered the results of FICC's backtesting coverage analyses, which indicate that the current margin methodology results in backtesting coverage that does not meet FICC's targeted confidence level. The analyses also indicate that the minimum margin amount would result in improved backtesting coverage towards meeting FICC's targeted coverage level. FICC's backtesting data shows that if the minimum margin amount had been in place, overall margin backtesting coverage (based on 12-month trailing backtesting) would have increased from approximately 99.3% to 99.6% through January 31, 2020 and

⁴⁰ In addition, because the proposals contained in the Advance Notice and the Proposed Rule Change are the same, all information submitted by FICC was considered regardless of whether the information submitted with respect to the Advance Notice or the Proposed Rule Change. See supra note 9.

approximately 97.3% to 98.5% through June 30, 2020.⁴¹ Therefore, the proposal would provide FICC with a more precise margin calculation, thereby enabling FICC to manage its credit exposures to members by maintaining sufficient financial resources to cover such exposures fully with a high degree of confidence.

In response to the comments regarding enhancing the model-based calculation instead of adding the minimum margin amount, the Commission believes that FICC's model-based calculation takes into account risk factors that are typical TBA attributes, whereas the extreme market volatility of March and April 2020 was caused by other external factors that are less subject to modeling. Thus, the commenters' preferred approach is not a viable alternative that would allow for consideration of such factors.⁴²

Accordingly, for the reasons discussed above, the Commission believes that the proposed minimum margin amount is reasonably designed to enable FICC to effectively identify, measure, monitor, and manage its credit exposure to members, consistent with Rule 17Ad-22(e)(4)(i).⁴³

C. Consistency with Rules 17Ad-22(e)(6)(i) and (iii)

Rules 17Ad-22(e)(6)(i) and (iii) require that FICC establish, implement, maintain

⁴¹ See Notice of Filing, supra note 4 at 588.

⁴² This Commission also notes that Section 19(b)(2)(C) of the Act directs the Commission to approve a proposed rule change of a self-regulatory organization if the change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to such organization. 15 U.S.C. 78s(b)(2)(C). Therefore, the Commission is required to approve the proposal unless the existence of alternatives identified by commenters renders the proposal inconsistent with the Act. The Commission does not believe this threshold has been met.

⁴³ 17 CFR 240.17Ad-22(e)(4)(i).

and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, at a minimum, considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market, and calculates margin sufficient to cover its potential future exposure to participants.⁴⁴

One commenter suggests that the minimum margin amount would be inefficient and ineffective at collecting margin amounts commensurate with the risks presented by the securities in member portfolios.⁴⁵ Several commenters argue that the proposed minimum margin amount calculation would produce sudden and persistent spikes in margin requirements.⁴⁶ One commenter argues that the minimum margin amount would effectively replace FICC's existing model-based calculation with one likely to produce procyclical results by increasing margin requirements at times of increased market volatility.⁴⁷ One commenter suggests the March-April 2020 market volatility was so unique that FICC need not adjust its margin methodology to account for a future similar event.⁴⁸

In addition, one commenter argues that the proposed minimum margin amount is inconsistent with Rule 17Ad-22(e)(6)(i) because the minimum margin amount calculation

⁴⁴ 17 CFR 240.17Ad-22(e)(6)(i) and (iii).

⁴⁵ See id.

⁴⁶ See IDTA/MBA Letter I at 5; ASA Letter at 2; SIFMA Letter I at 3-4.

⁴⁷ See IDTA/MBA Letter I at 5.

⁴⁸ See SIFMA Letter I at 3.

is not reasonably designed to mitigate future risk due to its reliance on historical price movements that will not generate margin requirements that equate to future protections against market volatility.⁴⁹ Two commenters argue that the proposed minimum margin amount calculation is not reasonably designed to mitigate future risks because the calculation relies on historical price movements, which will not necessarily generate margin amounts that will protect against future periods of market volatility.⁵⁰ One commenter argues that the MMA is not necessary despite the March and April 2020 backtesting deficiencies because there were no failures or other events that caused systemic issues.⁵¹

Several commenters speculate that since the minimum margin amount is typically larger than the model-based calculation, the minimum margin amount will likely become the predominant calculation for determining a member's VaR Charge.⁵² One commenter argues that instead of the minimum margin amount, FICC should consider adding concentration charges to its margin methodology to address the relevant risks.⁵³

In response, FICC states that any increased margin requirements resulting from the proposed minimum margin amount during periods of extreme market volatility would appropriately reflect the relevant risks presented to FICC by member portfolios holding

⁴⁹ See IDTA/MBA Letter I at 4.

⁵⁰ See IDTA/MBA Letter I at 5; SIFMA Letter I at 2.

⁵¹ See SIFMA Letter I at 2.

⁵² See IDTA/MBA Letter I at 4-5; ASA Letter at 1; SIFMA Letter I at 2-3.

⁵³ See IDTA/MBA Letter I at 5.

large TBA positions.⁵⁴ FICC also states that the minimum margin amount's reliance on observed price volatility with a shorter lookback period will provide margin that responds quicker during market volatility to limit FICC's exposures.⁵⁵ FICC also notes that the margin increases that the minimum margin amount would have imposed following the March-April 2020 market volatility would not have persisted at such high levels indefinitely.⁵⁶

In addition, regarding whether the minimum margin amount will likely become the predominant calculation for determining a member's VaR Charge, FICC states that as the period of extreme market volatility stabilized and the model-based calculation recalibrated to current market conditions, the average daily VaR Charge increase decreased from \$2.2 billion (i.e., 42%) to \$838 million (i.e., 7%) during the fourth quarter of 2020.⁵⁷ Regarding concentration charges, FICC states that concentration charges and the minimum margin amount address separate and distinct types of risk.⁵⁸ Whereas the minimum margin amount is designed to cover the risk of market price volatility, concentration charges (e.g., FICC's recently approved Margin Liquidity Adjustment Charge⁵⁹) are designed to mitigate the risk to FICC of incurring additional market impact

⁵⁴ See FICC Letter at 5-6.

⁵⁵ See id.

⁵⁶ See id.

⁵⁷ See FICC Letter at 5.

⁵⁸ See FICC Letter at 7-8.

⁵⁹ See Securities Exchange Act Release No. 90182 (October 14, 2020), 85 Fed. Reg. 66630 (October 20, 2020) (SR-FICC-2020-009).

cost from liquidating a directionally concentrated portfolio.⁶⁰

The Commission believes that the proposal is consistent with Rule 17Ad-22(e)(6)(i). Implementing the proposed minimum margin amount would result in margin requirements that reflect the risks such holdings present to FICC better than FICC's current margin methodology. In reaching this conclusion and considering the comments above, the Commission thoroughly reviewed and analyzed the (1) Advance Notice, including the supporting exhibits that provided confidential information on the calculation of the proposed minimum margin amount, impact analyses, and backtesting coverage results, (2) comments received, and (3) the Commission's own understanding of the performance of the current margin methodology, with which the Commission has experience from its general supervision of FICC, compared to the proposed margin methodology. Based on its review and analysis of these materials, including the effect that the minimum margin amount would have on FICC's backtesting coverage, the Commission believes that the proposed minimum margin amount is designed to consider, and collect margin commensurate with, the market risk presented by member portfolios holding TBA positions, specifically during periods of market volatility such as what occurred in March and April 2020. For the same reasons, the Commission disagrees with the comments suggesting that the minimum margin amount calculation is not designed to effectively and efficiently collect margin sufficient to mitigate the risks presented by the securities.

In response to comments regarding the sudden and persistent increases in margin that could arise from the minimum margin amount, the Commission acknowledges that,

⁶⁰ See FICC Letter at 7-8.

for some member portfolios in certain market conditions, application of the minimum margin amount calculation would result in an increase in the member's margin requirement based on the potential exposures arising from the TBA positions. The Commission notes that, by design, the minimum margin amount should respond more quickly to heightened market volatility because of its use of historical price data over a relatively short lookback period, as opposed to the model-based calculation which relies on risk factors and uses a longer lookback period.

The Commission also observes, however, based on its review and analysis of FICC's confidential data and analyses, that the increase in margin requirements generated by the minimum margin amount as compared to the other calculations would generally only apply during periods of high market volatility and for a time period thereafter.⁶¹ The frequency with which the minimum margin amount would constitute a majority of members' margin requirements decreases as markets become less volatile, and therefore, is not expected to persist indefinitely.⁶² The Commission believes that including the minimum margin amount as a potential method of determining a member's margin requirement is appropriate, in light of the potential exposures that could arise in a time of heightened market volatility and the need for FICC to cover those exposures. Therefore, the Commission believes that the proposal would provide FICC with a margin calculation better designed to enable FICC to cover its credit exposures to its members by enhancing

⁶¹ FICC provided this data as part of its response to the Commission's Request for Additional Information in connection with the Advance Notice. Pursuant to 17 CFR 240.24b-2, FICC requested confidential treatment of its RFI response. See also FICC Letter at 5.

⁶² See FICC Letter at 5.

FICC's risk-based margin system to produce margin levels commensurate with, the risks and particular attributes of TBAs during periods of extreme market volatility.

In response to the comments regarding the potential procyclical nature of the minimum margin amount calculation and whether it is appropriate for the margin methodology to take into account such extreme market events, the Commission notes that as a general matter, margin floors generally operate to reduce procyclicality by preventing margin levels from falling too low. Moreover, despite the commenters' procyclicality concerns, the Commission understands that the purpose of the minimum margin amount is to ensure that FICC collects sufficient margin in times of heightened market volatility, which means that FICC would, by design, collect additional margin at such times if the minimum margin amount applies. The Commission believes that, because heightened market volatility may lead to increased credit exposure for FICC, it is reasonable for FICC's margin methodology to collect additional margin at such times and to be responsive to market activity of this nature.

In response to the comment that the proposed minimum margin amount is not necessary because the March and April 2020 market volatility did not cause the failure of FICC members or otherwise cause broader systemic problems, the Commission disagrees. Similar to the Commission's analysis above in Section II.B., the relevant standard is not merely for FICC to maintain sufficient financial resources to avoid failures or systemic issues, but for FICC to cover its credit exposures to members with a risk-based margin system that produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market.⁶³ During periods of

⁶³ 17 CFR 240.17Ad-22(e)(6)(i).

extreme market volatility, FICC has demonstrated that adding the minimum margin amount to its margin methodology would better enable FICC to manage its credit exposures to members by producing margin charges commensurate with the applicable risks. The Commission has reviewed and analyzed FICC's backtesting data, and agrees that the data demonstrate that the minimum margin amount would result in better backtesting coverage and, therefore, less credit exposure of FICC to its members. Accordingly, the Commission believes that the proposed minimum margin amount would enable FICC to better manage its credit risks resulting from periods of extreme market volatility.

In response to the comments regarding the minimum margin amount calculation's reliance on historical price movements, the Commission does not agree that Rules 17Ad-22(e)(6)(i) and (iii) preclude FICC from implementing a margin methodology that relies, at least in part, on historical price movements or that FICC's margin methodology must generate margin requirements that "equate to future protections against market volatility." FICC's credit exposures are reasonably measured both by events that have actually happened as well as events that could potentially occur in the future. For this reason, a risk-based margin system is necessary for FICC to cover its potential future exposure to members.⁶⁴ Potential future exposure is, in turn, defined as the maximum

⁶⁴ See 17 CFR 240.17Ad-22(e)(6)(iii) (requiring a covered clearing agency to 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, at a minimum, 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).

exposure estimated to occur at a future point in time with an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure.⁶⁵ Thus, to be consistent with its regulatory requirements, FICC must consider potential future exposure, which includes, among other things, losses associated with the liquidation of a defaulted member's portfolio.

In response to the comments regarding enhancing the model-based calculation instead of adding the minimum margin amount, the Commission believes that, as FICC stated in its response, the inputs to FICC's model-based calculation include risk factors that are typical TBA attributes, whereas the extreme market volatility of March and April 2020, which affected the TBA markets, was caused by other external factors that are less subject to modeling. Accordingly, the Commission believes that FICC would more effectively cover its exposure during such periods by including the minimum margin amount as an alternative margin component based the price volatility in each member's portfolio using observable TBA benchmark prices, using a relatively short lookback period.⁶⁶

In response to the comments regarding whether the minimum margin amount will likely become the predominant calculation for determining a member's VaR Charge, the Commission disagrees. For example, the average daily VaR Charge increase from February 3, 2020 through June 30, 2020 would have been approximately \$2.2 billion or 42%, but as the model-based calculation took into account the current market conditions,

⁶⁵ 17 CFR 240.17Ad-22(a)(13).

⁶⁶ See FICC Letter at 3.

the average daily increase during Q4 of 2020 would have been approximately \$838 million or 7%.⁶⁷

Finally, in response to the comments regarding concentration charges, the Division states that there is a distinction between concentration charges and the VaR Charge in that they are generally designed to mitigate different risks. Whereas the VaR Charge is designed to cover the risk of market price volatility, concentration charges are typically designed to mitigate the risk of incurring additional market impact cost from liquidating a directionally concentrated portfolio.⁶⁸

Accordingly, the Commission believes that adding the minimum margin amount to FICC's margin methodology would be consistent with Rules 17Ad-22(e)(6)(i) and (iii) because this new margin calculation should better enable FICC to establish a risk-based margin system that considers and produces relevant margin levels commensurate with the risks (including potential future exposure) associated with liquidating member portfolios in a default scenario, including volatility in the TBA market.⁶⁹

III. CONCLUSION

IT IS THEREFORE NOTICED, pursuant to Section 806(e)(1)(I) of the Clearing Supervision Act, that the Commission DOES NOT OBJECT to Advance Notice (SR-

⁶⁷ See FICC Letter at 5. The Commission's conclusion is also based upon information that FICC submitted confidentially regarding member-level impact of the proposal from February through December 2020.

⁶⁸ See Securities Exchange Act Release No. 34-90182 (October 14, 2020), 85 Fed. Reg. 66630 (October 20, 2020).

⁶⁹ 17 CFR 240.17Ad-22(e)(6)(i) and (iii).

FICC-2020-804) and that FICC is AUTHORIZED to implement the proposed change as of the date of this notice or the date of an order by the Commission approving proposed rule change SR-FICC-2020-017, whichever is later.

By the Commission.

J. Matthew DeLesDernier
Assistant Secretary