SECURITIES AND EXCHANGE COMMISSION (Release No. 34-90568; File No. SR-FICC-2020-017)

December 4, 2020

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Notice of Filing of Proposed Rule Change to Modify the Calculation of the MBSD VaR Floor to Incorporate a Minimum Margin Amount

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and

Rule 19b-4 thereunder,² notice is hereby given that on November 20, 2020, Fixed Income

Clearing Corporation ("FICC") filed with the Securities and Exchange Commission

("Commission") the proposed rule change 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 proposed rule change from interested persons.

I. <u>Clearing Agency's Statement of the Terms of Substance of the Proposed Rule</u> <u>Change</u>

The proposed rule change of Fixed Income Clearing Corporation ("FICC") is

attached hereto as Exhibit 5 and consists of a proposal to modify the calculation of the

VaR Floor (as defined below) and the corresponding description in the FICC Mortgage-

Backed Securities Division ("MBSD") Clearing Rules ("MBSD Rules")⁴ to incorporate a

⁴ Capitalized terms not defined herein are defined in the MBSD Rules, <u>available at</u> http://www.dtcc.com/~/media/Files/Downloads/legal/rules/ficc_mbsd_rules.pdf.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ On November 27, 2020, FICC filed this proposed rule change as an advance notice (SR-FICC-2020-804) with the Commission 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, 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). A copy of the advance notice is <u>available at</u> http://www.dtcc.com/legal/sec-rule-filings.aspx.

"Minimum Margin Amount" as described in greater detail below.

The proposed rule change would necessitate changes to the Methodology and Model Operations Document – MBSD Quantitative Risk Model (the "QRM Methodology"), which is attached hereto as Exhibit 5.⁵ FICC is requesting confidential treatment of this document and has filed it separately with the Secretary of the Commission.⁶

II. <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the</u> <u>Proposed Rule Change</u>

In its filing with the Commission, the clearing agency included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. 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, B, and C below, of the most significant aspects of such statements.

⁵ Because FICC requested confidential treatment, the QRM Methodology was filed separately with the Secretary of the Commission as part of proposed rule change SR-FICC-2016-007 (the "VaR Filing"). See Securities Exchange Act Release No. 79868 (January 24, 2017), 82 FR 8780 (January 30, 2017) (SR-FICC-2016-007) ("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. 79843 (January 19, 2017), 82 FR 8555 (January 26, 2017) (SR-FICC-2016-801). The QRM Methodology has been 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) and 90182 (October 14, 2020) 85 FR 66630 (October 20, 2020) (SR-FICC-2020-009).

⁶ 17 CFR 240.24b-2.

(A) <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for,</u> <u>the Proposed Rule Change</u>

1. Purpose

The purpose of the proposed rule change is to modify the calculation of the VaR Floor and the corresponding description in the MBSD Rules to incorporate a Minimum Margin Amount.

The proposed changes would necessitate changes to the QRM Methodology. The proposed changes are described in detail below.

(i) Overview of The Required Fund Deposit and Clearing Fund Calculation

A key tool that FICC uses to manage market risk is the daily calculation and collection of Required Fund Deposits from Clearing Members. The Required Fund Deposit serves as each Clearing Member's margin. The aggregate of all Clearing Members' Required Fund Deposits constitutes the Clearing Fund of MBSD, which FICC would access should a defaulting Clearing Member's own Required Fund Deposit be insufficient to satisfy losses to FICC caused by the liquidation of that Clearing Member's portfolio.

The objective of a Clearing Member's Required Fund Deposit is to mitigate potential losses to FICC associated with liquidation of such Clearing Member's portfolio in the event that FICC ceases to act for such Clearing Member (hereinafter referred to as a "default"). Pursuant to the MBSD Rules, each Clearing Member's Required Fund Deposit amount currently consists of the greater of (i) the Minimum Charge or (ii) the sum of the following components: the VaR Charge, the Deterministic Risk Component, a special charge (to the extent determined to be appropriate), and, if applicable, the

Backtesting Charge, Holiday Charge and Intraday Mark-to-Market Charge.⁷ Of these components, the VaR Charge typically comprises the largest portion of a Clearing Member's Required Fund Deposit amount.

The VaR Charge is calculated using a risk-based margin methodology that is intended to capture the market price risk associated with the securities in a Clearing Member's portfolio. The VaR Charge provides an estimate of the projected liquidation losses at a 99% confidence level. The methodology is designed to project the potential gains or losses that could occur in connection with the liquidation of a defaulting Clearing Member's portfolio, assuming that a portfolio would take three days to hedge or liquidate in normal market conditions. The projected liquidation gains or losses are used to determine the amount of the VaR Charge, which is calculated to cover projected liquidation losses at 99% confidence level.⁸

On January 24, 2017, the Commission approved FICC's VaR Filing to make certain enhancements to the MBSD value-at-risk ("VaR") margin calculation methodology including the VaR Charge.⁹ The VaR Filing amended the definition of VaR Charge to, among other things, incorporate the VaR Floor.¹⁰ The VaR Floor is a calculation using a percentage of gross notional value of a Clearing Member's portfolio

⁹ <u>See VaR Filing Approval Order, supra note 5.</u>

⁷ MBSD Rule 4 Section 2, <u>supra</u>, note 4.

⁸ Unregistered Investment Pool Clearing Members are subject to a VaR Charge with a minimum targeted confidence level assumption of 99.5 percent. <u>See</u> MBSD Rule 4, Section 2(c), <u>supra</u> note 4.

¹⁰ The term "VaR Floor" is defined within the definition of VaR Charge. <u>See</u> MBSD Rule 1, <u>supra</u> note 4.

and is used as an alternative to the VaR Charge amount calculated by the VaR model for Clearing Members' portfolios where the VaR Floor calculation is greater than the VaR model-based calculation. The VaR Floor currently addresses the risk that the VaR model may calculate too low a VaR Charge for certain portfolios where the VaR model applies substantial risk offsets among long and short positions in different classes of mortgagebacked securities that have a high degree of historical price correlation. FICC applies the VaR Floor at the Clearing Member portfolio level. The VaR Floor is calculated by multiplying the market value of a Clearing Member's gross unsettled positions by a designated percentage that is no less than 0.05% and no greater than 0.30%.¹¹ FICC informs Clearing Members of the applicable percentage utilized by the VaR Floor by an Important Notice issued no later than 10 Business Days prior to the implementation of such percentage.¹² The percentage currently designated by FICC is 0.10%.¹³

FICC's VaR model did not respond effectively to the recent levels of market volatility and economic uncertainty, and the VaR Charge amounts that were calculated using the profit and loss scenarios generated by FICC's VaR model did not achieve a 99% confidence level for the period beginning in March 2020 through the beginning of April 2020. FICC's VaR model calculates the risk profile of each Clearing Member's portfolio by applying certain representative risk factors to measure the degree of responsiveness of a portfolio's value to the changes of these risk factors. COVID-19

¹¹ The VaR Floor calculation and percentages are described within the definition of VaR Charge. <u>See MBSD Rule 1, supra</u> note 4.

¹² <u>See</u> definition of VaR Charge, MBSD Rule 1, <u>supra</u> note 4.

 <u>See FICC-MBSD Important Notice MBS761-19</u>, dated November 5, 2019 (notifying Clearing Members that the designated VaR Floor percentage is 0.10%).

market volatility, borrower protection programs, home price outlook, and the Federal Reserve Bank of New York ("FRBNY") authority to buy and sell mortgage-backed securities have created uncertainty in forward rates, origination/refinance pipelines, voluntary/involuntary mortgage prepayments, and supply/demand dynamics that are not reflected in the FICC VaR historical data set and the FICC VaR model incorporates this historical data to calibrate the volatilities of the risk factors and the correlations between risk factors. During this period, the market uncertainty and FRBNY purchases led to market price changes that exceeded the VaR model's projections which yielded insufficient VaR Charges – particularly for higher coupon TBAs¹⁴ where current TBA market prices may reflect higher mortgage prepayment risk than implied by the VaR model's historical risk factor data in the lookback period.

In addition, the VaR Floor did not effectively address the risk that the VaR model calculated too low a VaR Charge for all portfolios during the recent market volatility and economic uncertainty. The VaR Floor is currently designed specifically to account for substantial risk offsets among long and short positions in different classes of mortgage-backed securities that have a high degree of historical price correlation. The recent market volatility and economic uncertainty resulted in a variance between historical price

¹⁴ The vast majority of agency mortgage-backed securities trading occurs in a forward market, on a "to-be-announced" or "TBA" basis. In a TBA trade, the seller of MBS agrees on a sale price, but does not specify which particular securities will be delivered to the buyer on settlement day. Instead, only a few basic characteristics of the securities are agreed upon, such as the mortgagebacked security program, maturity, coupon rate and the face value of the bonds to be delivered. This TBA trading convention enables a heterogeneous market consisting of thousands of different mortgage-backed security pools backed by millions of individual mortgages to be reduced – for trading purposes – to a series of liquid contracts.

changes and observed market price changes resulting in TBA price changes significantly exceeding those implied by the VaR model risk factors as indicated by backtesting data.

FICC employs daily backtesting to determine the adequacy of each Clearing Member's Required Fund Deposit.¹⁵ FICC compares the Required Fund Deposit for each Clearing Member with the simulated liquidation gains/losses using the actual positions in the Clearing Member's portfolio, and the actual historical security returns. During the recent market volatility and economic uncertainty, the VaR Charges and the Required Fund Deposits yielded backtesting deficiencies beyond FICC's risk tolerance.¹⁶ FICC proposes to introduce a Minimum Margin Amount into the VaR Floor to enhance the MBSD VaR model performance and improve the backtesting coverage during periods of heightened market volatility and economic uncertainty. FICC believes that this proposal will increase the margin back-testing performance during periods of heightened market volatility by maintaining a VaR Charge that is appropriately calibrated to the current market price volatility.

(ii) Proposed Rule Change to Incorporate the Minimum Margin Amount in the VaR Floor

FICC is proposing to introduce a new calculation called the "Minimum Margin Amount" to complement the existing VaR Floor calculation in the MBSD Rules. The Minimum Margin Amount would enhance backtesting coverage when there are potential VaR model performance challenges particularly when TBA price changes significantly

¹⁵ For backtesting comparisons, FICC uses the Required Fund Deposit amount, without regard to the actual collateral posted by the Clearing Member.

¹⁶ MBSD's monthly backtesting coverage ratios for Required Fund Deposit was 86.6% in March 2020 and 94.2% in April 2020.

exceed those implied by the VaR model risk factors as observed during March and April 2020.

The Minimum Margin Amount would be defined in the MBSD Rules as a minimum volatility calculation for specified net unsettled positions, calculated using the historical market price changes of such benchmark TBA securities determined by FICC. The definition would state that the Minimum Margin Amount would cover such range of historical market price moves and parameters as FICC from time to time deems appropriate using a look-back period of no less than one year and no more than three years.

FICC would set the range of historical market price moves and parameters 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 ("Model Risk Management Framework").¹⁷ Under the proposed changes to the QRM Methodology, the Minimum Margin Amount would be computed through a dynamic haircut method that is based on observed TBA price moves that would provide a more

¹⁷ See Securities Exchange Act Release Nos. 81485 (August 25, 2017), 82 FR 41433 (August 31, 2017) (SR-DTC-2017-008; SR-FICC-2017-014; SR-NSCC-2017-008); 84458 (October 19, 2018), 83 FR 53925 (October 25, 2018) (SR-DTC-2018-009; SR-FICC-2018-010; SR-NSCC-2018-009) and 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (SR-DTC-2020-008; SR-FICC-2020-004; SR-NSCC-2020-008) ("Model Risk Management Framework Filings"). The Model Risk Management Framework sets forth the model risk management practices adopted by FICC, National Securities Clearing Corporation, and The Depository Trust Company. The Model Risk Management Framework is designed to help identify, measure, monitor, and manage the risks associated with the design, development, implementation, use, and validation of quantitative models. The Model Risk Management Framework describes (i) governance of the Model Risk Management Framework; (ii) key terms; (iii) model inventory procedures; (iv) model validation procedures; (v) model approval process; and (vi) model performance procedures.

reliable estimate for the portfolio risk level when current market conditions deviate from historical observations. The Minimum Margin Amount would also improve the responsiveness of the VaR model to a volatile market because it would have a shorter look back period from the VaR model.

The MBSD Rules currently define the VaR Floor as an amount designated by FICC that is determined by multiplying the sum of the absolute values of a Clearing Member's Long Positions and Short Positions, at market value, by a percentage designated by FICC that is no less than 0.05% and no greater than 0.30%.¹⁸ 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 an amount derived using the current VaR Floor percentage calculation in the MBSD Rules: an amount designated by FICC that is determined by multiplying the sum of the absolute values of a Clearing Member's Long Positions and Short Positions, at market value, by a percentage designated by FICC that is no less than 0.05% and no greater than 0.30%. As with the existing VaR Floor percentage, FICC would determine the percentage within this range to be applied based on factors including but not limited to a review performed at least annually of the impact of the VaR Floor parameter at different levels within the range to the backtesting performance and to Clearing Members' margin charges. The VaR Floor percentage currently in place is 0.10%.

See definition of VaR Charge, MBSD Rule 1, supra note 4.

Likewise, as with the existing VaR Floor percentage, FICC would inform Clearing Members of the applicable percentage used in the VaR Floor Percentage Amount by Important Notice issued no later than 10 Business Days prior to implementation of such percentage. This rule change is not proposing to change the VaR Floor percentage or the manner in which this component is calculated.

The proposed Minimum Margin Amount would modify the VaR Floor to also cover circumstances where the market price volatility implied by the current VaR Charge calculation and the VaR Floor Percentage Amount is lower than market price volatility from corresponding price changes of the proposed TBA securities benchmarks observed during the lookback period. The proposed TBA securities benchmarks to be used in to calculate the Minimum Margin Amount in the QRM Methodology would be Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac") conventional 30-year mortgage-backed securities ("CONV30"), Government National Mortgage Association ("Ginnie Mae") 30-year mortgage-backed securities ("GNMA30"), Fannie Mae and Freddie Mac conventional 15-year mortgage-backed securities ("CONV15"), and Ginnie Mae 15-year mortgagebacked securities ("GNMA15"). These benchmarks were selected because they represent the majority of the trading volumes in the market.¹⁹ This proposal would allow offsetting between short and long positions within TBA securities benchmarks given that the TBAs

¹⁹ FICC plans to map 10-year and 20-year TBA to the corresponding 15-year TBA security benchmark. As of August 31, 2020, 20-year TBAs account for less than 0.5%, and 10-year TBAs account for less than 0.1%, of the positions in MBSD clearing portfolios. In the QRM Methodology, these TBAs are not selected as separate TBA security benchmarks due to the limited trading volumes in the market. FICC will continue to monitor the position exposures in MBSD and determine if a modification to the QRM Methodology may be required.

aggregated in each benchmark exhibit similar risk profiles and can be netted together to calculate the Minimum Margin Amount that will cover the observed market price changes for each portfolio.

FICC is proposing to modify the QRM Methodology to specify that the Minimum Margin Amount would be calculated per Clearing Member portfolio as follows: (i) risk factors would be calculated using historical market prices of benchmark TBA securities and (ii) each Clearing Member's portfolio exposure would be calculated on a net position across all products and for each securitization program (i.e., CONV30, GNMA30, CONV15 and GNMA15). The Minimum Margin Amount would be calculated by multiplying a "base risk factor" (described below) by the absolute value of the Clearing Member's net position across all products, plus the sum of each risk factor spread to the base risk factor multiplied by the absolute value of its corresponding position.

Pursuant to the QRM Methodology, FICC calculates an outright risk factor for GNMA30 and CONV30. The base risk factor for a portfolio for the Minimum Margin Amount would be based on whether GNMA30 or CONV30 constitutes the larger absolute net market value in each Clearing Member's portfolio. If GNMA30 constitute the larger absolute net market value in the portfolio, the base risk factor would be equal to the outright risk factor for GNMA30. If CONV30 constitute the larger absolute new market value in the portfolio, the base risk factor would be equal to the outright risk factor for GNMA30. If CONV30 constitute the larger absolute new market value in the portfolio, the base risk factor would be equal to the outright risk factor for GNMA30 and CONV30 are used as the baseline programs for

²⁰ To illustrate the Minimum Margin Amount calculation, consider an example where a Clearing Member has a portfolio with a net long position across all products of \$2 billion and CONV30 constitutes the larger absolute net market value in its portfolio as between GNMA30 and CONV30. Assume that the outright risk factor for CONV30 is 0.0096. Further assume the Clearing Member

determining the base risk factors because those programs constitute the majority part of the TBA market and the majority of positions in MBSD portfolios.

The proposed benchmark TBA securities, historical market price moves and parameters 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.²¹

FICC is proposing to introduce the Minimum Margin Amount to complement the VaR Floor during market conditions when the TBA prices are driven by factors outside of those implied by the VaR model. The Minimum Margin Amount would use observable TBA prices and would be calculated with a shorter lookback period than the VaR model so it would be more responsive to current market conditions. This proposal provides a more transparent and market price sensitive approach than alternatives, such

has a net short position of \$30 million in CONV15, and the corresponding risk factor spread to the base risk factor is 0.006; a net short position of \$500 million in GNMA30, and the corresponding risk factor spread is 0.005; and a net long position of \$120 million in GNMA15, and the corresponding risk factor spread is 0.007. In order to generate the Minimum Margin Amount, FICC would multiply the base risk factor by the absolute value of the Clearing Member's net position across all products, plus the sum of each risk factor spread of the subsequent products multiplied by absolute value of the position for the respective product (i.e., ([base risk factor]*ABS[portfolio net position]) + ([CONV15 spread risk factor] * ABS[CONV15 net position]) + ([GNMA30 spread risk factor] * ABS[GNMA30 net position]) + ([GNMA15 Spread Risk Factor] * ABS[GNMA15 net position])). The resulting Minimum Margin Amount would be \$22.72 million.

²¹ <u>See Model Risk Management Framework, supra note 17.</u>

as a VaR model parameter adjustment and VaR model add-on, would provide to Clearing Members.²²

The lookback period of the Minimum Margin Amount is intended to be shorter than the lookback period used for the VaR model, which is 10 years, plus, to the extent applicable, one stressed period.²³ The lookback period of the Minimum Margin Amount would be between one to three years. Consistent with the VaR methodology outlined in the QRM Methodology and pursuant to the model performance monitoring required under the Model Risk Management Framework,²⁴ the lookback period would be analyzed to evaluate its sensitivity and impact to the model performance under four distinctive market regimes, epitomized by recent observations: (i) calm markets where the VaR coverage is above 99% (e.g. 2018); (ii) moderately volatile markets or external mortgage market events (e.g. summer 2013; summer 2019); (iii) at the beginning of extreme market volatility (e.g., 2007; COVID-19 in March), and (iv) post extreme market stress and

²² A VaR model parameter adjustment or a VaR model add-on would be implemented by estimating how much the VaR model should be modified to correspond to the current market price volatility. A parameter adjustment would be a modification to one or more VaR model risk factors while an add-on would be a percentage adjustment to the calculated VaR.

²³ FICC maintains the ability to include an additional period of historically observed stressed market conditions to a 10-year look-back period if FICC observes that (1) the results of the model performance monitoring are not within FICC's 99th percentile confidence level or (2) the 10-year look-back period does not contain sufficient stressed market conditions.

²⁴ 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. See Model Risk Management Framework Filings, supra note 17.

mean-reverting to 'normal' market conditions. The lookback parameter in general affects (i) whether and how the floor will be invoked; (ii) the peak level of margin increase or the degree of procyclicality; and (iii) how quickly the margin will fall back to pre-stress levels. The lookback parameter update is intended to be an infrequent event and would typically happen only when there is a market regime change. The decision to update the lookback parameter would be based on the above-mentioned sensitivity analysis with considerations to the impacts to both the VaR Charges and the backtesting performance. The shorter lookback would more accurately reflect recent market conditions and would provide more responsiveness to market condition changes. The initial default lookback period for the Minimum Margin Amount calculation would be two years 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.²⁵

The Model Risk Management Framework would also require FICC to conduct model performance reviews of the Minimum Margin Amount methodology.²⁶ Specifically, FICC would monitor each Clearing Member's Required Fund Deposit and the aggregate Clearing Fund requirements versus the requirements calculated by the Minimum Margin Amount. In order to apply the risk management principles and model performance monitoring required under the Model Risk Management Framework, FICC's current model risk management practices would provide for a review of the robustness of the Required Fund Deposit inclusive of the Minimum Margin Amount by

²⁵ <u>See Model Risk Management Framework, supra note 17.</u>

 $[\]underline{See}$ note 24.

comparing the results versus the three-day profit and loss of each Clearing Member's margin portfolio based on actual market price moves. If the backtesting results of Required Fund Deposit inclusive of the Minimum Margin Amount did not meet FICC's 99% confidence level, FICC could consider adjustments to the Minimum Margin Amount, including changing the look-back period (as discussed above) and/or applying a historical stressed period to the Minimum Margin Amount calibration, as appropriate. Any adjustment to the Minimum Margin Amount calibration would be subject to the model risk management practices and governance process set forth in the Model Risk Management Framework.²⁷

A. Proposed MBSD Rule Changes

In connection with incorporating the Minimum Margin Amount, FICC would modify the MBSD Rules to:

- add a definition of "Minimum Margin Amount" and define it as a minimum volatility calculation for specified net unsettled positions of a Clearing Member, calculated using the historical market price changes of such benchmark TBA securities determined by FICC. The definition would specify that the Minimum Margin Amount shall cover such range of historical market price moves and parameters as the Corporation from time to time deems appropriate using a look-back period of no less than one year and no more than three years;
- add a definition of "VaR Floor Percentage Amount" which would be defined substantially the same as the current calculation for the VaR

²⁷ <u>See Model Risk Management Framework, supra note 17.</u>

Floor percentage with non-substantive modifications to reflect that the calculated amount is a separate defined term; and

 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.

B. Proposed QRM Methodology Changes

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

- describe how the Minimum Margin Amount, as defined in the MBSD
 Rules, would be calculated, including
 - establishing CONV30, GNMA30, CONV15 and GNMA15 as proposed TBA securities benchmarks for purposes of the calculation and calculating risk factors using historical market prices of such benchmark TBA securities;
 - using a dynamic haircut method that allows offsetting between short and long positions within a program and among different programs; and
 - multiplying a "base risk factor" (based on whether GNMA30 or CONV30 constitutes the larger absolute net market value in each Clearing Member's portfolio) by the absolute value of the Clearing Member's net position across all products, plus the sum of each risk factor spread to the base risk factor multiplied by the absolute value of its corresponding position;

- describe the developmental evidence and impacts to backtesting performance and margin charges relating to Minimum Margin Amount; and
- make certain technical changes to the QRM Methodology to re-number sections and tables, and update certain section titles as necessary, to add a new section that describes the proposed Minimum Margin Amount and the selection of benchmarks.

C. Impact Studies

FICC performed an impact study on Clearing Members' portfolios for the period beginning February 3, 2020 through June 30, 2020 ("Impact Study Period'). If the proposed rule changes had been in place during the Impact Study Period compared to the existing MBSD Rules:

- aggregate average daily aggregate VaR Charges would have increased by approximately \$2.2 billion or 42%; and
- aggregate average daily Backtesting Charges would have decreased by approximately \$450 million or 53%.

Impact studies also indicated that if the proposed rule changes had been in place, overall margin backtesting coverage (based on 12-month trailing backtesting) would have increased from approximately 99.3% to 99.6% through January 31, 2020 and approximately 97.3% to 98.5% through June 30, 2020.

D. Impacts to Clearing Members over the Impact Study Period

On average, at the Clearing Member level, the Minimum Margin Amount would have increased the VaR Charge by \$27 million over the Impact Study Period. The largest percent increase in VaR Charge for any Clearing Member would have been 146%, or \$22 million. The largest dollar increase for any Clearing Member would have been \$333 million, or 37% increase in the VaR Charge. The top 10 Clearing Members based on the size of their VaR Charges would have contributed 69.3% of the aggregate VaR Charges during the Impact Study Period had the Minimum Margin Amount been in place. The same Clearing Members would have contributed to 54% of the increase resulting from the Minimum Margin Amount during the Impact Study Period.

The portfolios that would have observed large percent increases were largely made up with concentrations in higher coupon TBAs and GNMA positions. However, no Clearing Members would have triggered the Excess Capital Premium charge²⁸ due to the increase in Required Fund Deposits resulting from the Minimum Margin Amount during the Impact Study Period.

(iii) Implementation Timeframe

FICC would implement the proposed changes no later than 20 Business Days after the later of the approval of the proposed rule change and no objection to the related advance notice²⁹ by the Commission. FICC would announce the effective date of the proposed changes by Important Notice posted to its website.

2. <u>Statutory Basis</u>

FICC believes that this proposal is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a registered clearing agency. Specifically, FICC believes that this proposal is consistent with Section 17A(b)(3)(F) of

²⁸ Excess Capital Premium is assessed when the Clearing Member's VaR Charge exceeds the Excess Capital it maintains.

 $[\]frac{29}{\text{Supra}}$ note 3.

the Act³⁰ and Rules 17Ad-22(e)(4)(i) and (e)(6)(i), each promulgated under the Act,³¹ for the reasons described below.

Section 17A(b)(3)(F) of the Act requires, in part, that the MBSD Rules be designed to assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible.³² FICC believes the proposed changes are designed to assure the safeguarding of securities and funds which are in its custody or control or for which it is responsible because they are designed to enable FICC to better limit its exposure to Clearing Members in the event of a Clearing Member default, as described below.

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 Clearing Members. FICC is proposing changes to the MBSD Rules and QRM Methodology 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 TBA prices. The proposed changes above would adjust the VaR Floor to help ensure that FICC collects adequate margin from its Clearing Members, particularly in periods of high market volatility and economic uncertainty. During these periods, the existing VaR model has been shown to be inadequate based on backtesting performances. Backtesting percentages covering such periods indicate the risk that VaR Charges will be insufficient to manage risk in the event of a Clearing Member's default. FICC pays particular

³⁰ 15 U.S.C. 78q-1(b)(3)(F).

³¹ 17 CFR 240.17Ad-22(e)(4), (e)(6) and (e)(23)(ii).

³² 15 U.S.C. 78q-1(b)(3)(F).

attention to Clearing Members with backtesting deficiencies that bring the results for that Clearing Member below the 99% confidence target to determine if there is an identifiable cause of repeat backtesting deficiencies. During the recent period of market volatility and economic uncertainty, there were numerous repeated backtesting deficiencies. The Minimum Margin Amount, to be defined in the MBSD Rules and further incorporated in the QRM Methodology as described herein, is a proposed targeted response to enhance the MBSD VaR model performance and improve the backtesting coverage during periods of heightened market volatility and economic uncertainty.

As a result of the recent market volatility and economic uncertainty, FICC's VaR model did not achieve a 99% confidence level for all Clearing Members in March and April 2020. The Minimum Margin Amount is intended to allow the VaR Charge to be more responsive during market conditions when the VaR model projections do not closely correspond with observed market price changes. Backtesting studies indicate that aggregate average daily aggregate VaR Charges would have increased by approximately \$2.2 billion or 42%, average aggregate daily Backtesting Charges would have decreased by approximately \$450 million or 53% during the Impact Study Period and the overall margin backtesting coverage (based on 12-month trailing backtesting) would have improved from approximately 97.3% to 98.5% through June 30, 2020 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 the risk spread based on observed TBA

price moves of TBA positions within each portfolio. As reflected by backtesting studies during the Impact Study Period, using observed market prices of such benchmark TBA securities to set risk exposure 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. This proposal would allow offsetting between short and long positions within TBA securities benchmarks given that the TBAs aggregated in each benchmark exhibit similar risk profiles and can be netted together to calculate the Minimum Margin Amount that will cover the observed market price changes for each portfolio. Adding the Minimum Margin Amount to the VaR Floor would help to ensure that the risk exposure during periods of market volatility and economic uncertainty 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 Clearing Members and better enable FICC to limit its exposures that could be incurred when liquidating a portfolio.

FICC believes the proposed technical changes to the QRM Methodology described above would enhance the clarity of the QRM Methodology for FICC. Having a clear and accurate methodology document, which describes how the Minimum Margin Amount would be calculated and the selection of benchmarks, that the Minimum Margin Amount would be included within the calculation of the VaR Charges and the developmental evidence and impacts to backtesting performance and margin charges, would help to ensure that FICC continues to accurately calculate and assess margin and in turn, collect sufficient margin from its Clearing Members and better enable FICC to limit its exposures that could be incurred when liquidating a portfolio.

By better enabling FICC to limit its exposure to Clearing Members, the proposed changes to the MBSD Rules and QRM Methodology are designed to better ensure that, in the event of a Clearing Member default, FICC would have adequate margin from the defaulting Clearing Member and non-defaulting Clearing Members would not be exposed to losses they cannot anticipate or control. Therefore, the proposed changes would be designed to assure the safeguarding of securities and funds which are in the custody or control of FICC or for which it is responsible, consistent with Section 17A(b)(3)(F) of the Act.³³

Rule 17Ad-22(e)(4)(i) under the Act³⁴ 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 Clearing Members' Required Fund Deposits, manage its credit exposures to Clearing 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 MBSD Rules and QRM Methodology as described herein would allow FICC to limit its credit exposures to Clearing Members in the event that the current VaR model yields too

³³ <u>Id.</u>

³⁴ <u>See</u> 17 CFR 240.17Ad-22(e)(4)(i).

low a VaR Charge for such portfolios and improve backtesting performance. As indicated by the backtesting studies, aggregate average daily aggregate VaR Charges would have increased by approximately \$2.2 billion or 42%, average aggregate daily Backtesting Charges would have decreased by approximately \$450 million or 53% during the Impact Study Period and the overall margin backtesting coverage (based on 12-month trailing backtesting) would have improved from approximately 97.3% to 98.5% through June 30, 2020 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 market volatility and economic uncertainty is adequately identified, measured and monitored. 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.³⁵

Rule 17Ad-22(e)(6)(i) under the Act³⁶ 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

³⁶ <u>See</u> 17 CFR 240.17Ad-22(e)(6)(i).

³⁵ <u>Id.</u>

Margin Amount by changing the MBSD 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 Clearing 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 TBA prices. As reflected in backtesting studies, FICC believes the proposed changes would appropriately limit FICC's credit exposure to Clearing Members in the event that the VaR model yields too low a VaR Charge in such situations. Such backtesting studies indicate that aggregate average daily aggregate VaR Charges would have increased by approximately \$2.2 billion or 42%, aggregate average daily Backtesting Charges would have decreased by approximately \$450 million or 53% during the Impact Study Period and the overall margin backtesting coverage (based on 12-month trailing backtesting) would have improved from approximately 97.3% to 98.5% through June 30, 2020 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 market volatility and economic uncertainty. The proposed changes would therefore allow FICC to continue 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) of the Act.³⁷

³⁷ <u>Id.</u>

(B) <u>Clearing Agency's Statement on Burden on Competition</u>

FICC believes the proposed rule changes to modify the VaR Floor to incorporate a Minimum Margin Amount as described above could impose a burden on competition. As a result of the incorporation of the Minimum Margin Amount, Clearing Members may experience increases in their Required Fund Deposits. An impact study during the Impact Study Period indicates that on average each Clearing Member would have had an increase in VaR Charge of approximately 42%. Impact studies also indicate that the proposed changes could impact each Clearing Member in a different manner compared to other Clearing Members depending on the products in such Clearing Member's portfolio. Clearing Members with higher percentages of higher coupon TBAs in their portfolios, are more likely to be impacted by the proposed changes. Such increases could burden Clearing Members that have lower operating margins or higher costs of capital than other Clearing Members. It is not clear whether the burden on competition would necessarily be significant because it would depend on whether the affected Clearing Members were similarly situated in terms of business type and size. Regardless of whether the burden on competition is significant, FICC believes that any burden on competition would be necessary and appropriate in furtherance of the purposes of the Act.

Specifically, FICC believes that the proposed rule changes would be necessary in furtherance of the Act, as described in this filing and further below. FICC believes that the above described burden on competition that may be created by the proposed changes to incorporate a Minimum Margin Amount in the VaR Floor is necessary, because the MBSD Rules must be designed to assure the safeguarding of securities and funds that are in FICC's custody or control or which it is responsible, consistent with Section

17A(b)(3)(F). As described above, FICC believes that the use of the Minimum Margin Amount would reduce risk by allowing FICC to calculate the exposure in each portfolio using the risk spread based on observed TBA price moves of TBA positions within each portfolio and 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. Accurately calculating and assessing margin and in turn, collecting sufficient margin from its Clearing Members would better enable FICC to limit its exposures that could be incurred when liquidating a portfolio. By better enabling FICC to limit its exposure to Clearing Members, the proposed changes to the MBSD Rules and QRM Methodology are designed to better ensure that, in the event of a Clearing Member default, FICC would have adequate margin from the defaulting Clearing Member and non-defaulting Clearing Members would not be exposed to losses they cannot anticipate or control. Therefore, the proposed changes would be designed to assure the safeguarding of securities and funds which are in the custody or control of FICC or for which it is responsible, consistent with Section 17A(b)(3)(F) of the Act.

FICC also believes these proposed changes are necessary to support FICC's compliance with Rules 17Ad-22(e)(4)(i) and Rule 17Ad-22(e)(6)(i) under the Act,³⁸ which require FICC to establish, implement, maintain and enforce written policies and procedures reasonably designed to (x) effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by maintaining sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence and (y) cover

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

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.

As described above, FICC believes that implementing the Minimum Margin Amount into the VaR Floor would allow FICC to more effectively measure and address risk characteristics in situations where the risk factors used in the VaR method do not adequately predict TBA prices, particularly in periods of high volatility and economic uncertainty. FICC's existing VaR model did not respond effectively to the recent levels of market volatility and economic uncertainty, and the VaR Charge amounts that were calculated using the profit and loss scenarios generated by FICC's VaR model did not achieve a 99% confidence level beginning in mid-March 2020. In addition, the VaR Floor did not effectively address the risk that the VaR model calculated too low a VaR Charge for all portfolios. As reflected in backtesting studies during the Impact Study Period, FICC believes the proposed changes would appropriately cover FICC's credit exposure to Clearing Members with a high degree of confidence in the event that the VaR model yields too low a VaR Charge in such situations. The proposed rule changes would limit FICC's exposure to Clearing Members by ensuring that each Clearing Member has an appropriate minimum VaR Charge in the event that the VaR model yields too low a VaR Charge for such portfolios. 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 market volatility and economic uncertainty. Therefore, FICC believes that these proposed changes would allow FICC to effectively identify, measure, monitor, and

manage its credit exposures to Clearing Members and better limit FICC's credit exposures to Clearing Members by maintaining sufficient financial resources to cover its credit exposure to each Clearing Member fully with a high degree of confidence and producing margin levels commensurate with, the risks and particular attributes of each relevant product and portfolio, consistent with the requirements of Rules 17Ad-22(e)(4)(i) and Rule 17Ad-22(e)(6)(i) under the Act.³⁹

FICC also believes that the above described burden on competition that could be created by the proposed changes would be appropriate in furtherance of the Act because such changes have been appropriately designed to assure the safeguarding of securities and funds which are in the custody or control of FICC or for which it is responsible, as described in detail above. The proposed change to incorporate the Minimum Margin Amount would enable FICC to produce margin levels more commensurate with the risks and particular attributes of each Clearing Member's portfolio. Any increase in Required Fund Deposit as a result of such proposed changes for a particular Clearing Member would be in direct relation to the specific risks presented by such Clearing Members' portfolio, and each Clearing Member's Required Fund Deposit would continue to be calculated with the same parameters and at the same confidence level. Therefore, Clearing Members with portfolios that present similar risks, regardless of the type of Clearing Member, would have similar impacts on their Required Fund Deposit amounts. In addition, the proposed changes would improve the risk-based margining methodology that FICC employs to set margin requirements and better limit FICC's credit exposures to its Clearing Members. Impact studies indicate that the proposed methodology would

³⁹ <u>Id.</u>

result in backtesting coverage that more appropriately addresses the risks presented by each portfolio. Therefore, because the proposed changes are designed to provide FICC with a more appropriate and complete measure of the risks presented by Clearing Members' portfolios, FICC believes the proposals are appropriately designed to meet its risk management goals and its regulatory obligations.

Therefore, FICC does not believe that the proposed changes would impose any burden on competition that is not necessary or appropriate in furtherance of the Act.⁴⁰

 (C) <u>Clearing Agency's Statement on Comments on the Proposed Rule Change</u> Received from Members, Participants, or Others

Written comments relating to the proposed rule changes have not been solicited or received. FICC will notify the Commission of any written comments received by FICC.

Within 45 days of the date of publication of this notice in the <u>Federal Register</u> or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) by order approve or disapprove such proposed rule change, or

(B) institute proceedings to determine whether the proposed rule change should be disapproved.

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

⁴⁰ 15.U.S.C. 78q-1(b)(3)(I).

IV. Solicitation of Comments

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

Electronic Comments:

- Use the Commission's Internet comment form (http://www.sec.gov/rules/sro.shtml); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-FICC-2020-017 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-2020-017. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change 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 (http://dtcc.com/legal/sec-rule-filings.aspx). All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-FICC-2020-017 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

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

J. Matthew DeLesDernier Assistant Secretary

⁴¹ 17 CFR 200.30-3(a)(12).