

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-90834; File No. SR-FICC-2020-804)

December 31, 2020

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Notice of Filing and Extension of the Review Period of an Advance Notice to Modify the Calculation of the MBSD VaR Floor to Incorporate a Minimum Margin Amount

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”)<sup>1</sup> and Rule 19b-4(n)(1)(i) under the Securities Exchange Act of 1934 (“Act”),<sup>2</sup> notice is hereby given that on November 27, 2020, Fixed Income Clearing Corporation (“FICC”) filed with the Securities and Exchange Commission (“Commission”) the advance notice SR-FICC-2020-804 (“Advance Notice”) as described in Items I and II below, which Items have been prepared by the clearing agency.<sup>3</sup> The Commission is publishing this notice to solicit comments on the Advance Notice from interested persons and to extend the review period of the Advance Notice for an additional 60 days pursuant to Section 806(e)(1)(H) of the Clearing Supervision Act.<sup>4</sup>

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

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

<sup>3</sup> On November 20, 2020, FICC filed this Advance Notice as a proposed rule change (SR-FICC-2020-017) 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 <http://www.dtcc.com/legal/sec-rule-filings.aspx> (“Proposed Rule Change”).

<sup>4</sup> 12 U.S.C. 5465(e)(1)(H).

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

This advance notice of Fixed Income Clearing Corporation (“FICC”) is attached [sic] 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”)<sup>5</sup> to incorporate a “Minimum Margin Amount” as described in greater detail below.

The proposal would necessitate changes to the Methodology and Model Operations Document – MBSD Quantitative Risk Model (the “QRM Methodology”), which is attached hereto as Exhibit 5.<sup>6</sup> FICC is requesting confidential treatment of this document and has filed it separately with the Secretary of the Commission.<sup>7</sup>

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

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<sup>5</sup> Capitalized terms not defined herein are defined in the MBSD Rules, available at [http://www.dtcc.com/~media/Files/Downloads/legal/rules/ficc\\_mbsd\\_rules.pdf](http://www.dtcc.com/~media/Files/Downloads/legal/rules/ficc_mbsd_rules.pdf).

<sup>6</sup> 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 Clearing Supervision Act (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).

<sup>7</sup> 17 CFR 240.24b-2.

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.

(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.

FICC will notify the Commission of any written comments received by FICC.

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

*Description of Proposed Change*

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.<sup>8</sup> 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.<sup>9</sup>

On January 24, 2017, the Commission approved FICC’s VaR Filing to make certain enhancements to the MBSD value-at-risk (“VaR”) margin calculation

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<sup>8</sup> MBSD Rule 4 Section 2, supra, note 4.

<sup>9</sup> Unregistered Investment Pool Clearing Members are subject to a VaR Charge with a minimum targeted confidence level assumption of 99.5 percent. See MBSD Rule 4, Section 2(c), supra note 4.

methodology including the VaR Charge.<sup>10</sup> The VaR Filing amended the definition of VaR Charge to, among other things, incorporate the VaR Floor.<sup>11</sup> The VaR Floor is a calculation using a percentage of gross notional value of a Clearing Member's portfolio 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 mortgage-backed 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%.<sup>12</sup> 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.<sup>13</sup> The percentage currently designated by FICC is 0.10%.<sup>14</sup>

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

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<sup>10</sup> See VaR Filing Approval Order, supra note 5.

<sup>11</sup> The term "VaR Floor" is defined within the definition of VaR Charge. See MBSD Rule 1, supra note 4.

<sup>12</sup> The VaR Floor calculation and percentages are described within the definition of VaR Charge. See MBSD Rule 1, supra note 4.

<sup>13</sup> See definition of VaR Charge, MBSD Rule 1, supra note 4.

<sup>14</sup> See FICC-MBSD Important Notice MBS761-19, dated November 5, 2019 (notifying Clearing Members that the designated VaR Floor percentage is 0.10%).

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 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 TBAs<sup>15</sup> 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.

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<sup>15</sup> 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 mortgage-backed 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.

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 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.<sup>16</sup> 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.<sup>17</sup> 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.

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<sup>16</sup> For backtesting comparisons, FICC uses the Required Fund Deposit amount, without regard to the actual collateral posted by the Clearing Member.

<sup>17</sup> MBSD's monthly backtesting coverage ratios for Required Fund Deposit was 86.6% in March 2020 and 94.2% in April 2020.

*(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 MBS Rules. The Minimum Margin Amount would enhance backtesting coverage when there are potential VaR model performance challenges particularly when TBA price changes significantly 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 MBS 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”).<sup>18</sup> Under the proposed changes to the QRM

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<sup>18</sup> 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



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 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%.<sup>19</sup> 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

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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.

<sup>19</sup> See definition of VaR Charge, MBSD Rule 1, supra note 4.

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%.

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 mortgage-backed securities ("GNMA15"). These benchmarks were selected because they represent

the majority of the trading volumes in the market.<sup>20</sup> 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.

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

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<sup>20</sup> 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 MBS 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 MBS and determine if a modification to the QRM Methodology may be required.

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 the CONV30.<sup>21</sup> GNMA30 and CONV30 are used as the baseline programs for 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.<sup>22</sup>

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

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<sup>21</sup> 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 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.,  $([\text{base risk factor}] * \text{ABS}[\text{portfolio net position}]) + ([\text{CONV15 spread risk factor}] * \text{ABS}[\text{CONV15 net position}]) + ([\text{GNMA30 spread risk factor}] * \text{ABS}[\text{GNMA30 net position}]) + ([\text{GNMA15 Spread Risk Factor}] * \text{ABS}[\text{GNMA15 net position}]))$ ). The resulting Minimum Margin Amount would be \$22.72 million.

<sup>22</sup> See Model Risk Management Framework, supra note 17.

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 as a VaR model parameter adjustment and VaR model add-on, would provide to Clearing Members.<sup>23</sup>

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.<sup>24</sup> 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,<sup>25</sup> 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

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<sup>23</sup> 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.

<sup>24</sup> 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.

<sup>25</sup> 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.

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 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.<sup>26</sup>

The Model Risk Management Framework would also require FICC to conduct model performance reviews of the Minimum Margin Amount methodology.<sup>27</sup> 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

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<sup>26</sup> See Model Risk Management Framework, supra note 17.

<sup>27</sup> See note 24.

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 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.<sup>28</sup>

**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;

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<sup>28</sup> See Model Risk Management Framework, supra note 17.

- add a definition of “VaR Floor Percentage Amount” which would be defined substantially 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
- 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 charge<sup>29</sup> 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 no objection to the advance notice and the approval of the related proposed rule change<sup>30</sup> by the Commission. FICC would announce the effective date of the proposed changes by Important Notice posted to its website.

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<sup>29</sup> Excess Capital Premium is assessed when the Clearing Member's VaR Charge exceeds the Excess Capital it maintains.

<sup>30</sup> Supra note 3.

*Anticipated Effect on and Management of Risk*

FICC believes that the proposed change, which consists of a proposal to modify the calculation of the VaR Floor and the corresponding description in the MBS Rules to incorporate a Minimum Margin Amount, would enable FICC to better limit its exposure to Clearing Members arising out of the activity in their portfolios. As stated above, the proposed charge is designed to enhance the MBS VaR model performance and improve the backtesting coverage during periods of heightened market volatility and economic uncertainty. 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, including the existing VaR Floor, does not respond effectively to increased market volatility and economic uncertainty 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 Clearing 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.<sup>31</sup>

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 Act<sup>32</sup> 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 modify the calculation of the VaR Floor and the corresponding description in the MBSD Rules and QRM Methodology to incorporate a Minimum Margin Amount which would enable FICC to better limit its exposure to Clearing Members arising out of the activity in their portfolios. FICC believes the

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<sup>31</sup> See 12 U.S.C. 5461(b).

<sup>32</sup> See 12 U.S.C. 5464(b).

proposed changes are consistent with promoting robust risk management because the changes would better enable FICC to limit its exposure to Clearing Members in the event of a Clearing Member default by collecting adequate prefunded financial resources to cover its potential losses resulting from the default of a Clearing Member and the liquidation of a defaulting Clearing Member's portfolio. Specifically, the proposed Minimum Margin Amount would modify the VaR Floor to cover circumstances, such as market volatility and economic uncertainty, where the current VaR Charge calculation and the VaR Floor is lower than market price volatility from corresponding TBA 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 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 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. 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.

For these reasons, FICC believes the proposed changes would help to promote MBSD'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.<sup>33</sup>

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.<sup>34</sup> As described above, the proposed changes are

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<sup>33</sup> Id.

<sup>34</sup> Id.

designed to help ensure that FICC is collecting adequate prefunded financial resources to cover its potential losses resulting from the default of a Clearing Member and the liquidation of a defaulting Clearing Member's portfolio in times of market volatility and economic uncertainty. Because the proposed changes would better position FICC to limit its exposures to Clearing Members in the event of a Clearing Member's 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 Act<sup>35</sup> 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 Act<sup>36</sup> and Section 17A of the Securities Exchange Act of 1934 (the "Act")<sup>37</sup> (the risk management standards are referred to as the "Covered Clearing Agency Standards").<sup>38</sup>

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

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<sup>35</sup> See 12 U.S.C. 5464(a)(2).

<sup>36</sup> See 12 U.S.C. 5464(a)(2)

<sup>37</sup> See 15 U.S.C. 78q-1.

<sup>38</sup> See 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.<sup>39</sup> FICC believes that this proposal is consistent with Rules 17Ad-22(e)(4)(i) and (e)(6)(i), each promulgated under the Act,<sup>40</sup> for the reasons described below.

Rule 17Ad-22(e)(4)(i) under the Act<sup>41</sup> 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 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

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<sup>39</sup> Id.

<sup>40</sup> 17 CFR 240.17Ad-22(e)(4), (e)(6) and (e)(23)(ii).

<sup>41</sup> See 17 CFR 240.17Ad-22(e)(4)(i).



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.<sup>42</sup>

Rule 17Ad-22(e)(6)(i) under the Act<sup>43</sup> 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 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

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<sup>42</sup> Id.

<sup>43</sup> See 17 CFR 240.17Ad-22(e)(6)(i).

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.<sup>44</sup>

### 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

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<sup>44</sup> Id.

was filed with the Commission or (ii) the date that any additional information requested by the Commission is received,<sup>45</sup> unless extended as described below. The clearing agency shall not implement the proposed change if the Commission has any objection to the proposed change.<sup>46</sup>

Pursuant to Section 806(e)(1)(H) of the Clearing Supervision Act,<sup>47</sup> the Commission may extend the review period of an advance notice for an additional 60 days, if the changes proposed in the advance notice raise novel or complex issues, subject to the Commission providing the clearing agency with prompt written notice of the extension.

Here, as the Commission has not requested any additional information, the date that is 60 days after FICC filed the Advance Notice with the Commission is January 26, 2021. However, the Commission is extending the review period of the Advance Notice for an additional 60 days under Section 806(e)(1)(H) of the Clearing Supervision Act<sup>48</sup> because the Commission finds the Advance Notice is both novel and complex, as discussed below.

The Commission believes that the changes proposed in the Advance Notice raise novel and complex issues. Specifically, FICC developed this proposal as a direct response to lessons learned during the pandemic-related market volatility experienced in

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<sup>45</sup> 12 U.S.C. 5465(e)(1)(G).

<sup>46</sup> 12 U.S.C. 5465(e)(1)(F).

<sup>47</sup> 12 U.S.C. 5465(e)(1)(H).

<sup>48</sup> Id.

March and April 2020. As noted above, the TBA price changes significantly exceeded those implied by the VaR model risk factors, which resulted in insufficient VaR Charges during that time period. Moreover, because of the variance between historical price changes and the observed market price changes in March and April 2020, the current VaR Floor did not effectively address the risk that the margin model calculated too low a VaR Charge for all portfolios during that time period. Therefore, FICC has developed the proposal described in the Advance Notice to provide a more reliable estimate for the portfolio risk level when current market conditions deviate from historical observations, as occurred in March and April 2020. Determining the appropriate method to address this particular set of circumstances in the context of FICC's VaR Model presents novel and complex issues.

Moreover, the Commission understands that comments likely would assert that the changes to FICC's risk management practices described in the Advance Notice would have a significant and lasting impact on the market participants in the mortgage market.<sup>49</sup>

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<sup>49</sup> See Letter from Kelli McMorrow, Head of Government Affairs, American Securities Association, dated December 18, 2020, to Vanessa Countryman, Secretary, Commission, [available at](https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017-8173139-227003.pdf) <https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017-8173139-227003.pdf> ("ASA Letter"); Letter from Pete Mills, Senior Vice President, Mortgage Bankers Association, dated December 17, 2020, to Jay Clayton, Chairman, Commission, [available at](https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017-8155338-226778.pdf) <https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017-8155338-226778.pdf> ("MBA Letter"); Letter from Christopher Killian, Managing Director, Securities Industry and Financial Markets Association, dated December 16, 2020, to Vanessa Countryman, Secretary, Commission, [available at](https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017-8154310-226759.pdf) <https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017-8154310-226759.pdf> ("SIFMA Letter"); Letter from Curtis Richins, President & CEO, Mortgage Capital Trading, Inc., dated December 15, 2020, to Vanessa Countryman, Secretary, Commission, [available at](https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017-8156568-226839.pdf) <https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017-8156568-226839.pdf> ("MCT Letter"); and Letter from James Tabacchi, Chairman, Independent Dealer and Trader Association, dated December 10, 2020, to

Currently, there is the potential for additional economic uncertainty in the mortgage market due to, among other things, uncertainty associated with the effects of the Federal Reserve Bank of New York asset purchases of MBS and CARES Act mortgage forbearance programs.<sup>50</sup> The Commission believes that the potential impact on the mortgage market arising from this proposal also presents novel and complex issues.

Accordingly, pursuant to Section 806(e)(1)(H) of the Clearing Supervision Act,<sup>51</sup> the Commission is extending the review period of the Advance Notice to March 27, 2021, which is the date by which the Commission shall notify the clearing agency of any objection regarding the Advance Notice, unless the Commission requests further information for consideration of the Advance Notice (SR-FICC-2020-804).<sup>52</sup>

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Vanessa Countryman, Secretary, Commission, available at <https://www.sec.gov/comments/sr-ficc-2020-017/srficc2020017-8127766-226454.pdf> (“IDTA Letter”). In addition, commenters stated that the Commission should expect to receive additional comments that will assert substantive issues with the proposal. Id. Because the proposals contained in the Advance Notice and Proposed Rule Change raise the same substantive issues, supra note 3, the Commission considers all public comments received on the proposal regardless of whether the comments were submitted to the Advance Notice or the Proposed Rule Change.

<sup>50</sup> See generally Agency MBS Historical Operational Results and Planned Purchase Amounts, [https://www.newyorkfed.org/markets/ambs/ambs\\_schedule](https://www.newyorkfed.org/markets/ambs/ambs_schedule); Consumer Finance Protection Bureau information site, <https://www.consumerfinance.gov/coronavirus/mortgage-and-housing-assistance/mortgage-relief/>.

<sup>51</sup> 12 U.S.C. 5465(e)(1)(H).

<sup>52</sup> This extension extends the time periods under Sections 806(e)(1)(E) and (G) of the Clearing Supervision Act. 12 U.S.C. 5465(e)(1)(E) and (G).

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 (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-FICC-2020-804 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-2020-804. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the Advance Notice that are filed with

the Commission, and all written communications relating to the Advance Notice between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, 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-2020-804 and should be submitted on or before January 29, 2021.

By the Commission.

J. Matthew DeLesDernier,  
Assistant Secretary.