SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-79643; File No. SR-FICC-2016-801)

December 21, 2016

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Notice of Filing of an Advance Notice to Implement a Change to the Methodology Used in the MBSD VaR Model

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" or "Payment, Clearing and Settlement Supervision Act")[1] and Rule 19b-4(n)(1)(i) under the Securities Exchange Act of 1934 ("Act"),[2] notice is hereby given that on November 23, 2016, the Fixed Income Clearing Corporation ("FICC") filed with the Securities and Exchange Commission ("Commission") the advance notice as described in Items I, II and III below, which Items have been prepared primarily by FICC ("Advance Notice").[3] The Commission is publishing this notice to solicit comments on the Advance Notice from interested persons.

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

The proposed change would change the methodology that FICC uses in the Mortgage-Backed Securities Division's ("MBSD") value-at-risk ("VaR") model from

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1 12 U.S.C. 5465(e)(1).

2 17 CFR 240.19b-4(n)(1)(i).

3 FICC also filed a proposed rule change with the Commission pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 and Rule 19b-4 thereunder, seeking approval of changes to its rules necessary to implement the proposal. 15 U.S.C. 78s(b)(1) and 17 CFR 240.19b-4. See File No. SR-FICC-2016-007.

one that employs a full revaluation approach to one that would employ a sensitivity approach, as described in greater detail below.[4]

The proposed change would also amend the MBSD Rules to (1) revise the definition of VaR Charge to reference an alternative volatility calculation (referred to herein as the Margin Proxy (as defined in Item II(B) below)), which would be employed in the event that the requisite data used to employ the sensitivity approach is unavailable for an extended period of time, (2) revise the definition of VaR Charge to include a minimum amount (the "VaR Floor") that FICC would employ as an alternative to the amount calculated by the proposed VaR model for portfolios where the VaR Floor would be greater than the model-based charge amount, (3) eliminate two components from the Required Fund Deposit calculation that would no longer be necessary following implementation of the proposed VaR model, and (4) change the margining approach that FICC may employ for certain securities with inadequate historical pricing data from one that calculates charges using a historic index volatility model to one that would employ a simple haircut method, as described in greater detail below.

The proposed sensitivity approach and Margin Proxy methodologies would be reflected in the Methodology and Model Operations Document - MBSD Quantitative Risk Model (the "QRM Methodology"). FICC is requesting confidential treatment of this document and has filed it separately with the Secretary of the Commission.[5]

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4 Capitalized terms used herein and not defined shall have the meaning assigned to such terms in the MBSD Clearing Rules ("MBSD Rules") available at www.dtcc.com/legal/rules-and-procedures.aspx.

5 See 17 CFR 240.24b-2.

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

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

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

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

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

Description of the Change

FICC is proposing to change the methodology that is currently used in MBSD's VaR model from one that employs a full revaluation approach to one that would employ a sensitivity approach. In connection with this change, FICC is also proposing to (1) amend the definition of VaR Charge to reference that an alternative volatility calculation (referred to herein as the Margin Proxy (as defined in section B below)) would be employed in the event that the requisite data used to employ the sensitivity approach is unavailable for an extended period of time, (2) revise the definition of VaR Charge to include a VaR Floor that FICC would employ as an alternative to the amount calculated by the proposed VaR model for portfolios where the VaR Floor would be greater than the model-based charge amount, (3) eliminate two components from the Required Fund Deposit calculation that would no longer be necessary following implementation of the

proposed VaR model, and (4) change the margining approach that FICC may employ for certain securities with inadequate historical pricing data from one that calculates charges using a historic index volatility model to one that would employ a simple haircut method. These changes are described in more detail below.

A. The Required Fund Deposit and Clearing Fund Calculation Overview

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 Member's portfolio in the event that FICC ceases to act for such Member (hereinafter referred to as a "default"). Pursuant to the MBSD Rules, each Clearing Member's Required Fund Deposit amount currently consists of the following components: the VaR Charge, the Coverage Charge, the Deterministic Risk Component, the margin requirement differential ("MRD") and, to the extent appropriate, a special charge.[6] Of these components, the VaR Charge 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

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[6] MBSD Rule 4 Section 2.

Member's portfolio. The methodology uses historical market moves to project the potential gains or losses that could occur in connection with the liquidation of a defaulting Clearing Member's portfolio. The methodology assumes 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 a 99 percent confidence level.[7]

FICC employs daily backtesting to determine the adequacy of each Clearing Member's Required Fund Deposit. The backtesting compares the Required Fund Deposit for each Clearing Member with actual price changes in the Clearing Member's portfolio. The portfolio values are calculated by using the actual positions in such Member's portfolio on a given day and the observed security price changes over the following three days. These backtesting results are reviewed as part of FICC's VaR model performance monitoring and assessment of the adequacy of each Clearing Member's Required Fund Deposit.

FICC currently calculates the VaR Charge using a methodology referred to as the "full revaluation" approach. The full revaluation approach employs a historical simulation method to fully reprice each security in a Clearing Member's portfolio using valuation algorithms with prevailing and historical market data. VaR provides an estimate of the possible losses for a given portfolio based on a given confidence level over a particular time horizon. The VaR Charge is calibrated at a 99 percent confidence level based on a 1-year look-back period assuming a three-day liquidation/hedge period. If FICC determines that a security's price history is incomplete and the market price risk

[7] Unregistered Investment Pool Clearing Members are subject to a VaR Charge with a minimum targeted confidence level assumption of 99.5 percent.

cannot be calculated by the VaR model, then FICC applies an index volatility model until such security's trading history and pricing reflects market risk factors that can be appropriately calibrated from the security's historical data.[8]

B. Proposed Change to Replace the Methodology Used in the Existing VaR Charge Calculation

During the volatile market period that occurred during the second and third quarters of 2013, FICC's full revaluation approach did not respond effectively to the levels of market volatility at that time, and the VaR Charge amounts that were calculated using the profit and loss scenarios generated by FICC's full revaluation model did not achieve a 99 percent confidence level. Thus, the VaR Charge and the Required Fund Deposit yielded backtesting deficiencies beyond FICC's risk tolerance, which prompted FICC to employ a supplemental risk charge to ensure that each Clearing Member's VaR Charge would achieve a minimum 99 percent confidence level. This supplemental charge, referred to as the margin proxy (the "Margin Proxy"), ensured that each Clearing Member's VaR Charge was adequate and, at the minimum, mirrored historical price moves.[9] Shortly thereafter, the annual model validation exercise revealed that FICC's prepayment model,[10] which is a component of the full revaluation approach, had failed to

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8 MBSD Rule 4 Section 2(c).

9 The Margin Proxy is currently employed to provide supplemental coverage to the VaR Charge, however, under this proposed change, the Margin Proxy would only be employed as an alternative volatility calculation in the event that the requisite data used to employ the sensitivity approach is unavailable for an extended period of time.

10 Cash flow uncertainty as a result of unscheduled payments of principal (prepayments) is a key investment characteristic of most mortgage-backed securities. The existing VaR model uses a full revaluation approach that fully reprices each instrument under each historically simulated scenario. One component of this pricing model is FICC's prepayment model. This model was

perform as expected due to shifting market dynamics that were not accurately captured by the model.

In connection with the above, FICC performed a review of the existing model deficiencies, examined the root causes of such deficiencies and considered options that would remediate the observed model weaknesses. As a result of this review, FICC is proposing to change MBSD's methodology for calculating the VaR Charge by: (1) replacing the full revaluation approach with the sensitivity approach,[11] (2) employing the Margin Proxy as an alternative volatility calculation in the event that the requisite data used to employ the sensitivity approach is unavailable for an extended period of time and (3) establishing a VaR Floor as the VaR Charge to address a circumstance where the proposed VaR model yields a VaR Charge amount that is lower than 5 basis points of the market value of a Clearing Member's gross unsettled positions.[12]

The current full revaluation method uses valuation algorithms, one component of which is FICC's prepayment model, to fully reprice each security in a Clearing Member's portfolio over a range of historically simulated scenarios. While there are benefits to this method, some of its deficiencies are that it requires significant historical market data

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implemented during the first quarter of 2013 and it is described in AN-FICC-2012-09. Securities Exchange Act Release No. 34-68498 (December 20, 2012) 77 FR 76311 (December 27, 2012) (AN-FICC-2012-09).

11 Two key choices in designing a VaR model are (1) the approach used to generate simulation scenarios (e.g., historical simulation or Monte Carlo) and (2) the approach used to value the portfolio change under the simulated scenarios (e.g., full revaluation approach or sensitivity approach).

12 Assuming the market value of gross unsettled positions of $500,000,000, the VaR Floor calculation would be .0005 multiplied by $500,000,000 = $250,000. If the VaR model charge is less than $250,000, then the VaR Floor calculation of $250,000 would be set as the VaR Charge.

inputs, calibration of various model parameters and extensive quantitative support for price simulations. FICC believes that the proposed sensitivity approach would address these deficiencies because it would leverage external vendor expertise in supplying the market risk attributes, which would then be incorporated by FICC into its model to calculate the VaR Charge. FICC would source security-level risk sensitivity data and relevant historical risk factor time series data from an external vendor for all Eligible Securities.[13] The sensitivity data is generated by the vendor based on its econometric, risk and pricing models. Because the quality of this data is an important component of calculating the VaR Charge, FICC would conduct independent data checks to verify the accuracy and consistency of the data feed received from the vendor. With respect to the historical risk factor time series data, FICC has evaluated the historical price moves and determined which risk factors primarily explain those price changes, a practice commonly referred to as risk attribution. The following risk factors have been incorporated into MBSD's proposed VaR methodology: key rate, convexity, spread, volatility, mortgage basis and time.[14]

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[13] Specified pool trades are mapped to the corresponding positions in to-be-announced securities ("TBAs"). For options on TBAs, it should be noted that FICC's guarantee for options is limited to the intrinsic value of option positions (that is, when the underlying price of the TBA position is above the call price, the option is considered in-the-money and FICC's guarantee reflects this portion of the option's positive value) at the time of a Clearing Member's insolvency. As such, the value change of an option position would be simulated as the change in intrinsic values over the period of risk.

[14] These risk factors are defined as follows:

- key rate measures the sensitivity of a price change to changes in interest rates;
- convexity measures the degree of curvature in the price/yield relationship of key interest rates;

FICC's proposal to use third-party risk factor data requires that FICC take steps to mitigate potential model risk. FICC has reviewed a description of the vendor's calculation methodology and the manner in which the market data is used to calibrate the vendor's models. FICC understands and is comfortable with the vendor's controls, governance process and data quality standards. Additionally, FICC would conduct an independent review of the vendor's release of a new version of the model. As described in the QRM Methodology, to the extent that the vendor changes its model and methodologies that produce the risk factors and risk sensitivities, the effect of these changes to FICC's proposed sensitivity approach would be reviewed by FICC. Future changes to the QRM Methodology would be subject to a proposed rule change pursuant to the Act Rule 19b-4 ("Rule 19b-4").[15] Modifications to the proposed VaR model may be subject to a proposed rule change pursuant to Rule 19b-4[16] and/or an advance notice filing pursuant to the Clearing Supervision Act,[17] and Rule 19b-4(n)(1)(i) under the Act.[18]

- spread is the yield spread that is added to a benchmark yield curve to discount a TBA's cash flows to match its market price, which takes into account a credit premium and the option-like feature of mortgage-backed-securities due to prepayment;
- volatility reflects the implied volatility observed from the swaption market to estimate fluctuations in interest rates, which impact the prepayment assumptions;
- mortgage basis captures the basis risk between the prevailing mortgage rate and a blended Treasury rate, which impacts borrowers' refinance incentives and the model prepayment assumptions; and
- time risk factor accounts for the time value change (or carry adjustment) over the assumed liquidation period.

15 See 17 CFR 240.19b-4.

16 Id.

17 See 12 U.S.C. 5465(e)(1).

18 See 17 CFR 240.19b-4(n)(1)(i).

Under the proposed approach, a Clearing Member's portfolio risk sensitivities would be calculated by FICC as the aggregate of the security level risk sensitivities weighted by the corresponding position market values. The portfolio risk sensitivities and the vendor supplied historical risk factor time series data would then be used by FICC's risk model to calculate the VaR Charge for each Clearing Member. More specifically, FICC would look at the historical changes of the chosen risk factors during the look-back period in order to generate risk scenarios to arrive at the market value changes for a given portfolio. A statistical probability distribution would be formed from the portfolio's market value changes.

The proposed sensitivity approach differs from the current full revaluation method mainly in how the market value changes are calculated. The full revaluation method accounts for changes in properties of mortgage-backed securities that change over time by incorporating certain historical data[19] to calibrate the model that generates a simulated interest rate curve. This data is used to create a distribution of returns per TBA. The proposed sensitivity approach, by comparison, would simulate the market value changes of a Clearing Member's portfolio under a given market scenario as the sum of the portfolio risk factor exposure multiplied by the corresponding risk factor movements.

The sensitivity approach would provide three key benefits. First, the sensitivity approach incorporates both historical data and current risk factor sensitivities while the full revaluation approach is calibrated with only historical data. The proposed sensitivity approach integrates both observed risk factor changes and current market conditions to more effectively respond to current market price moves that may not be reflected in the

[19] Such historical data may include TBA prices, 3-day movements of interest, option-adjusted spreads, current interest term structure and swaption volatilities.

historical price moves. This is evidenced in FICC's independent validation of the proposed model and the backtesting results. The risk factor data is sourced from an industry-leading vendor risk model with trading quality accuracy. As part of the assessment of the proposed VaR model, the independent validation of the proposed model indicated that the proposed sensitivity approach would address deficiencies observed in the existing model by leveraging external vendor expertise, which FICC does not need to develop in-house, in supplying the market risk attributes that would then be incorporated by FICC into its model to calculate the VaR Charge. FICC has also performed backtesting to validate the performance of the proposed model and determine the impact on the VaR Charge. Based on FICC's review of the backtesting results and the impact study, the sensitivity approach provides better coverage on volatile days and a material improvement in margin coverage, while not significantly increasing the overall Clearing Fund. Results of the analysis indicate that the proposed sensitivity approach would be more responsive to changing market dynamics and that it would not negatively impact FICC or its Clearing Members.

The second benefit of the proposed sensitivity approach is that it would provide more transparency to Clearing Members. Since Clearing Members typically use risk factor analysis for their own risk and financial reporting such Members would have comparable data and analysis to assess the variation in their VaR Charge based on changes in the market value of their portfolios. Thus, Clearing Members would be able to simulate the VaR Charge to a closer degree than under the existing VaR model.

The third benefit of the proposed sensitivity approach is that it provides FICC with the ability to increase the look-back period used to generate the risk scenarios from

1 year to 10 years plus, to the extent applicable, an additional stressed period.[20] The extended look-back period would be used to ensure that the historical simulation is inclusive of stressed market periods.

FICC would have 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. While FICC could extend the 1-year look-back period in the existing full revaluation approach to a 10-year look-back period, the performance of the model could deteriorate if current market conditions are materially different than indicated in the historical data. Additionally, since the full revaluation method requires FICC to maintain in-house complex pricing models and mortgage prepayment models, enhancing these models to extend the look-back period to include 10-years of historical data involves significant model development. The sensitivity approach, on the other hand, would incorporate a longer look-back period of 10 years, which would allow the proposed model to capture periods of historical volatility.

On an annual basis, FICC would assess whether an additional stressed period should be included. This assessment would include a review of (1) the largest moves in the dominating market risk factor of the proposed VaR model, (2) the impact analyses

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[20] Under the proposed model, the 10-year look-back period would include the 2008/2009 financial crisis scenario. To the extent that an equally or more stressed market period does not occur when the 2008/2009 financial crisis period is phased out from the 10-year look-back period (e.g., from September 2018 onward), FICC would continue to include the 2008/2009 financial crisis scenario in its historical scenarios. However, if an equally or more stressed market period emerges in the future, FICC may choose not to augment its 10-year historical scenarios with those from the 2008/2009 financial crisis.

resulting from the removal and/or addition of a stressed period and (3) the backtesting results of the proposed look-back period. As described in the QRM Methodology, approval by FICC's Model Risk Governance Committee ("MRGC") and, to the extent necessary, the Management Risk Committee ("MRC") would be required to determine when to apply an additional period of stressed market conditions to the look-back period and the appropriate historical stressed period to utilize if it is not within the current 10-year period.

Finally, FICC does not believe that its engagement of the vendor would present a conflict of interest to FICC because the vendor is not an existing Clearing Member nor are any of the vendor's affiliates existing Clearing Members. To the extent that the vendor or any of its affiliates submit an application to become a Clearing Member, FICC will negotiate an appropriate information barrier with the applicant in an effort to prevent a conflict of interest from arising. An affiliate of the vendor currently provides an existing service to FICC, however, this arrangement does not present a conflict of interest because the existing agreement between FICC and the vendor, and the existing agreement between FICC and the vendor's affiliate each contain provisions which limit the sharing of confidential information.

C. Proposed Change to Establish a VaR Floor

FICC is proposing to amend the definition of VaR Charge to include a VaR Floor. The VaR Floor would be employed as an alternative to the amount calculated by the proposed model for portfolios where the VaR Floor would be greater than the model-based charge amount. FICC's proposal to establish a VaR Floor seeks to address the risk that the proposed 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. Because this high degree of historical price correlation may not apply in future changing market conditions,[21] FICC believes that it is prudent to apply a VaR Floor that is based upon the market value of the gross unsettled positions in the Clearing Member's portfolio in order to protect FICC against such risk in the event that FICC is required to liquidate a large mortgage-backed securities portfolio in stressed market conditions.

D. Vendor Data Disruption

As noted above, FICC intends to source certain sensitivity data and risk factor data from a vendor. FICC's Quantitative Risk Management, Vendor Risk Management, and Information Technology teams have conducted due diligence of the vendor in order to evaluate its control framework for managing key risks. FICC's due diligence included an assessment of the vendor's technology risk, business continuity, regulatory compliance, and privacy controls. FICC has existing policy and procedures for data management that includes market data and analytical data provided by vendors. These policies and procedures do not have to be amended in connection with this proposed rules change. FICC also has tools in place to assess the quality of the data that it receives from vendors.

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[21] For example, and without limitation, certain classes of mortgage-backed securities may have highly correlated historical price returns despite having different coupons. However, if future mortgage market conditions were to generate substantially greater prepayment activity for some but not all such classes, these historical correlations could break down, leading to model-generated offsets that would not adequately capture a portfolio's risk.

Rule 1001(c)(1) of Regulation Systems Compliance and Integrity ("SCI") requires FICC to establish, maintain, and enforce reasonably designed written policies and procedures that include the criteria for identifying responsible SCI personnel, the designation and documentation of responsible SCI personnel, and escalation procedures to quickly inform responsible SCI personnel of potential SCI events.[22] Further, pursuant to Rule 1002 of Regulation SCI, each responsible SCI personnel is responsible for determining when there is a reasonable basis to conclude that a SCI event has occurred, which will trigger certain obligations of an SCI entity with respect to such SCI events.[23] FICC has existing policies and procedures which reflect established criteria that must be used by responsible SCI personnel to determine whether a disruption to, or significant downgrade of, the normal operation of FICC's risk management system has occurred as defined under Regulation SCI. These policies and procedures do not have to be amended in connection with this proposed rule change. In the event that the vendor fails to provide the requisite sensitivity data and risk factor data, the responsible SCI personnel would determine whether a SCI event has occurred and FICC would fulfill its obligations with respect to the SCI event.

In connection with FICC's proposal to source data for the proposed sensitivity approach, FICC is also proposing procedures that would govern in the event that the vendor fails to provide sensitivity data and risk factor data. If the vendor fails to provide any data or a significant portion of the data timely, FICC would use the most recently available data on the first day that such data disruption occurs. If it is determined that the

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22 See 17 CFR 242.1001(c)(1).

23 See 17 CFR 242.1002.

vendor will resume providing data within five (5) business days, management would determine whether the VaR Charge should continue to be calculated by using the most recently available data along with an extended look-back period or whether the Margin Proxy should be invoked, subject to the approval of DTCC's Group Chief Risk Officer or his/her designee. If it is determined that the data disruption will extend beyond five (5) business days, the Margin Proxy would be applied, subject to the approval of the MRC followed by notification to FICC's Board Risk Committee.

The Margin Proxy would be calculated 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., Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac") conventional 30-year mortgage-backed securities, Government National Mortgage Association ("Ginnie Mae") 30-year mortgage-backed securities, Fannie Mae and Freddie Mac conventional 15-year mortgage-backed securities, and Ginnie Mae 15-year mortgage-backed securities). The Margin Proxy would be used to calculate the VaR Charge by multiplying the risk factor for the Fannie Mae and Freddie Mac conventional 30-year mortgage-backed securities ("base risk factor"), which is the dominant and most liquid portion of the products cleared by FICC, 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.[24]

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[24] To illustrate the Margin Proxy calculation, consider an example where a Clearing Member has a portfolio with a net long position across all products of $2 billion, and the base risk factor is 0.015. Further assume the Clearing Member has a net

FICC would calculate the Margin Proxy on a daily basis and the Margin Proxy method would be subject to monthly performance review by the MRGC. FICC would monitor the performance of the calculation on a monthly basis to ensure that it could be used in the circumstance described above. Specifically, FICC would monitor each Clearing Member's Required Fund Deposit and the aggregate Clearing Fund requirements versus the requirements calculated by Margin Proxy. FICC would also backtest the Margin Proxy results versus the three-day profit and loss based on actual market price moves. If FICC observes material differences between the Margin Proxy calculations and the aggregate Clearing Fund requirement calculated using the proposed VaR model, or if the Margin Proxy's backtesting results do not meet FICC's 99 percent confidence level, management may recommend remedial actions to the MRGC, and to the extent necessary the MRC, such as increasing the look-back period and/or applying an appropriate historical stressed period to the Margin Proxy calibration.

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short position of $30 million in Fannie Mae and Freddie Mac conventional 15-year mortgage-backed securities, and the corresponding risk factor spread to the base risk factor is 0.006; a net short position of $500 million in Ginnie Mae 30-year mortgage-backed securities, and the corresponding risk factor spread is 0.005; and a net long position of $120 million in Ginnie Mae 15-year mortgage-backed securities, and the corresponding risk factor spread is 0.007. In order to generate the Margin Proxy calculation, 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 Margin Proxy amount would be $33.52 million.

E. Proposed Change to Replace the Historic Index Volatility Model with a Haircut Method to Measure the Risk Exposure of Securities That Lack Historical Data

Occasionally, portfolios contain classes of securities that reflect market price changes not consistently related to historical risk factors. The value of these securities is often uncertain because the securities' market volume varies widely, thus the price histories are limited. Since the volume and price information for such securities is not robust, a historical simulation approach would not generate VaR Charge amounts that adequately reflect the risk profile of such securities. Currently, MBSD Rule 4 provides that FICC may use a historic index volatility model to calculate the VaR component of the Required Fund Deposit for these classes of securities. FICC is proposing to amend Rule 4 to replace the historic index volatility model with a haircut method.

FICC believes that the haircut method would better capture the risk profile of these securities because the lack of adequate historical data makes it difficult to map such securities to a historic index volatility model. FICC is proposing to calculate the component of the Required Fund Deposit applicable to these securities by applying a fixed haircut level to the gross market value of the positions. FICC has selected an initial haircut of 1 percent based on its analysis of a five-year historical study of three-day returns during a period that such securities were traded. This percentage would be reviewed annually or more frequently if market conditions warrant and updated, if necessary, to ensure sufficient coverage.

Currently, the classes of securities that lack adequate historical data include balloon Fannie Mae 7-year securities, balloon Freddie Mac 5-year securities and balloon Freddie Mac 7-year securities. FICC has no exposure to these security classes as of the

filing date of this proposed change and has had negligible exposure over the last several years. However, prudent risk management dictates that FICC maintain appropriate rules to cover potential future exposures.

F. Proposed Change to Eliminate the Coverage Charge Component and the Margin Requirement Differential Component

FICC is also proposing to eliminate the Coverage Charge and MRD components from MBSD's Required Fund Deposit calculation. Both components are based on historical portfolio activity, which may not be indicative of a Clearing Member's current risk profile, but were determined by FICC to be appropriate to address potential shortfalls in margin charges under the existing VaR model.

As part of the development and assessment of the sensitivity approach for MBSD's proposed VaR model, FICC obtained an independent validation of the proposed model by an external party, backtested the model's performance and analyzed the impact of the margin changes. Results of the analysis indicated that the proposed sensitivity approach would be more responsive to changing market dynamics and a Clearing Member's portfolio composition coverage than the existing model. The model validation and backtesting analysis also demonstrated that the proposed sensitivity model would provide sufficient margin coverage on a standalone basis. Because testing and validation of MBSD's proposed VaR model show a material improvement in margin coverage, FICC believes that the Coverage Charge and MRD components are no longer necessary.

G. Description of the Proposed Changes to the Text of the MBSD Rules

The proposed changes to the MBSD Rules are as follows:

- Delete the term "Coverage Charge" from Rule 1 because FICC is proposing to eliminate this component from the Clearing Fund calculation.

- Delete the references to the Coverage Charge and the MRD in Rule 4 Section 2(c) because FICC is proposing to eliminate these components from the Clearing Fund calculation.

- Amend the term "VaR Charge" to reflect that (x) an alternative volatility calculation would be employed in the event that the requisite data used to employ the sensitivity approach is unavailable for an extended period of time and (y) the VaR Floor would be utilized as the VaR Charge if the proposed VaR methodology yields an amount that is lower than 5 basis points of the market value of a Clearing Member's gross unsettled positions.

- Replace the reference to the "historic index volatility model" with "haircut method" in Rule 4 Section 2 to reflect the method that would be used for classes of securities where the volatility is less amendable to statistical analysis.

H. Description of the QRM Methodology

The QRM Methodology document provides the methodology by which FICC would calculate the VaR Charge with the proposed sensitivity approach as well as other components of the Required Fund Deposit calculation. The document specifies (i) the

model inputs, parameters, assumptions and qualitative adjustments, (ii) the calculation used to generate Required Fund Deposit amounts, (iii) additional calculations used for benchmarking and monitoring purposes, (iv) theoretical analysis, (v) the process by which the VaR methodology was developed as well as its application and limitations, (vi) internal business requirements associated with the implementation and ongoing monitoring of the VaR methodology, (vii) the model change management process and governance framework (which includes the escalation process for adding a stressed period to the VaR calculation), and (viii) the Margin Proxy calculation.

Anticipated Effect on and Management of Risks

FICC believes that the proposed change, which consists of proposals to (1) implement the sensitivity approach in order to correct the existing deficiencies in the existing VaR methodology, (2) establish the Margin Proxy as a back-up to the sensitivity approach, (3) establish a VaR Floor as the minimum VaR Charge, (4) apply a haircut to securities that have market price changes that are not consistently related to historical risk factors and (5) remove the Coverage Charge component and the MRD component from the Required Fund Deposit calculation, would enable FICC to better limit its exposure to Clearing Members arising out of the activity in their portfolios.

FICC's proposal to change the existing VaR methodology from one that employs a full revaluation approach to one that employs a sensitivity approach would affect FICC's management of risk because it would help to address the deficiencies observed in the current model by leveraging external vendor expertise in supplying the market risk attributes that would then be incorporated by FICC into its model to calculate the VaR Charge. The proposed methodology would enhance FICC's risk management

capabilities because it would enable sensitivity analysis of key model parameters and assumptions. The sensitivity approach would allow FICC to attribute market price moves to various risk factors (such as key rates, option adjusted spread, and mortgage basis) that would enable FICC to view and respond more effectively to market volatility.

As noted above, the proposed sensitivity approach would leverage external vendor expertise in supplying the market risk attributes. FICC would manage the risks associated with a potential data disruption by using the most recently available data on the first day that a data disruption occurs. If it is determined that the vendor will resume providing data within five (5) business days, management would determine whether the VaR Charge should continue to be calculated by using the most recently available data along with an extended look-back period or whether the Margin Proxy should be invoked subject to the approval of DTCC's Group Chief Risk Officer or his/her designee. If it is determined that the data disruption will extend beyond five (5) business days, the Margin Proxy would be applied, subject to the approval of the MRC followed by notification to FICC's Board Risk Committee.

FICC's proposal to implement the Margin Proxy as a back-up methodology to the sensitivity approach would affect FICC's management of risk because the Margin Proxy would help ensure that FICC could continue to calculate each Clearing Member's VaR Charge in the event that FICC experiences a data disruption that is expected to last beyond five (5) business days.

FICC's proposal to implement the VaR Floor would affect FICC's management of risk because it addresses the risk that the proposed 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. Because this high degree of historical price correlation may not apply in future changing market conditions, FICC would manage this risk by applying a VaR Floor that would be based upon the market value of the gross unsettled positions in the Clearing Member's portfolio. This would protect FICC in the event that it is required to liquidate a large mortgage-backed securities portfolio in stressed market conditions.

FICC's proposal to implement a simple haircut method for securities with inadequate historical pricing data would affect FICC's management of risk because the proposed change would better capture the risk profile of these securities thus helping to ensure that sufficient margin would be calculated for portfolios that contain these securities. FICC would continue to manage the market risk of clearing these securities by conducting analysis on the type of securities that cannot be processed by the proposed VaR model and engaging in periodic reviews of the haircut used for calculating margin for these types of securities.

FICC's proposal to remove the Coverage Charge and MRD components would affect FICC's management of risk because the proposed changes would remove unnecessary components from the Clearing Fund calculation. As described above, both components are based on historical portfolio activity, which may not be indicative of a Clearing Member's current risk profile. As part of FICC's development of the sensitivity VaR model, FICC pursued a validation of the proposed model by an external party, performed back testing to validate model performance, and conducted analysis to determine the impact of the changes to the Clearing Members. Results of the analysis

indicate that the proposed sensitivity approach would be more responsive to changing market dynamics and provide better coverage than the existing model. Given the improvement in model coverage, FICC believes that the Coverage Charge and MRD components would no longer be necessary.

FICC has also managed the effect of the overall proposal by conducting extensive outreach with Clearing Members regarding the proposed changes, educating such Members on reasons for these proposed changes, and explaining the related risk management improvements. FICC has invited all Clearing Members to customer forums in an effort to provide transparency regarding the changes and the expected macro impact across the membership, and has provided each Clearing Member with an individual impact study. In addition, FICC's Enterprise Risk Management team and Relationship Management team have been available to answer all questions. Such communication gives Clearing Members the opportunity to manage any impact to their own risk profile.

Consistency with the Clearing Supervision Act

The proposed changes, which have been described in detail above, consist of proposals to (1) implement the sensitivity approach in order to correct the existing deficiencies in the existing VaR methodology, (2) establish the Margin Proxy as a back-up to the sensitivity approach, (3) establish a VaR Floor as the minimum VaR Charge, (4) apply a haircut to securities that have market price changes that are not consistently related to historical risk factors and (5) remove the Coverage Charge component and the MRD component from the Required Fund Deposit calculation, would be consistent with Section 805(b) of the Clearing Supervision Act.[25] The objectives and principles of

[25] See 12 U.S.C. 5464(b).

Section 805(b) include, among other things, the promotion of robust risk management.[26] FICC believes the proposed changes would promote this objective because they would give MBSD the ability to better cover its exposure to Clearing Members arising out of the activity of such Members' portfolios.

FICC believes that the proposed changes are also consistent with Rules 17Ad-22(b)(1) and (b)(2) under the Act.[27] Rule 17Ad-22(b)(1) requires a registered clearing agency that performs central counterparty services to establish, implement, maintain and enforce written policies and procedures reasonably designed to measure its credit exposures to its participants at least once a day and limit its exposures to potential losses from defaults by its participants under normal market conditions so that the operations of the clearing agency would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.[28] Taken together, the proposed changes referenced in the previous paragraph would continue FICC's practice of measuring its credit exposures at least once a day and would collectively enhance the risk-based margining framework whose objective would be to calculate each Clearing Member's Required Fund Deposit such that in the event of a Clearing Member's default, its own Required Fund Deposit would be sufficient to mitigate potential losses to FICC associated with the liquidation of such defaulted Clearing Member's portfolio.

Rule 17Ad-22(b)(2) under the Act requires a registered clearing agency that performs central counterparty services to establish, implement, maintain and enforce

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26 Id.

27 See 17 CFR 240.17Ad-22(b)(1) and (b)(2).

28 See 17 CFR 240.17Ad-22(b)(1).

written policies and procedures reasonably designed to use margin requirements to limit its credit exposures to participants under normal market conditions and use risk-based models and parameters to set margin requirements and review such margin requirements and the related risk-based models and parameters at least monthly.[29] The proposed changes referenced above in the second paragraph of this section would collectively constitute a risk-based model and parameters that would establish margin requirements for Clearing Members. This risk-based model and parameters would use margin requirements to limit FICC's credit exposure to its Clearing Members by enabling FICC to identify the risk posed by a Clearing Member's unsettled portfolio and to quickly adjust and collect additional deposits as needed to cover those risks. In order to mitigate counterparty exposure to each Clearing Member, under the proposed changes, FICC would calculate the VaR of the unsettled obligations of each Member to a 99 percent confidence interval with a three-day liquidation hedge/horizon, as the basis for its Clearing Fund requirement. Because the proposed changes are designed to calculate each Clearing Member's Required Fund Deposit at a 99 percent confidence level, FICC believes each Clearing Member's Required Fund Deposit would cover its own losses in the event that such Member defaults under normal market conditions.

FICC believes that the proposed changes are consistent with Rules 17Ad-22(e)(4) and (e)(6) of the Act, which were recently adopted by the Commission.[30] Rule 17Ad-

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29 See 17 CFR 240.17Ad-22(b)(2).

30 The Commission adopted amendments to Rule 17Ad-22, including the addition of new section 17Ad-22(e), on September 28, 2016. See Securities Exchange Act Release No. 78961 (September 28, 2016), 81 FR 70786 (October 13, 2016) (S7-03-14). The amendments to Rule 17ad-22 become effective on December 12, 2016. Id. FICC is a "covered clearing agency" as defined in Rule 17Ad-22(a)(5) and must comply with new section (e) of Rule 17Ad-22 by April 11, 2017. Id.

22(e)(4) will require FICC 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.[31] The proposed changes referenced above in the second paragraph of this section would enhance FICC's ability to identify, measure, monitor and manage its credit exposures to Clearing Members and those exposures arising from its payment, clearing, and settlement processes. Therefore, FICC believes the proposed changes are consistent with the requirements of Rule 17Ad-22(e)(4), promulgated under the Act, cited above.

Rule 17Ad-22(e)(6) will require FICC 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 is monitored by management on an ongoing basis and regularly reviewed, tested, and verified.[32] FICC's proposal to (1) implement the sensitivity approach in order to correct the existing deficiencies in the existing VaR methodology, (2) establish the Margin Proxy as a back-up to the sensitivity approach, (3) establish a VaR Floor as the minimum VaR Charge, and (4) apply a haircut to securities that have market price changes that are not consistently related to historical risk factors would help FICC to cover its credit exposures to Clearing Members because these proposed changes establish a risk-based margin system that would be monitored by FICC management on an ongoing basis and regularly reviewed, tested, and verified. Therefore, FICC believes that the proposed

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31 See Exchange Act Release No. 78961 (September 28, 2016), 81 FR 70786 (October 13, 2016) (S7-03-14).

32 Id.

changes are consistent with the requirements of Rule 17Ad-22(e)(6), promulgated under the Act, cited above.

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

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

The Commission may extend the period for review by an additional 60 days if the proposed change raises novel or complex issues, subject to the Commission providing the clearing agency with prompt written notice of the extension. A proposed change may be implemented in less than 60 days from the date the Advance Notice is filed, or the date further information requested by the Commission is received, if the Commission notifies the clearing agency in writing that it does not object to the proposed change and authorizes the clearing agency to implement the proposed change on an earlier date, subject to any conditions imposed by the Commission.

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

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

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing. 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-2016-801 on the subject line.

Paper Comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-FICC-2016-801. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (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 am and 3:00 pm. Copies of

the filing also will be available for inspection and copying at the principal office of FICC and on FICC's website (http://dtcc.com/legal/sec-rule-filings.aspx).

All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-FICC-2016-801 and should be submitted on or before [insert date 15 days from publication in the Federal Register].

By the Commission.

Eduardo A. Aleman
Assistant Secretary