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Page 1 of * 69		SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 19b-4		File No. * SR 2024 - * 801 Amendment No. (req. for Amendments *)	
Filing by Fixed Income Clearing Corporation Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934					
Initial * <input checked="" type="checkbox"/>		Amendment * <input type="checkbox"/>		Withdrawal <input type="checkbox"/>	
Section 19(b)(2) * <input type="checkbox"/>		Section 19(b)(3)(A) * <input type="checkbox"/>		Section 19(b)(3)(B) * <input type="checkbox"/>	
Pilot <input type="checkbox"/>		Extension of Time Period for Commission Action * <input type="checkbox"/>		Date Expires * <input type="text"/>	
		Rule			
		<input type="checkbox"/> 19b-4(f)(1)		<input type="checkbox"/> 19b-4(f)(4)	
		<input type="checkbox"/> 19b-4(f)(2)		<input type="checkbox"/> 19b-4(f)(5)	
		<input type="checkbox"/> 19b-4(f)(3)		<input type="checkbox"/> 19b-4(f)(6)	
Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010 Section 806(e)(1) * <input checked="" type="checkbox"/>			Section 806(e)(2) * <input type="checkbox"/>		
			Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934 Section 3C(b)(2) * <input type="checkbox"/>		
Exhibit 2 Sent As Paper Document <input type="checkbox"/>			Exhibit 3 Sent As Paper Document <input type="checkbox"/>		
Description Provide a brief description of the action (limit 250 characters, required when Initial is checked *). Adopt a Minimum Margin Amount at GSD					
Contact Information Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action. First Name * [REDACTED] Last Name * [REDACTED] Title * [REDACTED] E-mail * RuleFilingAdmin@dtcc.com Telephone * [REDACTED] Fax [REDACTED]					
Signature Pursuant to the requirements of the Securities Exchange of 1934, Fixed Income Clearing Corporation has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized. Date 02/27/2024 (Title *) By [REDACTED] [REDACTED] (Name *) NOTE: Clicking the signature block at right will initiate digitally signing the form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed. Date: 2024.02.27 10:31:38 -05'00'					

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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EDFS website.

Form 19b-4 Information *

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AN - Narrative - GSD MMA - 2024-022

The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

Exhibit 1 - Notice of Proposed Rule Change *

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 1A - Notice of Proposed Rule Change, Security-Based Swap Submission, or Advanced Notice by Clearing Agencies *

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AN - Exhibit 1A - GSD MMA.docx

The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 2- Notices, Written Comments, Transcripts, Other Communications

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Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

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Exhibit Sent As Paper Document

Exhibit 3 - Form, Report, or Questionnaire

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AN - Exhibit 3 - (Redacted) - FICC Imp

Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

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Exhibit Sent As Paper Document

Exhibit 4 - Marked Copies

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The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.

Exhibit 5 - Proposed Rule Text

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AN - Exhibit 5a - GSD MMA 02092024
AN - Exhibit 5b - (Redacted) - Propose

The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change

Partial Amendment

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If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1. Text of Advance Notice

(a) This advance notice consists of amendments to the Fixed Income Government Securities Division (“GSD”) Rulebook (“Rules”)¹ to (1) enhance the VaR Floor by incorporating a “Minimum Margin Amount” and (2) expand the application of the enhanced VaR Floor to include Margin Proxy, as described in greater detail below.

The proposed rule change would necessitate changes to the Methodology Document - GSD Initial Market Risk Margin Model (the “QRM Methodology”), which is attached here as Exhibit 5b.² FICC is requesting confidential treatment of the QRM Methodology and has filed it separately with the Commission.³

(b) Not applicable.

(c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The filing of this advance notice with the Commission was approved by the Risk Committee of FICC’s Board of Directors on October 18, 2022.

¹ Terms not defined herein are defined in the GSD Rules, available at www.dtcc.com/legal/rules-and-procedures.

² The QRM Methodology was filed as a confidential exhibit as part of proposed rule change SR-FICC-2018-001 (the “VaR Filing”). See Securities Exchange Act Release No. 83362 (June 1, 2018), 83 FR 26514 (June 7, 2018) (SR-FICC-2018-001) (“VaR Filing Approval Order”). FICC also filed the VaR Filing proposal as an advance notice pursuant to Section 806(e)(1) of the Payment, Clearing, and Settlement Supervision Act of 2010 (12 U.S.C. 5465(e)(1) and Rule 19b-4(n)(1)(i) under the Securities Exchange Act of 1934, as amended (“Act”) (17 CFR 240.19b-4(n)(1)(i)), with respect to which the U.S. Securities and Exchange Commission (the “Commission”) issued a Notice of No Objection. See Securities Exchange Act Release No. 83223 (May 11, 2018), 83 FR 23020 (May 17, 2018) (SR-FICC-2018-801). The QRM Methodology has been subsequently amended following the VaR Filing Approval Order. See Securities Exchange Act Release Nos. 85944 (May 24, 2019), 84 FR 25315 (May 31, 2019) (SR-FICC-2019-001), 90182 (Oct. 14, 2020), 85 FR 66630 (Oct. 20, 2020) (SR-FICC-2020-009), 93234 (Oct. 1, 2021), 86 FR 55891 (Oct. 7, 2021) (SR-FICC-2021-007), 95605 (Aug. 25, 2022), 87 FR 53522 (Aug. 31, 2022) (SR-FICC-2022-005), 97342 (Apr. 21, 2023), 88 FR 25721 (Apr. 27, 2023) (SR-FICC-2023-003), and 99447 (Jan. 30, 2024), 89 FR 8260 (Feb. 6, 2024) (SR-FICC-2024-001).

³ 17 CFR 240.24b-2.

3. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

Not applicable.

4. Self-Regulatory Organization's Statement on Burden on Competition

Not applicable.

5. Self-Regulatory Organization's Statement on Comments on the Advance Notice Received from Members, Participants, or Others

FICC has not received or solicited any written comments relating to this proposal. If any additional written comments are received, they will be publicly filed as an Exhibit 2 to this filing, as required by Form 19b-4 and the General Instructions thereto.

Persons submitting comments are cautioned that, according to Section IV (Solicitation of Comments) of the Exhibit 1A in the General Instructions to Form 19b-4, the Commission does not edit personal identifying information from comment submissions. Commenters should submit only information that they wish to make available publicly, including their name, email address, and any other identifying information.

All prospective commenters should follow the Commission's instructions on how to submit comments, available at www.sec.gov/regulatory-actions/how-to-submit-comments. General questions regarding the rule filing process or logistical questions regarding this filing should be directed to the Main Office of the SEC's Division of Trading and Markets at tradingandmarkets@sec.gov or 202-551-5777.

FICC reserves the right not to respond to any comments received.

6. Extension of Time Period for Commission Action

Not applicable.

7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

(a) Not applicable.

(b) Not applicable.

(c) Not applicable.

(d) Not applicable.

8. Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission

Not applicable.

9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

Not applicable.

10. Advance Notice Filed Pursuant to Section 806(e) of the Payment, Clearing, and Settlement Supervision Act of 2010

Nature of the Proposed Change

FICC is proposing to enhance the VaR Floor by incorporating a Minimum Margin Amount in order to supplement the VaR model and improve its responsiveness and resilience to extreme market volatility. Specifically, FICC is proposing to modify the VaR Floor and the corresponding description in the GSD Rules to incorporate a Minimum Margin Amount. In addition, FICC is proposing to expand the application of the enhanced VaR Floor to include Margin Proxy. The proposed change would necessitate changes to the QRM Methodology.

FICC has observed extreme market volatility in the fixed income market due to monetary policy changes, inflation, and recession fears. The extreme market volatility has led to greater risk exposures for FICC. Specifically, the extreme market volatilities during the two arguably most stressful market periods, i.e., the COVID period during March of 2020 and the successive interest rate hikes that began in March 2022, have led to market price changes that exceeded the VaR model's projections, which yielded insufficient VaR Charges. As a result, FICC's VaR backtesting metrics fell below the performance target due to unprecedented levels of extreme market volatility. This highlighted the need for FICC to enhance its VaR model so that it can better respond to extreme market volatility.

In order to better manage its risk exposures during extreme market volatility events, FICC is proposing to adopt a Minimum Margin Amount that would be applied as a minimum volatility calculation to ensure that FICC calculates sufficient margin to cover its risk exposures, particularly during extreme market volatility. The proposed Minimum Margin Amount would be incorporated into the VaR Floor to supplement the VaR model and enhance its responsiveness to extreme market volatility. As proposed, the Minimum Margin Amount is designed to improve the margin backtesting performance during periods of heightened market volatility by maintaining a VaR Charge that is appropriately calibrated to reflect the current market volatility. The proposed Minimum Margin Amount aims to enhance backtesting coverage when there are potential VaR model performance challenges, particularly when securities price changes significantly exceed those implied by the VaR model risk factors, as observed during the recent periods of extreme market volatility. FICC believes the proposed Minimum Margin Amount would provide a more reliable estimate for the portfolio risk level when current market conditions significantly deviate from historical observations.

The proposed Minimum Margin Amount would be determined using historical price returns to represent risk along with amounts calculated (i) using a filtered historical simulation

approach, (ii) using a haircut method, and (iii) to incorporate other risk factors. By using a filtered historical simulation approach in which historical returns are scaled to current market volatility, the proposed Minimum Margin Amount would operate as a floor to the VaR Charge to improve the responsiveness of the VaR model to extreme volatility. Because the use of historical price return-based risk representation is not dependent on any sensitivity data vendor, it would allow the proposed Minimum Margin Amount to also operate as a floor to the Margin Proxy and improve the responsiveness of Margin Proxy to extreme volatility.

As a result of this proposal, Members may experience increases in their Required Fund Deposits to the Clearing Fund. Based on an impact study conducted by FICC, on average, at the Member level, the proposed Minimum Margin Amount would have increased the SOD VaR Charge by approximately \$22.45 million, or 17.69%, and the noon VaR Charge by approximately \$23.22 million, or 17.44%, over a 2-year impact study period.

Background

FICC, through GSD, serves as a central counterparty and provider of clearance and settlement services for transactions in the U.S. government securities, as well as repurchase and reverse repurchase transactions involving U.S. government securities.⁴ As part of its market risk management strategy, FICC manages its credit exposure to Members by determining the appropriate Required Fund Deposit to the Clearing Fund and monitoring its sufficiency, as provided for in the GSD Rules.⁵ The Required Fund Deposit serves as each Member's margin.

The objective of a Member's Required Fund Deposit is to mitigate potential losses to FICC associated with liquidating a Member's portfolio in the event FICC ceases to act for that Member (hereinafter referred to as a "default").⁶ The aggregate amount of all Members' Required Fund Deposit constitutes the Clearing Fund. FICC would access the Clearing Fund should a defaulting Member's own Required Fund Deposit be insufficient to satisfy losses to FICC caused by the liquidation of that Member's portfolio.

FICC regularly assesses market and liquidity risks as such risks relate to its margin methodologies to evaluate whether margin levels are commensurate with the particular risk attributes of each relevant product, portfolio, and market. For example, FICC employs daily

⁴ GSD also clears and settles certain transactions on securities issued or guaranteed by U.S. government agencies and government sponsored enterprises.

⁵ See GSD Rule 4 (Clearing Fund and Loss Allocation), supra note 1. FICC's market risk management strategy is designed to comply with Rule 17Ad-22(e)(4) under the Act, where these risks are referred to as "credit risks." 17 CFR 240.17Ad-22(e)(4).

⁶ The GSD Rules identify when FICC may cease to act for a Member and the types of actions FICC may take. For example, FICC may suspend a firm's membership with FICC or prohibit or limit a Member's access to FICC's services in the event that Member defaults on a financial or other obligation to FICC. See GSD Rule 21 (Restrictions on Access to Services) of the GSD Rules, supra note 1.

backtesting to determine the adequacy of each Member's Required Fund Deposit.⁷ FICC compares the Required Fund Deposit⁸ for each Member with the simulated liquidation gains/losses, using the actual positions in the Member's portfolio(s) and the actual historical security returns. A backtesting deficiency occurs when a Member's Required Fund Deposit would not have been adequate to cover the projected liquidation losses and highlights exposure that could subject FICC to potential losses in the event that a Member defaults.

FICC investigates the cause(s) of any backtesting deficiencies and determines if there is an identifiable cause of repeat backtesting deficiencies. FICC also evaluates whether multiple Members may experience backtesting deficiencies for the same underlying reason.

Pursuant to the GSD Rules, each Member's Required Fund Deposit amount consists of a number of applicable components, each of which is calculated to address specific risks faced by FICC, as identified within the GSD Rules.⁹ These components include the VaR Charge, Blackout Period Exposure Adjustment, Backtesting Charge, Holiday Charge, Margin Liquidity Adjustment Charge, special charge, and Portfolio Differential Charge.¹⁰ The VaR Charge generally comprises the largest portion of a Member's Required Fund Deposit amount.

VaR Charge

The VaR Charge is based on the potential price volatility of unsettled positions using a sensitivity-based Value-at-Risk (VaR) methodology. The VaR methodology provides an estimate of the possible losses for a given portfolio based on: (1) confidence level, (2) a time horizon and (3) historical market volatility. The VaR methodology is intended to capture the risks related to market price that are associated with the Net Unsettled Positions in a Member's Margin Portfolios. This risk-based margin methodology is designed to project the potential

⁷ The Model Risk Management Framework ("Model Risk Management Framework") sets forth the model risk management practices of FICC and states that Value at Risk ("VaR") and Clearing Fund requirement coverage backtesting would be performed on a daily basis or more frequently. See Securities Exchange Act Release Nos. 81485 (Aug. 25, 2017), 82 FR 41433 (Aug. 31, 2017) (SR-FICC-2017-014), 84458 (Oct. 19, 2018), 83 FR 53925 (Oct. 25, 2018) (SR-FICC-2018-010), 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (SR-FICC-2020-004), 92380 (July 13, 2021), 86 FR 38140 (July 19, 2021) (SR-FICC-2021-006), 94271 (Feb. 17, 2022), 87 FR 10411 (Feb. 24, 2022) (SR-FICC-2022-001), and 97890 (July 13, 2023), 88 FR 46287 (July 19, 2023) (SR-FICC-2023-008).

⁸ Members may be required to post additional collateral to the Clearing Fund in addition to their Required Fund Deposit amount. See e.g., Section 7 of GSD Rule 3 (Ongoing Membership Requirements), supra note 1 (providing that adequate assurances of financial responsibility of a member may be required, such as increased Clearing Fund deposits). For backtesting comparisons, FICC uses the Required Fund Deposit amount, without regard to the actual, total collateral posted by the member to the GSD Clearing Fund.

⁹ Supra note 1.

¹⁰ See GSD Rule 4 (Clearing Fund and Loss Allocation), Section 1b. Supra note 1.

losses that could occur in connection with the liquidation of a defaulting Member's Margin Portfolio, assuming a Margin Portfolio would take three days to liquidate in normal market conditions. The projected liquidation gains or losses are used to determine the amount of the VaR Charge to each Margin Portfolio, which is calculated to capture the market price risk¹¹ associated with each Member's Margin Portfolio(s) at a 99% confidence level.

FICC's VaR model is designed to provide a margin calculation that covers the market risk in a Member's Margin Portfolio. The VaR model calculates the risk profile of each Member's Margin Portfolio by applying certain representative risk factors to measure the degree of responsiveness of the Margin Portfolio's value to the changes of these risk factors over a historical lookback period of at least 10 years that may be supplemented with an additional stressed period.

The VaR model has been shown to perform well in low to moderate volatility markets. From January 2013 to March 2020, the VaR model has generally performed above the 99% performance target, with deterioration in backtesting coverage only during the two arguably most stressful market periods, *i.e.*, the COVID period during March of 2020 and the successive interest rate hikes that began in March 2022. The market events during these two stressful periods, including monetary policy changes, inflation and recession fears, have resulted in significant market volatility in the fixed income market that exceeded the 99-percentile of the observed historical data set. Specifically, the extreme market volatilities during these two periods have led to market price changes that exceeded the VaR model's projections, which yielded insufficient VaR Charges. As a result, FICC's VaR backtesting metrics fell below the performance target due to unprecedented levels of extreme market volatility. This highlighted the need for FICC to enhance its VaR model so that it can better respond to extreme market volatility. Accordingly, FICC is proposing changes to the VaR Floor that FICC believes would mitigate the risk of potential underperformance of its VaR model under extreme market volatility.

Current VaR Floor

On June 1, 2018, the Commission approved FICC's VaR Filing to make changes to GSD's method of calculating a Member's Required Fund Deposit amount, including the VaR Charge.¹² The VaR Filing amended the definition of VaR Charge to, among other things, incorporate the VaR Floor.¹³ FICC established the VaR Floor to address the risk that in a long/short portfolio the VaR model could calculate a VaR Charge that is erroneously low where the gross market value of unsettled positions in a Member's portfolio is high and the cost of

¹¹ Market price risk refers to the risk that volatility in the market causes the price of a security to change between the execution of a trade and settlement of that trade. This risk is sometimes also referred to as volatility risk.

¹² See VaR Filing Approval Order, *supra* note 2.

¹³ The term "VaR Floor" is currently defined within the definition of VaR Charge. See GSD Rule 1 (Definitions), *supra* note 1.

liquidation in the event of the Member default is also high. This is likely to occur when the VaR model applies substantial risk offsets among long and short unsettled positions in different classes of securities that have a high degree of historical price correlation.¹⁴ When this high degree of historical price correlations does not apply as a result of changing market conditions, the VaR Charge derived from the VaR model can be inadequate, and the VaR Floor would then be applied by FICC to mitigate such risk.

Currently, the VaR Floor is based upon the market value of the gross unsettled positions in the Member's portfolio. The VaR Floor is determined by multiplying the absolute value of the sum of Net Long Positions and Net Short Positions of Eligible Securities, grouped by product and remaining maturity, by a percentage designated by FICC from time to time for such group. For U.S. Treasury and agency securities, such percentage shall be a fraction, no less than 10%, of the historical minimum volatility of a benchmark fixed income index for such group by product and remaining maturity. For mortgage-backed securities, such percentage shall be a fixed percentage that is no less than 0.05%.¹⁵

The current VaR Floor is not designed to address the risk of potential underperformance of the VaR model under extreme market volatility.

Incorporate a Minimum Margin Amount into the VaR Floor

In order to mitigate the risk of potential underperformance of its VaR model under extreme market volatility, FICC proposes to incorporate a Minimum Margin Amount into the VaR Floor to supplement the VaR model and enhance its responsiveness to extreme market volatility. FICC believes this proposal would complement and improve the VaR model performance during stressed market conditions. Specifically, FICC believes this proposal would improve the margin backtesting performance during periods of heightened market volatility by maintaining a VaR Charge that is appropriately calibrated to reflect the current market volatility.

FICC is proposing to introduce a new calculation called the "Minimum Margin Amount" to complement the existing VaR Floor in the GSD Rules. The Minimum Margin Amount would enhance backtesting coverage when there are potential VaR model performance challenges, particularly when securities price changes significantly exceed those implied by the VaR model risk factors, as observed during the recent periods of extreme market volatility. FICC believes the proposed Minimum Margin Amount would provide a more reliable estimate for the portfolio risk level when current market conditions significantly deviate from historical observations.

The Minimum Margin Amount would be defined in the GSD Rules as, with respect to each Margin Portfolio, a minimum volatility calculation for specified Net Unsettled Positions of a Netting Member as of the time of such calculation. The proposed definition would provide that

¹⁴ As an example, certain securities may have highly correlated historical price returns, but if market conditions were to substantially change, these historical correlations could break down, leading to model-generated offsets that could not adequately capture a portfolio's risk.

¹⁵ See "VaR Charge" definition in GSD Rule 1 (Definitions). Supra note 1.

the Minimum Margin Amount shall use historical price returns to represent risk¹⁶ and be calculated as the sum of the following: (a) amounts calculated using a filtered historical simulation (“FHS”) approach¹⁷ to assess volatility by scaling historical market price returns to current market volatility, with market volatility being measured by applying exponentially weighted moving average to the historical market price returns with a decay factor between 0.93 and 0.99, as determined by FICC from time to time based on sensitivity analysis, macroeconomic conditions, and/or backtesting performance, (b) amounts calculated using a haircut method to measure the risk exposure of those securities that lack sufficient historical price return data, (c) amounts calculated to incorporate risks related to (i) repo interest volatility (“repo interest volatility charge”)¹⁸ and (ii) transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio (“bid-ask spread risk charge”).¹⁹ In addition, the proposed definition would require FICC to provide Members with at a minimum one Business Day advance notice of any change to the decay factor via an Important Notice.²⁰

¹⁶ This proposed approach is referred to as the “price return-based risk representation” in the QRM Methodology. Given the availability and accessibility of historical price returns data, FICC believes the proposed approach would help minimize and diversify FICC’s risk exposure from external data vendors.

¹⁷ The FHS method differs from the historical simulation method by incorporating the volatilities of historical price returns as a crucial element. In particular, the FHS method constructs the filtered historical price returns in two steps: first, “devolatilizing” the historical price returns by dividing them by a volatility estimate for the day of the price return, and second, “revolatilizing” the devolatilized price returns by multiplying them by a volatility estimate based on the current market. For additional background on the FHS method, see Filtered historical simulation Value-at-Risk models and their competitors, Pedro Gurrola-Perez and David Murphy, Bank of England, March 2015, at www.bankofengland.co.uk/working-paper/2015/filtered-historical-simulation-value-at-risk-models-and-their-competitors.

¹⁸ The “repo interest volatility charge” is a component of the VaR Charge that is designed to address repo interest volatility. The repo interest volatility charge is calculated based on internally constructed repo interest rate indices. This rule change is proposing to also include the repo interest volatility charge as a component of the Minimum Margin Amount; however, it is not proposing to change the repo interest volatility charge or the manner in which this component is calculated.

¹⁹ The “bid-ask spread risk charge” is a component of the VaR Charge that is designed to address transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio. This rule change is proposing to also include the bid-ask spread risk charge as a component of the Minimum Margin Amount; however, it is not proposing to change the bid-ask spread risk charge or the manner in which this component is calculated.

²⁰ Although the QRM Methodology is being submitted as a confidential Exhibit 5b to this proposal due to its proprietary content, FICC makes available to Members a Value-at-

FICC is proposing to revise the definition of the VaR Floor to incorporate the Minimum Margin Amount, such that the VaR Floor would be the greater of (i) the VaR Floor Percentage Amount and (ii) the Minimum Margin Amount.

The “VaR Floor Percentage Amount” would be the new defined term used to describe the current VaR Floor percentage calculation in the GSD Rules. This rule change is not proposing to change the VaR Floor percentage or the manner in which this component is calculated.

As proposed, the Minimum Margin Amount would be utilized as the VaR Charge for a Member’s Margin Portfolio when it is greater than the current VaR Charge of the Margin Portfolio and the VaR Floor Percentage Amount.

Under the proposed changes to the QRM Methodology, the Minimum Margin Amount would use a price return-based risk representation (i.e., use historical price returns to represent risk)²¹ and be calculated as the sum of (i) amounts calculated using a FHS method that scales historical market price returns to current market volatility, (ii) amounts calculated using a haircut method for securities that lack sufficient historical price return data, and (iii) amounts calculated to incorporate additional risk factors.

FHS Method

Following the FHS method, FICC would first construct historical price returns using certain mapped fixed income securities benchmarks. As proposed, the mapped fixed income securities benchmarks to be used with the FHS method when calculating the Minimum Margin Amount in the QRM Methodology would be Bloomberg Treasury indexes for U.S. Treasury and agency securities, Bloomberg TIPS indexes for Treasury Inflation-Protected Securities (“TIPS”), and to-be-announced (“TBA”) securities for mortgage-backed securities (“MBS”) pools. These benchmarks were selected because their price movements generally closely track those of the securities mapped to them and that their price history is generally readily available and accessible.

After constructing historical price returns, FICC would estimate a market volatility associated with each historical price return by applying exponentially weighted moving average (“EWMA”) to the historical price returns. The historical price returns are then “devolatilized” by dividing them by the corresponding EWMA volatilities to obtain the residual returns. The residual returns are then “revolatilized” by multiplying them by the current EWMA volatility to obtain the filtered returns.

The filtered return time series are then used to simulate the profits and losses of a Member’s Margin Portfolio and derive the volatility of the Margin Portfolio using the standard historical simulation approach. In particular, each security that is in a Member’s Margin Portfolio would be mapped to a respective fixed income securities benchmark, as applicable,

Risk (VaR) calculator that can be used to estimate their Clearing Fund requirements based on their portfolios.

²¹ Supra note 16.

based on the security's asset class and remaining maturity. The filtered returns of the benchmark are used as the simulated returns of the mapped security to calculate the simulated profits and losses of a Member's Margin Portfolio. The Minimum Margin Amount is then calculated as the 99-percentile of the simulated portfolio loss.

Haircut Method

Occasionally, a Member's Margin Portfolio(s) contain classes of securities that reflect market price changes that are not consistently related to historical price moves. The value of these securities is often uncertain because the securities' market volume varies widely, thus the price histories are limited. Because the volume and price information for such securities are not robust, the FHS method would not generate Minimum Margin Amounts that adequately reflect the risk profile of such securities. Accordingly, the proposed changes to the QRM Methodology would provide that the Minimum Margin Amount would use a haircut method to assess the market risk of those securities that are more difficult to simulate, for example, because of thin trading history.

Specifically, the proposed haircut method would be used for MBS pools that are not TBA securities eligible, floating rate notes and U.S. Treasury/agency securities with remaining time to maturities of less than or equal to one year.

A haircut method would also be used to size up the basis risk between an agency security and the mapped U.S. Treasury index to supplement the historical market price moves generated by the FHS method for agency securities to reflect any residual risks between agency securities and the mapped fixed income securities benchmarks, *i.e.*, Bloomberg Treasury indexes. Similarly, a haircut method would be used to size up the MBS pool/TBA basis risk to address the residual risk for using TBA price returns as proxies for MBS pool returns used in the FHS method.

Minimum Margin Amount Calculation

FICC is proposing to modify the QRM Methodology to specify that the Minimum Margin Amount would use a price return-based risk representation and be calculated per Member Margin Portfolio as the sum of (i), (ii), and (iii):

- (i) FHS Method
 - (a) the amount calculated using historical market price returns of mapped fixed income securities benchmarks derived based on the FHS method.
- (ii) Haircut Method
 - (a) the haircut charge for MBS pools that are not TBA securities eligible,
 - (b) the supplemental haircut charge for agency securities,

- (c) the haircut charge for floating rate notes and U.S. Treasury/agency securities with remaining time to maturities of less than or equal to one year, and
 - (d) the supplemental basis haircut charge for mortgage pool securities.
- (iii) Additional Risk Factors
 - (a) the repo interest volatility charge,²² and
 - (b) the bid-ask spread risk charge.²³

The mapped fixed income securities benchmarks, historical market price returns, parameters and volatility assessments to be used to calculate the Minimum Margin Amount would be determined by FICC from time to time in accordance with FICC's model risk management practices and governance set forth in the Clearing Agency Model Risk Management Framework.²⁴

Minimum Margin Amount Parameters

The proposed Minimum Margin Amount uses a lookback period for the filtered historical simulation and a decay factor for calculating the EWMA volatility of the historical prices returns.

In particular, the lookback period of the proposed Minimum Margin Amount is the same as the lookback period used for the VaR model, which is 10 years, plus, to the extent applicable, a stressed period. Consistent with the VaR methodology outlined in the QRM Methodology and pursuant to the model performance monitoring required under the Model Risk Management Framework,²⁵ the lookback period would be analyzed to evaluate its sensitivity and impact to the model performance.

The decay factor in general affects (i) whether and how the Minimum Margin Amount would be invoked, (ii) the peak level of margin increase or the degree of procyclicality, and (iii) how quickly the margin would fall back to pre-stress levels. Similar to the lookback period, the decay factor of the proposed Minimum Margin Amount would also be analyzed to evaluate its

²² Supra note 18.

²³ Supra note 19.

²⁴ See Model Risk Management Framework, supra note 7.

²⁵ The Model Risk Management Framework provides that all models undergo ongoing model performance monitoring and backtesting which is the process of (i) evaluating an active model's ongoing performance based on theoretical tests, (ii) monitoring the model's parameters through the use of threshold indicators, and/or (iii) backtesting using actual historical data/realizations to test a VaR model's predictive power. Supra note 7.

sensitivity and impact to the model performance pursuant to the model performance monitoring required under the Model Risk Management Framework.²⁶ The decay factor would be, as proposed, between 0.93 and 0.99, and any update thereto is expected to be an infrequent event and would typically happen only when there is an unprecedented market volatility event which resulted in risk exposures to FICC that cannot be adequately mitigated by the then calibrated decay factor. The decision to update the decay factor would be based on the above-mentioned sensitivity analysis with considerations to factors, such as the impact to the VaR Charges, macroeconomic conditions, and/or backtesting performance. The initial decay factor for the Minimum Margin Amount calculation would be 0.97 but may be adjusted as set forth above in accordance with FICC's model risk management practices and governance set forth in the Model Risk Management Framework.²⁷

The Model Risk Management Framework would also require FICC to conduct ongoing model performance monitoring of the Minimum Margin Amount methodology.²⁸ FICC's current model performance monitoring practices would provide for sensitivity analysis of relevant model parameters and assumptions to be conducted monthly, or more frequently when markets display high volatility. In addition, FICC would monitor each Member's Required Fund Deposit and the aggregate Clearing Fund requirements versus the requirements calculated by the Minimum Margin Amount. Specifically, FICC would review and assess the robustness of the Required Fund Deposit inclusive of the Minimum Margin Amount by comparing the results versus the three-day profit and loss of each Member's Margin Portfolio based on actual market price moves. Based on the results of the sensitivity analysis and/or backtesting, FICC could consider adjustments to the Minimum Margin Amount, including changing the decay factor as appropriate. Any adjustment to the Minimum Margin Amount calculation would be subject to the model risk management practices and governance process set forth in the Model Risk Management Framework.²⁹

Expand Application of VaR Floor to Include Margin Proxy

The GSD Margin Proxy methodology is currently deployed as an alternative volatility calculation in the event that the requisite vendor data used for the VaR model is unavailable for an extended period of time.³⁰ In circumstances where the Margin Proxy is applied by FICC, FICC is proposing to have the VaR Floor operate as a floor for the Margin Proxy. Specifically, FICC is proposing to expand the application of the VaR Floor to include Margin Proxy so that if the Margin Proxy, when deployed, is lower than the VaR Floor, then the VaR Floor would be utilized as the VaR Charge with respect to a Member's Margin Portfolio. FICC believes this

²⁶ Supra note 25.

²⁷ See Model Risk Management Framework, supra note 7.

²⁸ See note 25.

²⁹ See Model Risk Management Framework, supra note 7.

³⁰ FICC may deem such data to be unavailable and deploy Margin Proxy when there are concerns with the quality of data provided by the vendor.

proposed change would enable Margin Proxy to be a more effective risk mitigant under extreme market volatility and heightened market stress, thereby enhancing the overall resilience of the FICC risk management.

Proposed GSD Rule Changes

In connection with incorporating the Minimum Margin Amount into the VaR Floor, FICC would modify the GSD Rules to:

- I. Add a definition of “Minimum Margin Amount” and define it as, with respect to each Margin Portfolio, a minimum volatility calculation for specified Net Unsettled Positions of a Member as of the time of such calculation. The definition would provide that the Minimum Margin Amount shall use historical price returns to represent risk and be calculated as the sum of the following: (a) amounts calculated using a filtered historical simulation approach to assess volatility by scaling historical market price returns to current market volatility, with market volatility being measured by applying exponentially weighted moving average to the historical market price returns with a decay factor between 0.93 and 0.99, as determined by FICC from time to time based on sensitivity analysis, macroeconomic conditions, and/or backtesting performance, (b) amounts calculated using a haircut method to measure the risk exposure of those securities that lack sufficient historical price return data, and (c) amounts calculated to incorporate risks related to (i) repo interest volatility (“repo interest volatility charge”) and (ii) transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio (“bid-ask spread risk charge”). In addition, the proposed definition would require FICC to provide Members with at a minimum one Business Day advance notice of any change to the decay factor via an Important Notice;
- II. Add a definition of “VaR Floor Percentage Amount” which would be defined the same as the current calculation for the VaR Floor percentage with non-substantive modifications to reflect that the calculated amount is a separate defined term; and
- III. Move the defined term VaR Floor out of the definition of VaR Charge and define it as the greater of (i) the VaR Floor Percentage Amount and (ii) the Minimum Margin Amount.

In connection with applying the VaR Floor to include Margin Proxy, FICC would modify the GSD Rules to revise the definition of “VaR Charge” by adding a reference to the Margin Proxy with respect to the VaR Floor application and clarifying that VaR Charge is calculated at the Margin Portfolio-level.

Proposed QRM Methodology Changes

In connection with incorporating the Minimum Margin Amount into the VaR Floor, FICC would modify the QRM Methodology to:

- I. Describe how the Minimum Margin Amount, as defined in the GSD Rules, would

be calculated, including:

- (i) Establishing mapped fixed income securities benchmarks for purposes of the calculation using historical market price returns of such securities with the FHS method;
 - (ii) Using a haircut method to assess the market risk of certain securities that are more difficult to simulate due to thin trading history; and
 - (iii) Detailing other risk factors that would be incorporated in the calculation.
- II. Describe the developmental evidence and impacts to backtesting performance and margin charges relating to Minimum Margin Amount.

In connection with applying the VaR Floor to include Margin Proxy, FICC would modify the QRM Methodology to reflect that the Minimum Margin Amount would serve as a floor for the Margin Proxy.

In addition, FICC would modify the QRM Methodology to:

- I. Make certain clarifying changes to the QRM Methodology to delete an out-of-date description of the Margin Proxy being used as an adjustment factor to the VaR,³¹ enhance the description of the VaR Floor Percentage Amount, and update the list of key model parameters to reflect the Margin Proxy lookback period; and
- II. Make certain technical changes to the QRM Methodology to renumber sections and tables, correct grammatical and typographical errors, delete out-of-date index names, and update certain formula notations and section titles as necessary.

Impact Study

FICC performed an impact study on Members' Margin Portfolios for the period beginning July 1, 2021 through June 30, 2023 ("Impact Study Period").^{32,33} If the proposed rule

³¹ FICC currently does not use Margin Proxy as an adjustment factor to the VaR and does not intend to use it as such in the future.

³² GSD increased the minimum Required Fund Deposit for Members to \$1 million on Dec. 5, 2022 (see Securities Exchange Act Release No. 96136 (Oct. 24, 2022), 87 FR 65268 (Oct. 28, 2022) (SR-FICC-2022-006)); however, for the purpose of this Impact Study, the \$1 million minimum Requirement Fund Deposit is assumed to be in effect for the entirety of the Impact Study period.

³³ GSD adopted a Portfolio Differential Charge ("PD Charge") as an additional component to the GSD Required Fund Deposit on Oct. 30, 2023 (see Securities Exchange Act Release No. 98494 (Sep. 25, 2023), 88 FR 67394 (Sep. 29, 2023) (SR-FICC-2023-011));

changes³⁴ had been in place during the Impact Study Period compared to the existing GSD Rules, the aggregate average daily start-of-day (“SOD”) VaR Charges would have increased by approximately \$2.9 billion or 13.89%, the aggregate average daily noon VaR Charges would have increased by approximately \$3.03 billion or 14.05%, and the aggregate average daily Backtesting Charges would have decreased by approximately \$622 million or 64.46%.

The impact study indicated that if the proposed rule changes had been in place, the VaR model backtesting coverage would have increased from approximately 98.86% to 99.46% during the Impact Study Period. Specifically, if the proposed rule changes had been in place during the Impact Study Period, the number of VaR model backtesting deficiencies would have been reduced by 443 (from 843 to 400, or approximately 53%).

The impact study also indicated that if the proposed rule changes had been in place, overall margin backtesting coverage would have increased from approximately 98.87% to 99.33% during the Impact Study Period. Specifically, if the proposed rule changes had been in place during the Impact Study Period, the number of overall margin backtesting deficiencies would have been reduced by 280 (from 685 to 405, or approximately 41%) and the overall margin backtesting coverage for 94 Members (approximately 72% of the GSD membership) would have improved with 36 Members who were below 99% coverage would be brought back to above 99%.

Impacts to Members over the Impact Study Period

On average, at the Member level, the proposed Minimum Margin Amount would have increased the SOD VaR Charge by approximately \$22.45 million, or 17.69%, and the noon VaR Charge by approximately \$23.22 million, or 17.44%, over the Impact Study Period. The largest average percentage increase in SOD VaR Charge for any Member would have been approximately 66.88%, or \$97,051 (0.21% of the Member’s average Net Capital),³⁵ and the

however, for the purpose of this Impact Study, the PD Charge is assumed to be in effect for the entirety of the Impact Study period.

³⁴ Margin Proxy was not deployed during the Impact Study Period; however, if the proposed rule changes had been in place and the Margin Proxy were deployed during the Impact Study Period, the aggregate average daily SOD VaR Charges would have increased by approximately \$4.2 billion or 20.98%. The impact study also indicated that if the proposed rule changes had been in place and the Margin Proxy were deployed, the VaR model backtesting coverage would have increased from approximately 98.17% to 99.38% during the Impact Study Period. Specifically, if the proposed rule changes had been in place and the Margin Proxy were deployed during the Impact Study Period, the number of the VaR model backtesting deficiencies would have been reduced by 901 (from 1358 to 457, or approximately 66.3%).

³⁵ The term “Net Capital” means, as of a particular date, the amount equal to the net capital of a broker or dealer as defined in SEC Rule 15c3-1(c)(2), or any successor rule or regulation thereto. See GSD Rule 1 (Definitions), supra note 1.

largest average percentage increase in noon VaR Charge for any Member would have been approximately 64.79%, or \$61,613 (0.13% of the Member's average Net Capital). The largest average dollar increase in SOD VaR Charge for any Member would have been approximately \$268.35 million (0.34% of the Member's average Net Capital), or 19.05%, and the largest dollar increase in noon VaR Charge for any Member would have been approximately \$288.57 million (1.07% of the Member's average Net Capital), or 13.65%. The top 10 Members based on the size of their average SOD VaR Charges and average noon VaR Charges would have contributed approximately 51.84% and 53.63% of the aggregated SOD VaR Charges and aggregated noon VaR Charges, respectively, during the Impact Study Period had the proposed Minimum Margin Amount been in place. The same Members would have contributed to 49.86% and 51.48% of the increase in aggregated SOD VaR Charges and aggregated noon VaR Charges, respectively, had the proposed Minimum Margin Amount been in place during the Impact Study Period.

Implementation Timeframe

FICC would implement the proposed rule changes by no later than 60 Business Days after the later of the approval of the related proposed rule change filing³⁶ and no objection to the advance notice by the Commission. FICC would announce the effective date of the proposed changes by an Important Notice posted to its website.

Anticipated Effect on and Management of Risk

FICC believes that the proposed change, which consists of a proposal to (i) modify the calculation of the VaR Floor and the corresponding description in the GSD Rules and QRM Methodology to incorporate a Minimum Margin Amount and (ii) expand the application of the VaR Floor to include Margin Proxy, would enable FICC to better limit its exposure to Members arising out of the activity in their portfolios. As stated above, the proposed change is designed to enhance the GSD VaR model performance and improve the backtesting coverage during periods of extreme market volatility. The proposed change would help ensure that FICC maintains an appropriate level of margin to address its risk management needs.

Specifically, the proposed rule change seeks to remedy potential situations that are described above where FICC's VaR model and/or Margin Proxy, including the existing VaR Floor, does not respond effectively to increased market volatility and the VaR Charge amounts do not achieve a 99% confidence level. Therefore, by enabling FICC to collect margin that more accurately reflects the risk characteristics of its Members, the proposal would enhance FICC's risk management capabilities.

By providing FICC with a more effective limit on its exposures, the proposed change would also mitigate risk for Members because lowering the risk profile for FICC would in turn lower the risk exposure that Members may have with respect to FICC in its role as a central

³⁶ FICC filed this advance notice as a proposed rule change (File No. SR-FICC-2024-003) with the Commission pursuant to Section 19(b)(1) of the Act, 15 U.S.C. 78s(b)(1), and Rule 19b-4 thereunder, 17 CFR 240.19b-4. A copy of the proposed rule change is available at www.dtcc.com/legal/sec-rule-filings.

counterparty. Further, the proposal is designed to meet FICC's risk management goals and its regulatory obligations, as described below.

Consistency with the Clearing Supervision Act

Although Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act") does not specify a standard of review for an advance notice, its stated purpose is instructive: to mitigate systemic risk in the financial system and promote financial stability by, among other things, promoting uniform risk management standards for systemically important financial market utilities and strengthening the liquidity of systemically important financial market utilities.³⁷

FICC believes that the proposal is consistent with the Clearing Supervision Act, specifically with the risk management objectives and principles of Section 805(b), and with certain of the risk management standards adopted by the Commission pursuant to Section 805(a)(2), for the reasons described below.

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

Section 805(b) of the Clearing Supervision Act³⁸ states that the objectives and principles for the risk management standards prescribed under Section 805(a) shall be to, among other things, promote robust risk management, promote safety and soundness, reduce systemic risks, and support the stability of the broader financial system. For the reasons described below, FICC believes that the proposed changes in this advance notice are consistent with the objectives and principles of the risk management standards as described in Section 805(b) of the Clearing Supervision Act.

FICC is proposing to (i) modify the calculation of the VaR Floor and the corresponding description in the GSD Rules and QRM Methodology to incorporate a Minimum Margin Amount and (ii) expand the application of the VaR Floor to include Margin Proxy, both of which would enable FICC to better limit its exposure to Members arising out of the activity in their portfolios. FICC believes these proposed changes are consistent with promoting robust risk management because the changes would better enable FICC to limit its exposure to Members in the event of a Member default by collecting adequate prefunded financial resources to cover its potential losses resulting from the default of a Member and the liquidation of a defaulting Member's portfolio.

Specifically, the proposed Minimum Margin Amount would modify the VaR Floor to cover circumstances, such as extreme market volatility, where the current VaR Charge calculation and the VaR Floor are both lower than market price volatility from corresponding securities benchmarks. The proposed changes are designed to more effectively measure and address risk characteristics in situations where the risk factors used in the VaR method do not

³⁷ 12 U.S.C. 5461(b).

³⁸ 12 U.S.C. 5464(b).

adequately predict market price movements and associated credit risk exposure. As reflected in backtesting studies, FICC believes the proposed changes would appropriately limit FICC's credit exposure to Members in the event that the VaR model yields too low a VaR Charge in such situations. Such backtesting studies indicate that the aggregate average daily Backtesting Charges would have decreased by approximately \$622 million or 64.46% during the Impact Study Period, and the overall margin backtesting coverage (based on 12-month trailing backtesting) would have improved from approximately 98.87% to 99.33% during the Impact Study Period if the Minimum Margin Amount calculation had been in place. Improving the overall backtesting coverage level would help FICC ensure that it maintains an appropriate level of margin to address its risk management needs.

The use of the Minimum Margin Amount would reduce risk by allowing FICC to calculate the exposure in each portfolio using historical price returns to represent risk along with amounts calculated (i) using a FHS method that scales historical market price returns to current market volatility, (ii) using a haircut method for those securities that lack sufficient historical price return data, and (iii) to incorporate other risk factors. As reflected by backtesting studies during the Impact Study Period, using the FHS method would provide a more reliable estimate than the FICC VaR historical data set for the portfolio risk level when current market conditions deviate from historical observations. Adding the Minimum Margin Amount to the VaR Floor and applying the VaR Floor to include Margin Proxy would help to ensure that the risk exposure during periods of extreme market volatility is adequately captured in the VaR Charges. FICC believes that would help to ensure that FICC continues to accurately calculate and assess margin and in turn, collect sufficient margin from its Members and better enable FICC to limit its exposures that could be incurred when liquidating a portfolio.

The proposed change to expand the application of VaR Floor to include Margin Proxy would enable Margin Proxy to be a more effective risk mitigant under extreme market volatility and heightened market stress. By improving the effectiveness of Margin Proxy as a risk mitigant under extreme market volatility and heightened market stress would help ensure that the margin that FICC collects from Members is sufficient to mitigate the credit exposure presented by the Members.

For these reasons, FICC believes the proposed changes would help to promote GSD's robust risk management, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system, consistent with Section 805(b) of the Clearing Supervision Act.³⁹

FICC also believes the changes proposed in this advance notice are consistent with promoting safety and soundness, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system, consistent with Section 805(b) of the Clearing Supervision Act.⁴⁰ As described above, the proposed changes are designed to help ensure that FICC is collecting adequate prefunded financial resources to cover its potential losses

³⁹ Id.

⁴⁰ Id.

resulting from the default of a Member and the liquidation of a defaulting Member's portfolio in times of extreme market volatility. Because the proposed changes would better position FICC to limit its exposures to Members in the event of a Member default, FICC believes the proposed changes are consistent with promoting safety and soundness, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system.

(ii) *Consistency with 805(a)(2) of the Clearing Supervision Act*

Section 805(a)(2) of the Clearing Supervision Act⁴¹ authorizes the Commission to prescribe risk management standards for the payment, clearing and settlement activities of designated clearing entities, like FICC, and financial institutions engaged in designated activities for which the Commission is the supervisory agency or the appropriate financial regulator. The Commission has adopted risk management standards under Section 805(a)(2) of the Clearing Supervision Act⁴² and Section 17A of the Act⁴³ (the risk management standards are referred to as the "Covered Clearing Agency Standards").⁴⁴

The Covered Clearing Agency Standards require registered clearing agencies to establish, implement, maintain, and enforce written policies and procedures that are reasonably designed to be consistent with the minimum requirements for their operations and risk management practices on an ongoing basis.⁴⁵ FICC believes that this proposal is consistent with Rules 17Ad-22(e)(4)(i) and (e)(6)(i), each promulgated under the Act,⁴⁶ for the reasons described below.

Rule 17Ad-22(e)(4)(i) under the Act⁴⁷ requires a covered clearing agency to 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 exposures arising from its payment, clearing, and settlement processes by maintaining sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. As described above, FICC believes that the proposed changes would enable it to better identify, measure, monitor, and, through the collection of Members' Required Fund Deposits, manage its credit exposures to Members by maintaining sufficient resources to cover those credit exposures fully with a high degree of confidence. More specifically, as indicated by backtesting studies, implementation of a Minimum Margin Amount by changing the GSD Rules and QRM Methodology as described herein would allow FICC to limit its credit exposures to

⁴¹ 12 U.S.C. 5464(a)(2).

⁴² Id.

⁴³ 15 U.S.C. 78q-1.

⁴⁴ 17 CFR 240.17Ad-22.

⁴⁵ Id.

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

⁴⁷ 17 CFR 240.17Ad-22(e)(4)(i).

Members in the event that the current VaR model yields too low a VaR Charge for such portfolios and improve backtesting performance. As indicated by the backtesting studies, the aggregate average daily SOD VaR Charges would have increased by approximately \$2.90 billion or 13.89%, the aggregate average daily noon VaR Charges would have increased by approximately \$3.03 billion or 14.05%, the aggregate average daily Backtesting Charges would have decreased by approximately \$622 million or 64.46% during the Impact Study Period, and the overall margin backtesting coverage (based on 12-month trailing backtesting) would have improved from approximately 98.87% to 99.33% during the Impact Study Period if the Minimum Margin Amount calculation had been in place. By identifying and providing for appropriate VaR Charges, adding the Minimum Margin Amount to the VaR Floor would help to ensure that the risk exposure during periods of extreme market volatility is adequately identified, measured and monitored. Similarly, the proposed change to expand the application of VaR Floor to include Margin Proxy would enable Margin Proxy to be a more effective risk mitigant under extreme market volatility and heightened market stress. By improving the effectiveness of Margin Proxy as a risk mitigant under extreme market volatility and heightened market stress would help ensure that the margin that FICC collects from Members is sufficient to mitigate the credit exposure presented by the Members. As a result, FICC believes that the proposal would enhance FICC's ability to effectively identify, measure and monitor its credit exposures and would enhance its ability to maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence, consistent with the requirements of Rule 17Ad-22(e)(4)(i) of the Act.⁴⁸

Rule 17Ad-22(e)(6)(i) under the Act⁴⁹ requires 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, considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market. FICC believes that the proposed changes to adjust the VaR Floor to include the Minimum Margin Amount by changing the GSD Rules and QRM Methodology as described herein are consistent with the requirements of Rule 17Ad-22(e)(6)(i) cited above. The Required Fund Deposits are made up of risk-based components (as margin) that are calculated and assessed daily to limit FICC's credit exposures to Members. FICC is proposing changes that are designed to more effectively measure and address risk characteristics in situations where the risk factors used in the VaR method do not adequately predict market price movements. As reflected in backtesting studies, FICC believes the proposed changes would appropriately limit FICC's credit exposure to Members in the event that the VaR model yields too low a VaR Charge in such situations. Such backtesting studies indicate that the aggregate average daily SOD VaR Charges would have increased by approximately \$2.90 billion or 13.89%, the aggregate average daily noon VaR Charges would have increased by approximately \$3.03 billion or 14.05%, the aggregate average daily Backtesting Charges would have decreased by approximately \$622 million or 64.46% during the Impact Study Period, and the overall margin backtesting coverage (based on 12-month trailing backtesting) would have improved from approximately 98.87% to 99.33% during the Impact

⁴⁸ Id.

⁴⁹ 17 CFR 240.17Ad-22(e)(6)(i).

Study Period if the Minimum Margin Amount calculation had been in place. By identifying and providing for appropriate VaR Charges, adding the Minimum Margin Amount to the VaR Floor would help to ensure that margin levels are commensurate with the risk exposure of each portfolio during periods of extreme market volatility. Similarly, the proposed change to expand the application of VaR Floor to include Margin Proxy would enable Margin Proxy to be a more effective risk mitigant under extreme market volatility and heightened market stress. By improving the effectiveness of Margin Proxy as a risk mitigant under extreme market volatility and heightened market stress would help ensure that the margin that FICC collects from Members is sufficient to mitigate the credit exposure presented by the Members. Overall, the proposed changes would allow FICC to more effectively address the risks presented by Members. In this way, the proposed changes enhance the ability of FICC to produce margin levels commensurate with the risks and particular attributes of each relevant product, portfolio, and market. As such, FICC believes that the proposed changes are consistent with the requirements of Rule 17Ad-22(e)(6)(i) under the Act.⁵⁰

11. Exhibits

Exhibit 1 – Not applicable.

Exhibit 1A – Notice of advance notice for publication in the Federal Register.

Exhibit 2 – Not applicable.

Exhibit 3 – FICC Impact Study. ***Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 3 being requested pursuant to 17 CFR 240.24b-2.***

Exhibit 4 – Not applicable.

Exhibit 5a – Proposed changes to the GSD Rules.

Exhibit 5b – Proposed changes to the QRM Methodology. ***Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 5b being requested pursuant to 17 CFR 240.24b-2.***

⁵⁰

Id.

EXHIBIT 1A

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-[____]; File No. SR-FICC-2024-801)

[DATE]

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Notice of Filing of Advance Notice to Adopt a Minimum Margin Amount at GSD

Pursuant to Section 806(e)(1) of Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 (“Clearing Supervision Act”)¹ and Rule 19b-4(n)(1)(i) under the Securities Exchange Act of 1934 (“Act”),² notice is hereby given that on February __, 2024, Fixed Income Government Securities Division (“GSD”) filed with the Securities and Exchange Commission (“Commission”) the advance notice SR-FICC-2024-801 (“Advance Notice”) as described in Items I, II and III below, which Items have been prepared by the clearing agency.³ The Commission is publishing this notice to solicit comments on the Advance Notice from interested persons.

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

This Advance Notice consists of amendments to FICC’s Government Securities Division (“GSD”) Rulebook (“GSD Rules”)⁴ in order to (1) enhance the VaR Floor by

¹ 12 U.S.C. 5465(e)(1).

² 17 CFR 240.19b-4(n)(1)(i).

³ On February 27, 2024, FICC filed this Advance Notice as a proposed rule change (SR-FICC-2024-003) with the Commission pursuant to Section 19(b)(1) of the Act, 15 U.S.C. 78s(b)(1), and Rule 19b-4 thereunder, 17 CFR 240.19b-4. A copy of the proposed rule change is available at www.dtcc.com/legal/sec-rule-filings.

⁴ Terms not defined herein are defined in the GSD Rules, available at www.dtcc.com/legal/rules-and-procedures.

incorporating a “Minimum Margin Amount” and (2) expand the application of the enhanced VaR Floor to include Margin Proxy, as described in greater detail below.

The proposed rule change would necessitate changes to the Methodology Document - GSD Initial Market Risk Margin Model (the “QRM Methodology”), which is attached here as Exhibit 5b.⁵ FICC is requesting confidential treatment of the QRM Methodology and has filed it separately with the Commission.⁶

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

In its filing with the Commission, the clearing agency included statements concerning the purpose of and basis for the Advance Notice and discussed any comments it received on the Advance Notice. The text of these statements may be examined at the places specified in Item IV below. The clearing agency has prepared summaries, set forth in sections A and B below, of the most significant aspects of such statements.

⁵ The QRM Methodology was filed as a confidential exhibit as part of proposed rule change SR-FICC-2018-001 (the “VaR Filing”). See Securities Exchange Act Release No. 83362 (June 1, 2018), 83 FR 26514 (June 7, 2018) (SR-FICC-2018-001) (“VaR Filing Approval Order”). FICC also filed the VaR Filing proposal as an advance notice pursuant to Section 806(e)(1) of the Payment, Clearing, and Settlement Supervision Act of 2010 (12 U.S.C. 5465(e)(1) and Rule 19b-4(n)(1)(i) under the Act (17 CFR 240.19b-4(n)(1)(i)), with respect to which the Commission issued a Notice of No Objection. See Securities Exchange Act Release No. 83223 (May 11, 2018), 83 FR 23020 (May 17, 2018) (SR-FICC-2018-801). The QRM Methodology has been subsequently amended following the VaR Filing Approval Order. See Securities Exchange Act Release Nos. 85944 (May 24, 2019), 84 FR 25315 (May 31, 2019) (SR-FICC-2019-001), 90182 (Oct. 14, 2020), 85 FR 66630 (Oct. 20, 2020) (SR-FICC-2020-009), 93234 (Oct. 1, 2021), 86 FR 55891 (Oct. 7, 2021) (SR-FICC-2021-007), 95605 (Aug. 25, 2022), 87 FR 53522 (Aug. 31, 2022) (SR-FICC-2022-005), 97342 (Apr. 21, 2023), 88 FR 25721 (Apr. 27, 2023) (SR-FICC-2023-003), and 99447 (Jan. 30, 2024), 89 FR 8260 (Feb. 6, 2024) (SR-FICC-2024-001).

⁶ 17 CFR 240.24b-2.

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

FICC has not received or solicited any written comments relating to this proposal. If any additional written comments are received, they will be publicly filed as an Exhibit 2 to this filing, as required by Form 19b-4 and the General Instructions thereto.

Persons submitting comments are cautioned that, according to Section IV (Solicitation of Comments) of the Exhibit 1A in the General Instructions to Form 19b-4, the Commission does not edit personal identifying information from comment submissions. Commenters should submit only information that they wish to make available publicly, including their name, email address, and any other identifying information.

All prospective commenters should follow the Commission's instructions on how to submit comments, available at www.sec.gov/regulatory-actions/how-to-submit-comments. General questions regarding the rule filing process or logistical questions regarding this filing should be directed to the Main Office of the SEC's Division of Trading and Markets at tradingandmarkets@sec.gov or 202-551-5777.

FICC reserves the right not to respond to any comments received.

(B) Advance Notice Filed Pursuant to Section 806(e) of the Clearing Supervision Act

Nature of the Proposed Change

FICC is proposing to enhance the VaR Floor by incorporating a Minimum Margin Amount in order to supplement the VaR model and improve its responsiveness and resilience to extreme market volatility. Specifically, FICC is proposing to modify the VaR Floor and the corresponding description in the GSD Rules to incorporate a Minimum Margin Amount. In addition, FICC is proposing to expand the application of

the enhanced VaR Floor to include Margin Proxy. The proposed change would necessitate changes to the QRM Methodology.

FICC has observed extreme market volatility in the fixed income market due to monetary policy changes, inflation, and recession fears. The extreme market volatility has led to greater risk exposures for FICC. Specifically, the extreme market volatilities during the two arguably most stressful market periods, i.e., the COVID period during March of 2020 and the successive interest rate hikes that began in March 2022, have led to market price changes that exceeded the VaR model's projections, which yielded insufficient VaR Charges. As a result, FICC's VaR backtesting metrics fell below the performance target due to unprecedented levels of extreme market volatility. This highlighted the need for FICC to enhance its VaR model so that it can better respond to extreme market volatility.

In order to better manage its risk exposures during extreme market volatility events, FICC is proposing to adopt a Minimum Margin Amount that would be applied as a minimum volatility calculation to ensure that FICC calculates sufficient margin to cover its risk exposures, particularly during extreme market volatility. The proposed Minimum Margin Amount would be incorporated into the VaR Floor to supplement the VaR model and enhance its responsiveness to extreme market volatility. As proposed, the Minimum Margin Amount is designed to improve the margin backtesting performance during periods of heightened market volatility by maintaining a VaR Charge that is appropriately calibrated to reflect the current market volatility. The proposed Minimum Margin Amount aims to enhance backtesting coverage when there are potential VaR model performance challenges, particularly when securities price changes significantly exceed

those implied by the VaR model risk factors, as observed during the recent periods of extreme market volatility. FICC believes the proposed Minimum Margin Amount would provide a more reliable estimate for the portfolio risk level when current market conditions significantly deviate from historical observations.

The proposed Minimum Margin Amount would be determined using historical price returns to represent risk along with amounts calculated (i) using a filtered historical simulation approach, (ii) using a haircut method, and (iii) to incorporate other risk factors. By using a filtered historical simulation approach in which historical returns are scaled to current market volatility, the proposed Minimum Margin Amount would operate as a floor to the VaR Charge to improve the responsiveness of the VaR model to extreme volatility. Because the use of historical price return-based risk representation is not dependent on any sensitivity data vendor, it would allow the proposed Minimum Margin Amount to also operate as a floor to the Margin Proxy and improve the responsiveness of Margin Proxy to extreme volatility.

As a result of this proposal, Members may experience increases in their Required Fund Deposits to the Clearing Fund. Based on an impact study conducted by FICC, on average, at the Member level, the proposed Minimum Margin Amount would have increased the SOD VaR Charge by approximately \$22.45 million, or 17.69%, and the noon VaR Charge by approximately \$23.22 million, or 17.44%, over a 2-year impact study period.

Background

FICC, through GSD, serves as a central counterparty and provider of clearance and settlement services for transactions in the U.S. government securities, as well as

repurchase and reverse repurchase transactions involving U.S. government securities.⁷

As part of its market risk management strategy, FICC manages its credit exposure to Members by determining the appropriate Required Fund Deposit to the Clearing Fund and monitoring its sufficiency, as provided for in the GSD Rules.⁸ The Required Fund Deposit serves as each Member's margin.

The objective of a Member's Required Fund Deposit is to mitigate potential losses to FICC associated with liquidating a Member's portfolio in the event FICC ceases to act for that Member (hereinafter referred to as a "default").⁹ The aggregate amount of all Members' Required Fund Deposit constitutes the Clearing Fund. FICC would access the Clearing Fund should a defaulting Member's own Required Fund Deposit be insufficient to satisfy losses to FICC caused by the liquidation of that Member's portfolio.

FICC regularly assesses market and liquidity risks as such risks relate to its margin methodologies to evaluate whether margin levels are commensurate with the particular risk attributes of each relevant product, portfolio, and market. For example, FICC employs daily backtesting to determine the adequacy of each Member's Required

⁷ GSD also clears and settles certain transactions on securities issued or guaranteed by U.S. government agencies and government sponsored enterprises.

⁸ See GSD Rule 4 (Clearing Fund and Loss Allocation), supra note 4. FICC's market risk management strategy is designed to comply with Rule 17Ad-22(e)(4) under the Act, where these risks are referred to as "credit risks." 17 CFR 240.17Ad-22(e)(4).

⁹ The GSD Rules identify when FICC may cease to act for a Member and the types of actions FICC may take. For example, FICC may suspend a firm's membership with FICC or prohibit or limit a Member's access to FICC's services in the event that Member defaults on a financial or other obligation to FICC. See GSD Rule 21 (Restrictions on Access to Services) of the GSD Rules, supra note 4.

Fund Deposit.¹⁰ FICC compares the Required Fund Deposit¹¹ for each Member with the simulated liquidation gains/losses, using the actual positions in the Member's portfolio(s) and the actual historical security returns. A backtesting deficiency occurs when a Member's Required Fund Deposit would not have been adequate to cover the projected liquidation losses and highlights exposure that could subject FICC to potential losses in the event that a Member defaults.

FICC investigates the cause(s) of any backtesting deficiencies and determines if there is an identifiable cause of repeat backtesting deficiencies. FICC also evaluates whether multiple Members may experience backtesting deficiencies for the same underlying reason.

Pursuant to the GSD Rules, each Member's Required Fund Deposit amount consists of a number of applicable components, each of which is calculated to address

¹⁰ The Model Risk Management Framework ("Model Risk Management Framework") sets forth the model risk management practices of FICC and states that Value at Risk ("VaR") and Clearing Fund requirement coverage backtesting would be performed on a daily basis or more frequently. See Securities Exchange Act Release Nos. 81485 (Aug. 25, 2017), 82 FR 41433 (Aug. 31, 2017) (SR-FICC-2017-014), 84458 (Oct. 19, 2018), 83 FR 53925 (Oct. 25, 2018) (SR-FICC-2018-010), 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (SR-FICC-2020-004), 92380 (July 13, 2021), 86 FR 38140 (July 19, 2021) (SR-FICC-2021-006), 94271 (Feb. 17, 2022), 87 FR 10411 (Feb. 24, 2022) (SR-FICC-2022-001), and 97890 (July 13, 2023), 88 FR 46287 (July 19, 2023) (SR-FICC-2023-008).

¹¹ Members may be required to post additional collateral to the Clearing Fund in addition to their Required Fund Deposit amount. See e.g., Section 7 of GSD Rule 3 (Ongoing Membership Requirements), supra note 4 (providing that adequate assurances of financial responsibility of a member may be required, such as increased Clearing Fund deposits). For backtesting comparisons, FICC uses the Required Fund Deposit amount, without regard to the actual, total collateral posted by the member to the GSD Clearing Fund.

specific risks faced by FICC, as identified within the GSD Rules.¹² These components include the VaR Charge, Blackout Period Exposure Adjustment, Backtesting Charge, Holiday Charge, Margin Liquidity Adjustment Charge, special charge, and Portfolio Differential Charge.¹³ The VaR Charge generally comprises the largest portion of a Member's Required Fund Deposit amount.

VaR Charge

The VaR Charge is based on the potential price volatility of unsettled positions using a sensitivity-based Value-at-Risk (VaR) methodology. The VaR methodology provides an estimate of the possible losses for a given portfolio based on: (1) confidence level, (2) a time horizon and (3) historical market volatility. The VaR methodology is intended to capture the risks related to market price that are associated with the Net Unsettled Positions in a Member's Margin Portfolios. This risk-based margin methodology is designed to project the potential losses that could occur in connection with the liquidation of a defaulting Member's Margin Portfolio, assuming a Margin Portfolio would take three days to liquidate in normal market conditions. The projected liquidation gains or losses are used to determine the amount of the VaR Charge to each

¹² Supra note 4.

¹³ See GSD Rule 4 (Clearing Fund and Loss Allocation), Section 1b. Supra note 4.

Margin Portfolio, which is calculated to capture the market price risk¹⁴ associated with each Member's Margin Portfolio(s) at a 99% confidence level.

FICC's VaR model is designed to provide a margin calculation that covers the market risk in a Member's Margin Portfolio. The VaR model calculates the risk profile of each Member's Margin Portfolio by applying certain representative risk factors to measure the degree of responsiveness of the Margin Portfolio's value to the changes of these risk factors over a historical lookback period of at least 10 years that may be supplemented with an additional stressed period.

The VaR model has been shown to perform well in low to moderate volatility markets. From January 2013 to March 2020, the VaR model has generally performed above the 99% performance target, with deterioration in backtesting coverage only during the two arguably most stressful market periods, i.e., the COVID period during March of 2020 and the successive interest rate hikes that began in March 2022. The market events during these two stressful periods, including monetary policy changes, inflation and recession fears, have resulted in significant market volatility in the fixed income market that exceeded the 99-percentile of the observed historical data set. Specifically, the extreme market volatilities during these two periods have led to market price changes that exceeded the VaR model's projections, which yielded insufficient VaR Charges. As a result, FICC's VaR backtesting metrics fell below the performance target due to unprecedented levels of extreme market volatility. This highlighted the need for FICC to enhance its VaR model so that it can better respond to extreme market volatility.

¹⁴ Market price risk refers to the risk that volatility in the market causes the price of a security to change between the execution of a trade and settlement of that trade. This risk is sometimes also referred to as volatility risk.

Accordingly, FICC is proposing changes to the VaR Floor that FICC believes would mitigate the risk of potential underperformance of its VaR model under extreme market volatility.

Current VaR Floor

On June 1, 2018, the Commission approved FICC's VaR Filing to make changes to GSD's method of calculating a Member's Required Fund Deposit amount, including the VaR Charge.¹⁵ The VaR Filing amended the definition of VaR Charge to, among other things, incorporate the VaR Floor.¹⁶ FICC established the VaR Floor to address the risk that in a long/short portfolio the VaR model could calculate a VaR Charge that is erroneously low where the gross market value of unsettled positions in a Member's portfolio is high and the cost of liquidation in the event of the Member default is also high. This is likely to occur when the VaR model applies substantial risk offsets among long and short unsettled positions in different classes of securities that have a high degree of historical price correlation.¹⁷ When this high degree of historical price correlations does not apply as a result of changing market conditions, the VaR Charge derived from

¹⁵ See VaR Filing Approval Order, supra note 5.

¹⁶ The term "VaR Floor" is currently defined within the definition of VaR Charge. See GSD Rule 1 (Definitions), supra note 4.

¹⁷ As an example, certain securities may have highly correlated historical price returns, but if market conditions were to substantially change, these historical correlations could break down, leading to model-generated offsets that could not adequately capture a portfolio's risk.

the VaR model can be inadequate, and the VaR Floor would then be applied by FICC to mitigate such risk.

Currently, the VaR Floor is based upon the market value of the gross unsettled positions in the Member's portfolio. The VaR Floor is determined by multiplying the absolute value of the sum of Net Long Positions and Net Short Positions of Eligible Securities, grouped by product and remaining maturity, by a percentage designated by FICC from time to time for such group. For U.S. Treasury and agency securities, such percentage shall be a fraction, no less than 10%, of the historical minimum volatility of a benchmark fixed income index for such group by product and remaining maturity. For mortgage-backed securities, such percentage shall be a fixed percentage that is no less than 0.05%.¹⁸

The current VaR Floor is not designed to address the risk of potential underperformance of the VaR model under extreme market volatility.

Incorporate a Minimum Margin Amount into the VaR Floor

In order to mitigate the risk of potential underperformance of its VaR model under extreme market volatility, FICC proposes to incorporate a Minimum Margin Amount into the VaR Floor to supplement the VaR model and enhance its responsiveness to extreme market volatility. FICC believes this proposal would complement and improve the VaR model performance during stressed market conditions. Specifically, FICC believes this proposal would improve the margin backtesting performance during

¹⁸ See "VaR Charge" definition in GSD Rule 1 (Definitions). Supra note 4.

periods of heightened market volatility by maintaining a VaR Charge that is appropriately calibrated to reflect the current market volatility.

FICC is proposing to introduce a new calculation called the “Minimum Margin Amount” to complement the existing VaR Floor in the GSD Rules. The Minimum Margin Amount would enhance backtesting coverage when there are potential VaR model performance challenges, particularly when securities price changes significantly exceed those implied by the VaR model risk factors, as observed during the recent periods of extreme market volatility. FICC believes the proposed Minimum Margin Amount would provide a more reliable estimate for the portfolio risk level when current market conditions significantly deviate from historical observations.

The Minimum Margin Amount would be defined in the GSD Rules as, with respect to each Margin Portfolio, a minimum volatility calculation for specified Net Unsettled Positions of a Netting Member as of the time of such calculation. The proposed definition would provide that the Minimum Margin Amount shall use historical price returns to represent risk¹⁹ and be calculated as the sum of the following: (a) amounts calculated using a filtered historical simulation (“FHS”) approach²⁰ to assess

¹⁹ This proposed approach is referred to as the “price return-based risk representation” in the QRM Methodology. Given the availability and accessibility of historical price returns data, FICC believes the proposed approach would help minimize and diversify FICC’s risk exposure from external data vendors.

²⁰ The FHS method differs from the historical simulation method by incorporating the volatilities of historical price returns as a crucial element. In particular, the FHS method constructs the filtered historical price returns in two steps: first, “devolatilizing” the historical price returns by dividing them by a volatility estimate for the day of the price return, and second, “revolatilizing” the devolatilized price returns by multiplying them by a volatility estimate based on the current market. For additional background on the FHS method, see Filtered historical simulation Value-at-Risk models and their competitors, Pedro Gurrola-

volatility by scaling historical market price returns to current market volatility, with market volatility being measured by applying exponentially weighted moving average to the historical market price returns with a decay factor between 0.93 and 0.99, as determined by FICC from time to time based on sensitivity analysis, macroeconomic conditions, and/or backtesting performance, (b) amounts calculated using a haircut method to measure the risk exposure of those securities that lack sufficient historical price return data, (c) amounts calculated to incorporate risks related to (i) repo interest volatility (“repo interest volatility charge”)²¹ and (ii) transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio (“bid-ask spread risk charge”).²² In addition, the proposed definition would require FICC to provide

Perez and David Murphy, Bank of England, March 2015, at www.bankofengland.co.uk/working-paper/2015/filtered-historical-simulation-value-at-risk-models-and-their-competitors.

²¹ The “repo interest volatility charge” is a component of the VaR Charge that is designed to address repo interest volatility. The repo interest volatility charge is calculated based on internally constructed repo interest rate indices. This rule change is proposing to also include the repo interest volatility charge as a component of the Minimum Margin Amount; however, it is not proposing to change the repo interest volatility charge or the manner in which this component is calculated.

²² The “bid-ask spread risk charge” is a component of the VaR Charge that is designed to address transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio. This rule change is proposing to also include the bid-ask spread risk charge as a component of the Minimum Margin Amount; however, it is not proposing to change the bid-ask spread risk charge or the manner in which this component is calculated.

Members with at a minimum one Business Day advance notice of any change to the decay factor via an Important Notice.²³

FICC is proposing to revise the definition of the VaR Floor to incorporate the Minimum Margin Amount, such that the VaR Floor would be the greater of (i) the VaR Floor Percentage Amount and (ii) the Minimum Margin Amount.

The “VaR Floor Percentage Amount” would be the new defined term used to describe the current VaR Floor percentage calculation in the GSD Rules. This rule change is not proposing to change the VaR Floor percentage or the manner in which this component is calculated.

As proposed, the Minimum Margin Amount would be utilized as the VaR Charge for a Member’s Margin Portfolio when it is greater than the current VaR Charge of the Margin Portfolio and the VaR Floor Percentage Amount.

Under the proposed changes to the QRM Methodology, the Minimum Margin Amount would use a price return-based risk representation (i.e., use historical price returns to represent risk)²⁴ and be calculated as the sum of (i) amounts calculated using a FHS method that scales historical market price returns to current market volatility, (ii)

²³ Although the QRM Methodology is being submitted as a confidential Exhibit 5b to this proposal due to its proprietary content, FICC makes available to Members a Value-at-Risk (VaR) calculator that can be used to estimate their Clearing Fund requirements based on their portfolios.

²⁴ Supra note 19.

amounts calculated using a haircut method for securities that lack sufficient historical price return data, and (iii) amounts calculated to incorporate additional risk factors.

FHS Method

Following the FHS method, FICC would first construct historical price returns using certain mapped fixed income securities benchmarks. As proposed, the mapped fixed income securities benchmarks to be used with the FHS method when calculating the Minimum Margin Amount in the QRM Methodology would be Bloomberg Treasury indexes for U.S. Treasury and agency securities, Bloomberg TIPS indexes for Treasury Inflation-Protected Securities (“TIPS”), and to-be-announced (“TBA”) securities for mortgage-backed securities (“MBS”) pools. These benchmarks were selected because their price movements generally closely track those of the securities mapped to them and that their price history is generally readily available and accessible.

After constructing historical price returns, FICC would estimate a market volatility associated with each historical price return by applying exponentially weighted moving average (“EWMA”) to the historical price returns. The historical price returns are then “devolatilized” by dividing them by the corresponding EWMA volatilities to obtain the residual returns. The residual returns are then “revolatilized” by multiplying them by the current EWMA volatility to obtain the filtered returns.

The filtered return time series are then used to simulate the profits and losses of a Member’s Margin Portfolio and derive the volatility of the Margin Portfolio using the standard historical simulation approach. In particular, each security that is in a Member’s Margin Portfolio would be mapped to a respective fixed income securities benchmark, as applicable, based on the security’s asset class and remaining maturity. The filtered returns of the benchmark are used as the simulated returns of the mapped security to

calculate the simulated profits and losses of a Member's Margin Portfolio. The Minimum Margin Amount is then calculated as the 99-percentile of the simulated portfolio loss.

Haircut Method

Occasionally, a Member's Margin Portfolio(s) contain classes of securities that reflect market price changes that are not consistently related to historical price moves. The value of these securities is often uncertain because the securities' market volume varies widely, thus the price histories are limited. Because the volume and price information for such securities are not robust, the FHS method would not generate Minimum Margin Amounts that adequately reflect the risk profile of such securities. Accordingly, the proposed changes to the QRM Methodology would provide that the Minimum Margin Amount would use a haircut method to assess the market risk of those securities that are more difficult to simulate, for example, because of thin trading history.

Specifically, the proposed haircut method would be used for MBS pools that are not TBA securities eligible, floating rate notes and U.S. Treasury/agency securities with remaining time to maturities of less than or equal to one year.

A haircut method would also be used to size up the basis risk between an agency security and the mapped U.S. Treasury index to supplement the historical market price moves generated by the FHS method for agency securities to reflect any residual risks between agency securities and the mapped fixed income securities benchmarks, i.e., Bloomberg Treasury indexes. Similarly, a haircut method would be used to size up the

MBS pool/TBA basis risk to address the residual risk for using TBA price returns as proxies for MBS pool returns used in the FHS method.

Minimum Margin Amount Calculation

FICC is proposing to modify the QRM Methodology to specify that the Minimum Margin Amount would use a price return-based risk representation and be calculated per Member Margin Portfolio as the sum of (i), (ii), and (iii):

- (i) FHS Method
 - (a) the amount calculated using historical market price returns of mapped fixed income securities benchmarks derived based on the FHS method.
- (ii) Haircut Method
 - (a) the haircut charge for MBS pools that are not TBA securities eligible,
 - (b) the supplemental haircut charge for agency securities,
 - (c) the haircut charge for floating rate notes and U.S. Treasury/agency securities with remaining time to maturities of less than or equal to one year, and
 - (d) the supplemental basis haircut charge for mortgage pool securities.
- (iii) Additional Risk Factors
 - (a) the repo interest volatility charge,²⁵ and
 - (b) the bid-ask spread risk charge.²⁶

²⁵ Supra note 21.

²⁶ Supra note 22.

The mapped fixed income securities benchmarks, historical market price returns, parameters and volatility assessments to be used to calculate the Minimum Margin Amount would be determined by FICC from time to time in accordance with FICC's model risk management practices and governance set forth in the Clearing Agency Model Risk Management Framework.²⁷

Minimum Margin Amount Parameters

The proposed Minimum Margin Amount uses a lookback period for the filtered historical simulation and a decay factor for calculating the EWMA volatility of the historical prices returns.

In particular, the lookback period of the proposed Minimum Margin Amount is the same as the lookback period used for the VaR model, which is 10 years, plus, to the extent applicable, a stressed period. Consistent with the VaR methodology outlined in the QRM Methodology and pursuant to the model performance monitoring required under the Model Risk Management Framework,²⁸ the lookback period would be analyzed to evaluate its sensitivity and impact to the model performance.

The decay factor in general affects (i) whether and how the Minimum Margin Amount would be invoked, (ii) the peak level of margin increase or the degree of procyclicality, and (iii) how quickly the margin would fall back to pre-stress levels.

²⁷ See Model Risk Management Framework, supra note 10.

²⁸ The Model Risk Management Framework provides that all models undergo ongoing model performance monitoring and backtesting which is the process of (i) evaluating an active model's ongoing performance based on theoretical tests, (ii) monitoring the model's parameters through the use of threshold indicators, and/or (iii) backtesting using actual historical data/realizations to test a VaR model's predictive power. Supra note 10.

Similar to the lookback period, the decay factor of the proposed Minimum Margin Amount would also be analyzed to evaluate its sensitivity and impact to the model performance pursuant to the model performance monitoring required under the Model Risk Management Framework.²⁹ The decay factor would be, as proposed, between 0.93 and 0.99, and any update thereto is expected to be an infrequent event and would typically happen only when there is an unprecedented market volatility event which resulted in risk exposures to FICC that cannot be adequately mitigated by the then calibrated decay factor. The decision to update the decay factor would be based on the above-mentioned sensitivity analysis with considerations to factors, such as the impact to the VaR Charges, macroeconomic conditions, and/or backtesting performance. The initial decay factor for the Minimum Margin Amount calculation would be 0.97 but may be adjusted as set forth above in accordance with FICC's model risk management practices and governance set forth in the Model Risk Management Framework.³⁰

The Model Risk Management Framework would also require FICC to conduct ongoing model performance monitoring of the Minimum Margin Amount methodology.³¹ FICC's current model performance monitoring practices would provide for sensitivity analysis of relevant model parameters and assumptions to be conducted monthly, or more frequently when markets display high volatility. In addition, FICC would monitor each Member's Required Fund Deposit and the aggregate Clearing Fund requirements versus the requirements calculated by the Minimum Margin Amount.

²⁹ Supra note 28.

³⁰ See Model Risk Management Framework, supra note 10.

³¹ See note 28.

Specifically, FICC would review and assess the robustness of the Required Fund Deposit inclusive of the Minimum Margin Amount by comparing the results versus the three-day profit and loss of each Member's Margin Portfolio based on actual market price moves. Based on the results of the sensitivity analysis and/or backtesting, FICC could consider adjustments to the Minimum Margin Amount, including changing the decay factor as appropriate. Any adjustment to the Minimum Margin Amount calculation would be subject to the model risk management practices and governance process set forth in the Model Risk Management Framework.³²

Expand Application of VaR Floor to Include Margin Proxy

The GSD Margin Proxy methodology is currently deployed as an alternative volatility calculation in the event that the requisite vendor data used for the VaR model is unavailable for an extended period of time.³³ In circumstances where the Margin Proxy is applied by FICC, FICC is proposing to have the VaR Floor operate as a floor for the Margin Proxy. Specifically, FICC is proposing to expand the application of the VaR Floor to include Margin Proxy so that if the Margin Proxy, when deployed, is lower than the VaR Floor, then the VaR Floor would be utilized as the VaR Charge with respect to a Member's Margin Portfolio. FICC believes this proposed change would enable Margin

³² See Model Risk Management Framework, supra note 10.

³³ FICC may deem such data to be unavailable and deploy Margin Proxy when there are concerns with the quality of data provided by the vendor.

Proxy to be a more effective risk mitigant under extreme market volatility and heightened market stress, thereby enhancing the overall resilience of the FICC risk management.

Proposed GSD Rule Changes

In connection with incorporating the Minimum Margin Amount into the VaR Floor, FICC would modify the GSD Rules to:

- I. Add a definition of “Minimum Margin Amount” and define it as, with respect to each Margin Portfolio, a minimum volatility calculation for specified Net Unsettled Positions of a Member as of the time of such calculation. The definition would provide that the Minimum Margin Amount shall use historical price returns to represent risk and be calculated as the sum of the following: (a) amounts calculated using a filtered historical simulation approach to assess volatility by scaling historical market price returns to current market volatility, with market volatility being measured by applying exponentially weighted moving average to the historical market price returns with a decay factor between 0.93 and 0.99, as determined by FICC from time to time based on sensitivity analysis, macroeconomic conditions, and/or backtesting performance, (b) amounts calculated using a haircut method to measure the risk exposure of those securities that lack sufficient historical price return data, and (c) amounts calculated to incorporate risks related to (i) repo interest volatility (“repo interest volatility charge”) and (ii) transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio (“bid-ask spread risk charge”). In addition, the proposed definition would require FICC to provide Members

with at a minimum one Business Day advance notice of any change to the decay factor via an Important Notice;

- II. Add a definition of “VaR Floor Percentage Amount” which would be defined the same as the current calculation for the VaR Floor percentage with non-substantive modifications to reflect that the calculated amount is a separate defined term; and
- III. Move the defined term VaR Floor out of the definition of VaR Charge and define it as the greater of (i) the VaR Floor Percentage Amount and (ii) the Minimum Margin Amount.

In connection with applying the VaR Floor to include Margin Proxy, FICC would modify the GSD Rules to revise the definition of “VaR Charge” by adding a reference to the Margin Proxy with respect to the VaR Floor application and clarifying that VaR Charge is calculated at the Margin Portfolio-level.

Proposed QRM Methodology Changes

In connection with incorporating the Minimum Margin Amount into the VaR Floor, FICC would modify the QRM Methodology to:

- I. Describe how the Minimum Margin Amount, as defined in the GSD Rules, would be calculated, including:
 - (i) Establishing mapped fixed income securities benchmarks for purposes of the calculation using historical market price returns of such securities with the FHS method;
 - (ii) Using a haircut method to assess the market risk of certain securities that are more difficult to simulate due to thin trading history;and

(iii) Detailing other risk factors that would be incorporated in the calculation.

- II. Describe the developmental evidence and impacts to backtesting performance and margin charges relating to Minimum Margin Amount.

In connection with applying the VaR Floor to include Margin Proxy, FICC would modify the QRM Methodology to reflect that the Minimum Margin Amount would serve as a floor for the Margin Proxy.

In addition, FICC would modify the QRM Methodology to:

- I. Make certain clarifying changes to the QRM Methodology to delete an out-of-date description of the Margin Proxy being used as an adjustment factor to the VaR,³⁴ enhance the description of the VaR Floor Percentage Amount, and update the list of key model parameters to reflect the Margin Proxy lookback period; and
- II. Make certain technical changes to the QRM Methodology to renumber sections and tables, correct grammatical and typographical errors, delete out-of-date index names, and update certain formula notations and section titles as necessary.

³⁴ FICC currently does not use Margin Proxy as an adjustment factor to the VaR and does not intend to use it as such in the future.

Impact Study

FICC performed an impact study on Members' Margin Portfolios for the period beginning July 1, 2021 through June 30, 2023 ("Impact Study Period").^{35,36} If the proposed rule changes³⁷ had been in place during the Impact Study Period compared to the existing GSD Rules, the aggregate average daily start-of-day ("SOD") VaR Charges would have increased by approximately \$2.9 billion or 13.89%, the aggregate average daily noon VaR Charges would have increased by approximately \$3.03 billion or 14.05%, and the aggregate average daily Backtesting Charges would have decreased by approximately \$622 million or 64.46%.

The impact study indicated that if the proposed rule changes had been in place, the VaR model backtesting coverage would have increased from approximately 98.86%

³⁵ GSD increased the minimum Required Fund Deposit for Members to \$1 million on Dec. 5, 2022 (see Securities Exchange Act Release No. 96136 (Oct. 24, 2022), 87 FR 65268 (Oct. 28, 2022) (SR-FICC-2022-006)); however, for the purpose of this Impact Study, the \$1 million minimum Requirement Fund Deposit is assumed to be in effect for the entirety of the Impact Study period.

³⁶ GSD adopted a Portfolio Differential Charge ("PD Charge") as an additional component to the GSD Required Fund Deposit on Oct. 30, 2023 (see Securities Exchange Act Release No. 98494 (Sep. 25, 2023), 88 FR 67394 (Sep. 29, 2023) (SR-FICC-2023-011)); however, for the purpose of this Impact Study, the PD Charge is assumed to be in effect for the entirety of the Impact Study period.

³⁷ Margin Proxy was not deployed during the Impact Study Period; however, if the proposed rule changes had been in place and the Margin Proxy were deployed during the Impact Study Period, the aggregate average daily SOD VaR Charges would have increased by approximately \$4.2 billion or 20.98%. The impact study also indicated that if the proposed rule changes had been in place and the Margin Proxy were deployed, the VaR model backtesting coverage would have increased from approximately 98.17% to 99.38% during the Impact Study Period. Specifically, if the proposed rule changes had been in place and the Margin Proxy were deployed during the Impact Study Period, the number of the VaR model backtesting deficiencies would have been reduced by 901 (from 1358 to 457, or approximately 66.3%).

to 99.46% during the Impact Study Period. Specifically, if the proposed rule changes had been in place during the Impact Study Period, the number of VaR model backtesting deficiencies would have been reduced by 443 (from 843 to 400, or approximately 53%).

The impact study also indicated that if the proposed rule changes had been in place, overall margin backtesting coverage would have increased from approximately 98.87% to 99.33% during the Impact Study Period. Specifically, if the proposed rule changes had been in place during the Impact Study Period, the number of overall margin backtesting deficiencies would have been reduced by 280 (from 685 to 405, or approximately 41%) and the overall margin backtesting coverage for 94 Members (approximately 72% of the GSD membership) would have improved with 36 Members who were below 99% coverage would be brought back to above 99%.

Impacts to Members over the Impact Study Period

On average, at the Member level, the proposed Minimum Margin Amount would have increased the SOD VaR Charge by approximately \$22.45 million, or 17.69%, and the noon VaR Charge by approximately \$23.22 million, or 17.44%, over the Impact Study Period. The largest average percentage increase in SOD VaR Charge for any Member would have been approximately 66.88%, or \$97,051 (0.21% of the Member's average Net Capital),³⁸ and the largest average percentage increase in noon VaR Charge for any Member would have been approximately 64.79%, or \$61,613 (0.13% of the Member's average Net Capital). The largest average dollar increase in SOD VaR Charge for any Member would have been approximately \$268.35 million (0.34% of the

³⁸ The term "Net Capital" means, as of a particular date, the amount equal to the net capital of a broker or dealer as defined in SEC Rule 15c3-1(c)(2), or any successor rule or regulation thereto. See GSD Rule 1 (Definitions), supra note 4.

Member's average Net Capital), or 19.05%, and the largest dollar increase in noon VaR Charge for any Member would have been approximately \$288.57 million (1.07% of the Member's average Net Capital), or 13.65%. The top 10 Members based on the size of their average SOD VaR Charges and average noon VaR Charges would have contributed approximately 51.84% and 53.63% of the aggregated SOD VaR Charges and aggregated noon VaR Charges, respectively, during the Impact Study Period had the proposed Minimum Margin Amount been in place. The same Members would have contributed to 49.86% and 51.48% of the increase in aggregated SOD VaR Charges and aggregated noon VaR Charges, respectively, had the proposed Minimum Margin Amount been in place during the Impact Study Period.

Implementation Timeframe

FICC would implement the proposed rule changes by no later than 60 Business Days after the later of the approval of the related proposed rule change filing³⁹ and no objection to the advance notice by the Commission. FICC would announce the effective date of the proposed changes by an Important Notice posted to its website.

Anticipated Effect on and Management of Risk

FICC believes that the proposed change, which consists of a proposal to (i) modify the calculation of the VaR Floor and the corresponding description in the GSD Rules and QRM Methodology to incorporate a Minimum Margin Amount and (ii) expand the application of the VaR Floor to include Margin Proxy, would enable FICC to better

³⁹ FICC filed this advance notice as a proposed rule change (File No. SR-FICC-2024-003) with the Commission pursuant to Section 19(b)(1) of the Act, 15 U.S.C. 78s(b)(1), and Rule 19b-4 thereunder, 17 CFR 240.19b-4. A copy of the proposed rule change is available at www.dtcc.com/legal/sec-rule-filings.

limit its exposure to Members arising out of the activity in their portfolios. As stated above, the proposed change is designed to enhance the GSD VaR model performance and improve the backtesting coverage during periods of extreme market volatility. The proposed charge would help ensure that FICC maintains an appropriate level of margin to address its risk management needs.

Specifically, the proposed rule change seeks to remedy potential situations that are described above where FICC's VaR model and/or Margin Proxy, including the existing VaR Floor, does not respond effectively to increased market volatility and the VaR Charge amounts do not achieve a 99% confidence level. Therefore, by enabling FICC to collect margin that more accurately reflects the risk characteristics of its Members, the proposal would enhance FICC's risk management capabilities.

By providing FICC with a more effective limit on its exposures, the proposed change would also mitigate risk for Members because lowering the risk profile for FICC would in turn lower the risk exposure that Members may have with respect to FICC in its role as a central counterparty. Further, the proposal is designed to meet FICC's risk management goals and its regulatory obligations, as described below.

Consistency with the Clearing Supervision Act

Although Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act") does not specify a standard of review for an advance notice, its stated purpose is instructive: to mitigate systemic risk in the financial system and promote financial stability by, among other things, promoting uniform risk management

standards for systemically important financial market utilities and strengthening the liquidity of systemically important financial market utilities.⁴⁰

FICC believes that the proposal is consistent with the Clearing Supervision Act, specifically with the risk management objectives and principles of Section 805(b), and with certain of the risk management standards adopted by the Commission pursuant to Section 805(a)(2), for the reasons described below.

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

Section 805(b) of the Clearing Supervision Act⁴¹ states that the objectives and principles for the risk management standards prescribed under Section 805(a) shall be to, among other things, promote robust risk management, promote safety and soundness, reduce systemic risks, and support the stability of the broader financial system. For the reasons described below, FICC believes that the proposed changes in this advance notice are consistent with the objectives and principles of the risk management standards as described in Section 805(b) of the Clearing Supervision Act.

FICC is proposing to (i) modify the calculation of the VaR Floor and the corresponding description in the GSD Rules and QRM Methodology to incorporate a Minimum Margin Amount and (ii) expand the application of the VaR Floor to include Margin Proxy, both of which would enable FICC to better limit its exposure to Members arising out of the activity in their portfolios. FICC believes these proposed changes are consistent with promoting robust risk management because the changes would better enable FICC to limit its exposure to Members in the event of a Member default by

⁴⁰ 12 U.S.C. 5461(b).

⁴¹ 12 U.S.C. 5464(b).

collecting adequate prefunded financial resources to cover its potential losses resulting from the default of a Member and the liquidation of a defaulting Member's portfolio.

Specifically, the proposed Minimum Margin Amount would modify the VaR Floor to cover circumstances, such as extreme market volatility, where the current VaR Charge calculation and the VaR Floor are both lower than market price volatility from corresponding securities benchmarks. The proposed changes are designed to more effectively measure and address risk characteristics in situations where the risk factors used in the VaR method do not adequately predict market price movements and associated credit risk exposure. As reflected in backtesting studies, FICC believes the proposed changes would appropriately limit FICC's credit exposure to Members in the event that the VaR model yields too low a VaR Charge in such situations. Such backtesting studies indicate that the aggregate average daily Backtesting Charges would have decreased by approximately \$622 million or 64.46% during the Impact Study Period, and the overall margin backtesting coverage (based on 12-month trailing backtesting) would have improved from approximately 98.87% to 99.33% during the Impact Study Period if the Minimum Margin Amount calculation had been in place. Improving the overall backtesting coverage level would help FICC ensure that it maintains an appropriate level of margin to address its risk management needs.

The use of the Minimum Margin Amount would reduce risk by allowing FICC to calculate the exposure in each portfolio using historical price returns to represent risk along with amounts calculated (i) using a FHS method that scales historical market price returns to current market volatility, (ii) using a haircut method for those securities that lack sufficient historical price return data, and (iii) to incorporate other risk factors. As

reflected by backtesting studies during the Impact Study Period, using the FHS method would provide a more reliable estimate than the FICC VaR historical data set for the portfolio risk level when current market conditions deviate from historical observations. Adding the Minimum Margin Amount to the VaR Floor and applying the VaR Floor to include Margin Proxy would help to ensure that the risk exposure during periods of extreme market volatility is adequately captured in the VaR Charges. FICC believes that would help to ensure that FICC continues to accurately calculate and assess margin and in turn, collect sufficient margin from its Members and better enable FICC to limit its exposures that could be incurred when liquidating a portfolio.

The proposed change to expand the application of VaR Floor to include Margin Proxy would enable Margin Proxy to be a more effective risk mitigant under extreme market volatility and heightened market stress. By improving the effectiveness of Margin Proxy as a risk mitigant under extreme market volatility and heightened market stress would help ensure that the margin that FICC collects from Members is sufficient to mitigate the credit exposure presented by the Members.

For these reasons, FICC believes the proposed changes would help to promote GSD's robust risk management, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system, consistent with Section 805(b) of the Clearing Supervision Act.⁴²

FICC also believes the changes proposed in this advance notice are consistent with promoting safety and soundness, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system, consistent with Section

⁴²

Id.

805(b) of the Clearing Supervision Act.⁴³ As described above, the proposed changes are designed to help ensure that FICC is collecting adequate prefunded financial resources to cover its potential losses resulting from the default of a Member and the liquidation of a defaulting Member's portfolio in times of extreme market volatility. Because the proposed changes would better position FICC to limit its exposures to Members in the event of a Member default, FICC believes the proposed changes are consistent with promoting safety and soundness, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system.

(ii) *Consistency with 805(a)(2) of the Clearing Supervision Act*

Section 805(a)(2) of the Clearing Supervision Act⁴⁴ authorizes the Commission to prescribe risk management standards for the payment, clearing and settlement activities of designated clearing entities, like FICC, and financial institutions engaged in designated activities for which the Commission is the supervisory agency or the appropriate financial regulator. The Commission has adopted risk management standards under Section 805(a)(2) of the Clearing Supervision Act⁴⁵ and Section 17A of the Act⁴⁶ (the risk management standards are referred to as the "Covered Clearing Agency Standards").⁴⁷

The Covered Clearing Agency Standards require registered clearing agencies to establish, implement, maintain, and enforce written policies and procedures that are

⁴³ Id.

⁴⁴ 12 U.S.C. 5464(a)(2).

⁴⁵ Id.

⁴⁶ 15 U.S.C. 78q-1.

⁴⁷ 17 CFR 240.17Ad-22.

reasonably designed to be consistent with the minimum requirements for their operations and risk management practices on an ongoing basis.⁴⁸ FICC believes that this proposal is consistent with Rules 17Ad-22(e)(4)(i) and (e)(6)(i), each promulgated under the Act,⁴⁹ for the reasons described below.

Rule 17Ad-22(e)(4)(i) under the Act⁵⁰ requires a covered clearing agency to 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 exposures arising from its payment, clearing, and settlement processes by maintaining sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. As described above, FICC believes that the proposed changes would enable it to better identify, measure, monitor, and, through the collection of Members' Required Fund Deposits, manage its credit exposures to Members by maintaining sufficient resources to cover those credit exposures fully with a high degree of confidence. More specifically, as indicated by backtesting studies, implementation of a Minimum Margin Amount by changing the GSD Rules and QRM Methodology as described herein would allow FICC to limit its credit exposures to Members in the event that the current VaR model yields too low a VaR Charge for such portfolios and improve backtesting performance. As indicated by the backtesting studies, the aggregate average daily SOD VaR Charges would have increased by approximately \$2.90 billion or 13.89%, the aggregate average daily noon VaR

⁴⁸ Id.

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

⁵⁰ 17 CFR 240.17Ad-22(e)(4)(i).

Charges would have increased by approximately \$3.03 billion or 14.05%, the aggregate average daily Backtesting Charges would have decreased by approximately \$622 million or 64.46% during the Impact Study Period, and the overall margin backtesting coverage (based on 12-month trailing backtesting) would have improved from approximately 98.87% to 99.33% during the Impact Study Period if the Minimum Margin Amount calculation had been in place. By identifying and providing for appropriate VaR Charges, adding the Minimum Margin Amount to the VaR Floor would help to ensure that the risk exposure during periods of extreme market volatility is adequately identified, measured and monitored. Similarly, the proposed change to expand the application of VaR Floor to include Margin Proxy would enable Margin Proxy to be a more effective risk mitigant under extreme market volatility and heightened market stress. By improving the effectiveness of Margin Proxy as a risk mitigant under extreme market volatility and heightened market stress would help ensure that the margin that FICC collects from Members is sufficient to mitigate the credit exposure presented by the Members. As a result, FICC believes that the proposal would enhance FICC's ability to effectively identify, measure and monitor its credit exposures and would enhance its ability to maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence, consistent with the requirements of Rule 17Ad-22(e)(4)(i) of the Act.⁵¹

Rule 17Ad-22(e)(6)(i) under the Act⁵² requires a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably

⁵¹ Id.

⁵² 17 CFR 240.17Ad-22(e)(6)(i).

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. FICC believes that the proposed changes to adjust the VaR Floor to include the Minimum Margin Amount by changing the GSD Rules and QRM Methodology as described herein are consistent with the requirements of Rule 17Ad-22(e)(6)(i) cited above. The Required Fund Deposits are made up of risk-based components (as margin) that are calculated and assessed daily to limit FICC's credit exposures to Members. FICC is proposing changes that are designed to more effectively measure and address risk characteristics in situations where the risk factors used in the VaR method do not adequately predict market price movements. As reflected in backtesting studies, FICC believes the proposed changes would appropriately limit FICC's credit exposure to Members in the event that the VaR model yields too low a VaR Charge in such situations. Such backtesting studies indicate that the aggregate average daily SOD VaR Charges would have increased by approximately \$2.90 billion or 13.89%, the aggregate average daily noon VaR Charges would have increased by approximately \$3.03 billion or 14.05%, the aggregate average daily Backtesting Charges would have decreased by approximately \$622 million or 64.46% during the Impact Study Period, and the overall margin backtesting coverage (based on 12-month trailing backtesting) would have improved from approximately 98.87% to 99.33% during the Impact Study Period if the Minimum Margin Amount calculation had been in place. By identifying and providing for appropriate VaR Charges, adding the Minimum Margin Amount to the VaR Floor would help to ensure that margin levels are commensurate with the risk exposure of each portfolio during

periods of extreme market volatility. Similarly, the proposed change to expand the application of VaR Floor to include Margin Proxy would enable Margin Proxy to be a more effective risk mitigant under extreme market volatility and heightened market stress. By improving the effectiveness of Margin Proxy as a risk mitigant under extreme market volatility and heightened market stress would help ensure that the margin that FICC collects from Members is sufficient to mitigate the credit exposure presented by the Members. Overall, the proposed changes would allow FICC to more effectively address the risks presented by Members. In this way, the proposed changes enhance the ability of FICC to produce margin levels commensurate with the risks and particular attributes of each relevant product, portfolio, and market. As such, FICC believes that the proposed changes are consistent with the requirements of Rule 17Ad-22(e)(6)(i) under the Act.⁵³

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

The proposed change may be implemented if the Commission does not object to the proposed change within 60 days of the later of (i) the date that the proposed change was filed with the Commission or (ii) the date that any additional information requested by the Commission is received. The clearing agency shall not implement the proposed change if the Commission has any objection to the proposed change.

The Commission may extend the period for review by an additional 60 days if the proposed change raises novel or complex issues, subject to the Commission providing the clearing agency with prompt written notice of the extension. A proposed change may be implemented in less than 60 days from the date the advance notice is filed, or the date further information requested by the Commission is received, if the Commission notifies

⁵³

Id.

the clearing agency in writing that it does not object to the proposed change and authorizes the clearing agency to implement the proposed change on an earlier date, subject to any conditions imposed by the Commission.

The clearing agency shall post notice on its website of proposed changes that are implemented.

The proposal shall not take effect until all regulatory actions required with respect to the proposal are completed.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the Advance Notice is consistent with the Clearing Supervision Act. Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission's Internet comment form (www.sec.gov/rules/sro.shtml); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-FICC-2024-801 on the subject line.

Paper Comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549.

All submissions should refer to File Number SR-FICC-2024-801. 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 (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, NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of FICC and on DTCC's website (www.dtcc.com/legal/sec-rule-filings). Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to File Number SR-FICC-2024-801 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

By the Commission.

Secretary

EXHIBIT 3

The information contained in this Exhibit 3 is subject to exemption from mandatory disclosure under Exemptions #4 and #8 of the Freedom of Information Act because the information concerns (i) trade secrets and commercial information that is privileged or confidential and (ii) the supervision of Fixed Income Clearing Corporation (FICC), a financial institution. This Exhibit 3 contains electronic files, each embedded in a one-page document for filing efficiency, as listed below. The information contained in the embedded files is not intended for public disclosure. Accordingly, this Exhibit 3 has been redacted and confidential treatment requested pursuant to 17 CFR 240.24b-2. An unredacted version was filed separately and confidentially with the Securities and Exchange Commission. Notwithstanding the request for confidential treatment, FICC believes the substance of this Exhibit 3 is clearly and adequately described in the accompanying Exhibit 1A and Form 19b-4 narrative to this filing, thus allowing for meaningful public comment.

Embedded Files:

- FICC Impact Study; spreadsheet file; FICC Impact Analysis – VaR Results.
- FICC Impact Study; spreadsheet file; FICC Impact Analysis – Margin Proxy Results.
- FICC Impact Study; spreadsheet file; FICC Impact Analysis – Backtest Results.

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EXHIBIT 5a

Bold and underlined text indicates proposed added language

~~Bold and strikethrough text~~ indicates proposed deleted language

**FIXED INCOME CLEARING CORPORATION
GOVERNMENT SECURITIES DIVISION RULEBOOK**

RULE 1 – DEFINITIONS

[Changes to this Rule, as amended by File Nos. SR-FICC-2024-003 and SR-FICC-2024-801, are available at www.dtcc.com/legal/sec-rule-filings. These changes have been approved by the Securities and Exchange Commission but have not yet been implemented. By no later than [insert date 60 Business Days after the later of the approval of SR-FICC-2024-003 and no objection to SR-FICC-2024-801], these changes will be implemented, and this legend will be automatically removed from this Rule.]

Minimum Margin Amount

The term “Minimum Margin Amount” means, with respect to each Margin Portfolio, a minimum volatility calculation for specified Net Unsettled Positions of a Netting Member as of the time of such calculation.

The Minimum Margin Amount shall use historical price returns to represent risk and be calculated as the sum of the following:

(a) amounts calculated using a filtered historical simulation approach to assess volatility by scaling historical market price returns to current market volatility, with market volatility being measured by applying exponentially weighted moving average to the historical market price returns with a decay factor between 0.93 and 0.99, as determined by the Corporation from time to time based on sensitivity analysis, macroeconomic conditions, and/or backtesting performance,

(b) amounts calculated using a haircut method to measure the risk exposure of those securities that lack sufficient historical market price return data, and

(c) amounts calculated to incorporate risks related to (i) repo interest volatility (“repo interest volatility charge”) and (ii) transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio (“bid-ask spread risk charge”).

The Corporation will provide Members with at a minimum one Business Day advance notice of any change to the decay factor via an Important Notice.

VaR Charge

The term “VaR Charge” means, with respect to each Margin Portfolio, a calculation of the volatility of specified Net Unsettled Positions of a Netting Member as of the time of such calculation. Such volatility calculations shall be made in accordance with any generally

accepted portfolio volatility model, including, but not limited to, any margining formula employed by any other clearing agency registered under Section 17A of the Securities Exchange Act of 1934. Such calculation shall be made utilizing such assumptions (including confidence levels) and based on such observable market data as the Corporation deems reasonable, and shall cover such range and assessment of volatility as the Corporation from time to time deems appropriate. To the extent that the primary source of such market data becomes unavailable for an extended period of time, the Corporation shall utilize the Margin Proxy as an alternative volatility calculation. In its assessment of volatility, the Corporation shall calculate an additional bid-ask spread risk charge measured by multiplying the gross market value of each Net Unsettled Position by a basis point charge, where the applicable basis point charge shall be reviewed at least annually and shall be based on the following risk groups: (a) mortgage pool transactions; (b) TIPS; (c) U.S. agency bonds; and (d) U.S. Treasury securities, which shall be further categorized by maturity – those maturing in (i) less than five years, (ii) equal to or more than five years and less than ten years, and (iii) equal to or more than ten years.

If the volatility calculation (or the Margin Proxy, when applicable) is lower than ~~an amount designated by the Corporation~~ (the “VaR Floor”), then the VaR Floor will be utilized as ~~the such Netting Member’s~~ VaR Charge of the Margin Portfolio.

VaR Floor

The term “VaR Floor” means, with respect to each Margin Portfolio, the greater of (i) the VaR Floor Percentage Amount and (ii) the Minimum Margin Amount.

VaR Floor Percentage Amount

~~Such VaR Floor will be determined by multiplying~~ **The term “VaR Floor Percentage Amount” means** the absolute value of the sum of Net Long Positions and Net Short Positions of Eligible Securities, grouped by product and remaining maturity, **multiplied** by a percentage designated by the Corporation from time to time for such group. For U.S. Treasury and agency securities, such percentage shall be a fraction, no less than 10%, of the historical minimum volatility of a benchmark fixed income index for such group by product and remaining maturity. For mortgage-backed securities, such percentage shall be a fixed percentage that is no less than 0.05%.

EXHIBIT 5b

The information contained in this Exhibit 5b is subject to exemption from mandatory disclosure under Exemptions #4 and #8 of the Freedom of Information Act because the information concerns (i) trade secrets and commercial information that is privileged or confidential and (ii) the supervision of Fixed Income Clearing Corporation (FICC), a financial institution. This Exhibit 5b contains one electronic file embedded in a one-page document for filing efficiency, as listed below. The information contained in the embedded file is not intended for public disclosure. Accordingly, this Exhibit 5b has been redacted and confidential treatment requested pursuant to 17 CFR 240.24b-2. An unredacted version was filed separately and confidentially with the Securities and Exchange Commission. Notwithstanding the request for confidential treatment, FICC believes the substance of this Exhibit 5b is clearly and adequately described in the accompanying Exhibit 1A and Form 19b-4 narrative to this filing, thus allowing for meaningful public comment.

Embedded File:

- Proposed changes to the QRM Methodology; 26 pages; proposed changes to Methodology Document – GSD Initial Market Risk Margin Model.

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