

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-98494; File No. SR-FICC-2023-011)

September 25, 2023

Self-Regulatory Organizations; Fixed Income Clearing Corporation; Order Approving Proposed Rule Change, as Modified by Amendment No. 1, to Adopt a Portfolio Differential Charge as an Additional Component to the Government Securities Division Required Fund Deposit

**I. INTRODUCTION**

On August 3, 2023, Fixed Income Clearing Corporation (“FICC”) filed with the Securities and Exchange Commission (“Commission”) proposed rule change SR-FICC-2023-011 pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder.<sup>2</sup> On August 16, 2023, FICC filed Amendment No. 1 to the proposed rule change, to make clarifications to the proposed rule change.<sup>3</sup> The proposed rule change, as modified by Amendment No. 1, is hereinafter referred to as the “Proposed Rule Change.” The Proposed Rule Change was published for comment in the Federal Register on August 23, 2023.<sup>4</sup> The Commission has received no comments on the

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> Amendment No. 1 made clarifications and corrections to the description of the proposed rule change and Exhibit 3a of the filing (Summary of Impact Study) to incorporate a longer impact analysis. As originally filed, the time-period of the impact analysis was November 2021 to October 2022. As amended by Amendment No. 1, the time-period of the impact analysis is November 2021 to March 2023. These clarifications and corrections have been incorporated, as appropriate, into the proposed rule change. FICC has requested confidential treatment of Exhibit 3a, pursuant to 17 CFR 240.24b-2.

<sup>4</sup> See Securities Exchange Act Release No. 98160 (Aug. 17, 2023), 88 FR 57485 (Aug. 23, 2023) (File No. SR-FICC-2023-011) (“Notice of Filing”).

Proposed Rule Change. For the reasons discussed below, the Commission is approving the Proposed Rule Change.<sup>5</sup>

## **II. BACKGROUND**

FICC is a central counterparty (“CCP”), which means it interposes itself as the buyer to every seller and seller to every buyer for the financial transactions it clears. FICC’s Government Securities Division (“GSD”)<sup>6</sup> provides trade comparison, netting, risk management, settlement, and CCP services for the U.S. Government securities market. As such, FICC is exposed to the risk that one or more of its members may fail to make a payment or to deliver securities.

A key tool that FICC uses to manage its credit exposures to its members is the daily collection of the Required Fund Deposit (i.e., margin) from each member. A member’s margin is designed to mitigate potential losses associated with liquidation of the member’s portfolio in the event of that member’s default. The aggregated amount of all members’ margin constitutes the Clearing Fund, which FICC would be able to access should a defaulted member’s own margin be insufficient to satisfy losses to FICC caused by the liquidation of that member’s portfolio. Each member’s margin consists of a number of components, each of which is calculated to address specific risks faced by FICC arising out of its members’ trading activity. Each member’s margin includes a

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<sup>5</sup> Capitalized terms not defined herein are defined in the GSD Rulebook (“Rules”), available at [https://www.dtcc.com/~media/Files/Downloads/legal/rules/ficc\\_gov\\_rules.pdf](https://www.dtcc.com/~media/Files/Downloads/legal/rules/ficc_gov_rules.pdf).

<sup>6</sup> FICC operates two divisions: GSD and the Mortgage-Backed Securities Division (“MBSD”). GSD provides CCP services for the U.S. Government securities market; MBSD provides CCP services for the U.S. mortgage-backed securities market. GSD and MBSD maintain separate sets of rules, margin models, and clearing funds. The Proposed Rule Change relates solely to GSD.

value-at-risk (“VaR”) charge (“VaR Charge”) designed to capture the potential market price risk<sup>7</sup> associated with the securities in a member’s portfolio. The VaR Charge is typically the largest component of a member’s margin requirement.

The VaR Charge uses a sensitivity-based VaR methodology and is based on the potential price volatility of unsettled positions in a member’s portfolio. It is designed to project the potential losses that could occur in connection with the liquidation of a defaulting member’s portfolio, assuming the portfolio would take three days to liquidate in normal market conditions and uses three inputs: (1) confidence level, (2) a time horizon and (3) historical market volatility. The projected liquidation gains or losses are used to determine the amount of the VaR Charge for each portfolio, which is calculated to capture the market price risk associated with each portfolio at a 99 percent confidence level.

FICC calculates and collects a start-of-day VaR component, which is designed to address the risk presented by a member’s start-of-day positions. FICC also calculates and collects an intraday VaR component, which reflects the changes in a member’s positions and risk profile due to the submission of new trades and completed settlement activity from the start-of-day to noon. Additionally, FICC re-calculates the amount of the intraday VaR Charge applicable to each member portfolio, based on the open positions therein, to determine whether FICC will collect an additional margin amount (the “Intraday Supplemental Fund Deposit” or “ISFD”). FICC calculates the ISFD by evaluating certain

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<sup>7</sup> Market price risk refers to the risk that volatility in the market causes the price of a security to change between the execution of a trade and settlement of that trade. This risk is sometimes also referred to as volatility risk.

criteria with respect to a member's intraday VaR Charge and backtesting results.<sup>8</sup> FICC may assess the ISFD in the event that a member's risk exposure breaches certain criteria.<sup>9</sup>

FICC states that it regularly assesses market and liquidity risks as such risks relate to its margin methodologies to evaluate whether margin levels are commensurate with the particular risk attributes of each relevant product, portfolio, and market.<sup>10</sup> For example, FICC employs daily backtesting<sup>11</sup> to determine the adequacy of each member's margin. FICC compares each member's margin with the simulated liquidation gains/losses, using the actual positions in the member's portfolio(s) and the actual historical security returns. A backtesting deficiency occurs when a member's margin would not have been adequate to cover the projected liquidation losses estimated from the member's settlement activity based on the backtesting results. Backtesting deficiencies highlight exposure that could subject FICC to potential losses in the event of a member default. FICC states that it

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<sup>8</sup> The first criterion, the "Dollar Threshold," evaluates whether a member's intraday VaR Charge equals or exceeds a set threshold dollar amount when compared to the VaR Charge that was included in the most recent margin collection. The second criterion, the "Percentage Threshold," evaluates whether the intraday VaR Charge equals or exceeds a percentage increase of the VaR Charge that was included in the most recent margin collection. The third criterion, the "Coverage Target," evaluates whether a member's backtesting results are below the 99 percent confidence level. Securities Exchange Act Release No. 83362 (June 1, 2018), 83 FR 26514 (June 7, 2018) (File No. SR-FICC-2018-001); Securities Exchange Act Release No. 83223 (May 11, 2018), 83 FR 23020 (May 17, 2018) (File No. SR-FICC-2018-801).

<sup>9</sup> FICC assesses an ISFD if a member's risk exposure breaches all three of the Dollar Threshold, Percentage Threshold, and Coverage Target. FICC also assesses an ISFD if, under certain market conditions, a member's intraday VaR Charge breaches both the Dollar Threshold and the Percentage Threshold. Id.

<sup>10</sup> See Notice of Filing, supra note 4, at 57485.

<sup>11</sup> Backtesting is an ex-post comparison of actual outcomes with expected outcomes derived from the use of margin models. See 17 CFR 240.17Ad-22(a)(1).

investigates the cause(s) of any backtesting deficiencies to determine whether there is an identifiable cause of repeat backtesting deficiencies and/or whether multiple members may experience backtesting deficiencies for the same underlying reason.<sup>12</sup>

FICC states that based on its regular review of the effectiveness of its margin methodology, FICC has identified backtesting deficiencies attributable to intraday margin fluctuations in certain member portfolios as those members execute trades throughout the day.<sup>13</sup> Specifically, since FICC generally novates and guarantees trades upon comparison,<sup>14</sup> a member's trading activity may result in coverage gaps due to large unmarginated intraday portfolio fluctuations that remain unmitigated from the time of novation until the next scheduled margin collection.<sup>15</sup> FICC designed the Proposed Rule Change to mitigate such exposure.

### **III. DESCRIPTION OF THE PROPOSED RULE CHANGE**

FICC proposes to add a new margin component, the Portfolio Differential Charge ("PD Charge"), to its methodology for calculating members' margin. FICC designed the PD Charge to help mitigate the risks posed to FICC by the variability of clearing activity submitted by members to GSD throughout the day, by measuring the historical period-

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<sup>12</sup> See id. at 57486.

<sup>13</sup> See id. at 57487.

<sup>14</sup> Trade comparison consists of the reporting, validating, and in some cases, matching by FICC of the long and short sides of a securities trade to ensure that the details of such trade are in agreement between the parties. See GSD Rule 5, supra note 5.

<sup>15</sup> See Notice of Filing, supra note 4, at 57486.

over-period increases in the VaR Charge of a member over a given time-period.<sup>16</sup> FICC would calculate the PD Charge twice a day, and if applicable, add the PD Charge to the calculation of the member's margin.

Specifically, in determining the PD Charge, FICC would take into account the historical period-over-period increases between the (1) start-of-day and intraday VaR components, and (2) intraday and end-of-day VaR components, respectively, of a member's margin over a look-back period of no less than 100 days, with a decay factor of no greater than 1.<sup>17</sup> FICC would calculate the PD Charge to equal the exponentially weighted moving average of such changes to the member's VaR Charge during the look-back period, times a multiplier that is no less than one and no greater than three, as determined by FICC from time to time based on backtesting results.<sup>18</sup> The use of this type

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<sup>16</sup> See *id.* The proposed PD Charge is different from the ISFD because the PD Charge is meant to capture the risks presented by the unpredictability of a member's historical trading activity, as measured, in part, by the variability in a member's VaR Charge over the look-back period; by contrast, the ISFD is meant to capture the intraday volatility risks presented by the existing net unsettled positions in a member's portfolio. See *id.*

<sup>17</sup> Upon implementation of the Proposed Rule Change, FICC would use a 100-day look-back period in conjunction with a decay factor of 0.97, which FICC believes would provide a sufficient amount of time to reflect the current market conditions. As market conditions shift, FICC may modify the look-back period and/or the decay factor from time to time, subject to FICC's model governance process and announced by FICC via an Important Notice posted on its website. See *id.* at note 14.

<sup>18</sup> FICC states that the uncertainty of the market condition and/or changes in members' business models may lead to changes in member activity patterns that would require a multiplier greater than 1 be invoked from time to time. See *id.* at note 15. FICC would determine whether to modify the multiplier based on the backtesting results to evaluate the effectiveness of PD Charge as a mitigant of the position change risk and may change the multiplier from time to time to maintain the effectiveness of the PD Charge in generating sufficient backtesting coverage.

of average means that FICC would use an exponentially weighted array of VaR Charges, the result of which is to emphasize more recent observations in determining the PD Charge (that is, it places more weight and significance on more recent data points).

FICC believes the PD Charge would address the period-over-period changes to members' VaR Charges, and thereby help mitigate the risks posed to FICC by un-margined period-over-period fluctuations to member portfolios resulting from trades that FICC novates and guarantees during the coverage gap between margin collections.<sup>19</sup> In support, FICC cites an impact study it conducted that covers the period from November 2021 to March 2023 (the "Impact Study").<sup>20</sup> The Impact Study shows, among other things, that if the PD Charge had been in place from April 2022 through March 2023, the number of backtesting deficiencies would have been reduced by 77 (from 498 to 421, or approximately 15 percent) and the backtesting coverage for 44 members (approximately

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Changes to the multiplier would be subject to FICC's model governance process and be announced by FICC via an Important Notice posted to its website.

<sup>19</sup> See id. at 57486.

<sup>20</sup> As part of the Proposed Rule Change, FICC filed Exhibit 3a – Summary of Impact Analysis (i.e., the Impact Study), comparing, on a member by member basis, the actual margin collections during the period of the Impact Study to the hypothetical margin collections FICC would have collected had the PD Charge been in place during that period. The Impact Study shows that the rolling 12-month Clearing Fund requirement backtesting coverage ratio (from April 2022 through March 2023) would have improved from 98.37 percent to 98.62 percent. The Impact Study also shows what the average daily PD Charge would be on a per member basis. Pursuant to 17 CFR 240.24b-2, FICC requested confidential treatment of Exhibit 3b. For further discussion of the Impact Study, see the Notice of Filing. See id. at 57487.

34 percent of the GSD membership) would have improved, with 14 members who were below 99 percent coverage brought back to above 99 percent.<sup>21</sup>

#### **IV. DISCUSSION AND COMMISSION FINDINGS**

Section 19(b)(2)(C) of the Act<sup>22</sup> directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that such proposed rule change is consistent with the requirements of the Act and rules and regulations thereunder applicable to such organization. After carefully considering the Proposed Rule Change, the Commission finds that the Proposed Rule Change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to FICC. In particular, the Commission finds that the Proposed Rule Change is consistent with Section 17A(b)(3)(F)<sup>23</sup> of the Act and Rules 17Ad-22(e)(4)(i), (e)(6)(i), and (e)(6)(iii) thereunder.<sup>24</sup>

##### **A. Consistency with Section 17A(b)(3)(F) of the Act**

Section 17A(b)(3)(F) of the Act<sup>25</sup> requires that the rules of a clearing agency, such as FICC, be designed to, among other things, promote the prompt and accurate clearance and settlement of securities transactions and assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is

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<sup>21</sup> See id.

<sup>22</sup> 15 U.S.C. 78s(b)(2)(C).

<sup>23</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>24</sup> 17 CFR 240.17Ad-22(e)(4)(i), (e)(6)(i), and (e)(6)(iii).

<sup>25</sup> 15 U.S.C. 78q-1(b)(3)(F).

responsible.<sup>26</sup> The Commission believes that the Proposed Rule Change is consistent with Section 17A(b)(3)(F) of the Act for the reasons stated below.

As described above in Section III, FICC proposes to add the PD Charge to the margin requirements that FICC may collect. As discussed in more detail in Section IV.B infra, the Commission believes adding the PD Charge to FICC's margin methodology would help ensure that FICC collects sufficient margin to cover its credit exposure associated with the variability of clearing activity submitted by members to GSD throughout the day by measuring the historical period-over-period increases in the VaR Charges of members over the look-back period. By helping FICC to collect sufficient margin, the Proposed Rule Change would better ensure that, in the event of a member default, FICC's operation of its critical clearance and settlement services would not be disrupted because of insufficient financial resources. Accordingly, the Commission finds that the Proposed Rule Change should help FICC to continue providing prompt and accurate clearance and settlement of securities transactions, consistent with Section 17A(b)(3)(F) of the Act.<sup>27</sup>

Moreover, as described above in Section II, FICC would access the mutualized Clearing Fund should a defaulted member's own margin be insufficient to satisfy losses to FICC caused by the liquidation of that member's portfolio. Because FICC's proposal to adopt the PD Charge should help ensure that FICC has collected sufficient margin from members, the Proposed Rule Change should also help minimize the likelihood that FICC would have to access the Clearing Fund, thereby limiting non-defaulting members'

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<sup>26</sup> Id.

<sup>27</sup> 15 U.S.C. 78q-1(b)(3)(F).

exposure to mutualized losses. The Commission believes that by helping to limit the exposure of FICC's non-defaulting members to mutualized losses, the Proposed Rule Change would help FICC assure the safeguarding of securities and funds which are in its custody or control, consistent with Section 17A(b)(3)(F) of the Act.<sup>28</sup>

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

Rule 17Ad-22(e)(4)(i) under the Act requires that each covered clearing agency, such as FICC, establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by maintaining sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.<sup>29</sup> The Commission believes that the Proposed Rule Change is consistent with Rule 17Ad-22(e)(4)(i) under the Act for the reasons stated below.<sup>30</sup>

The Commission agrees that FICC's proposal to add the PD Charge to its margin methodology would enable FICC to better manage its credit exposures to members by maintaining sufficient resources to cover those credit exposures fully with a high degree of confidence. Specifically, the proposed PD Charge would allow FICC to collect additional margin on an intraday basis to help FICC effectively mitigate the risks attributable to intraday margin fluctuations in certain member portfolios as those members execute trades throughout the day between margin collections. As discussed

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<sup>28</sup> Id.

<sup>29</sup> 17 CFR 240.17Ad-22(e)(4)(i).

<sup>30</sup> Id.

above in Section II, since FICC generally novates and guarantees trades upon comparison, a member's trading activity may result in coverage gaps due to large unmarginated intraday portfolio fluctuations that remain unmitigated from the time of novation until the next scheduled margin collection. The PD Charge would help FICC mitigate such exposure.

The Commission has reviewed and analyzed the materials filed by FICC, including FICC's Impact Study and backtesting results submitted confidentially,<sup>31</sup> which show that had the PD Charge been in place from April 2022 through March 2023, it would have reduced number of backtesting deficiencies and thereby better enabled FICC to collect margin sufficient to meet its coverage requirements. Accordingly, for the reasons discussed above, the Commission finds that the Proposed Rule Change is reasonably designed to better enable FICC to effectively identify, measure, monitor, and manage its credit exposure to members, and those arising from its payment, clearing, and settlement processes, including by maintaining sufficient financial resources to cover its credit exposure to each member fully with a high degree of confidence consistent with Rule 17Ad-22(e)(4)(i).<sup>32</sup>

C. Consistency with Rule 17Ad-22(e)(6)(i) under the Act

Rule 17Ad-22(e)(6)(i) under the Act requires that each covered clearing agency that provides central counterparty services, such as FICC, 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

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<sup>31</sup> See supra note 20.

<sup>32</sup> 17 CFR 240.17Ad-22(e)(4)(i).

minimum, considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market.<sup>33</sup> The Commission believes that the proposal is consistent with Rule 17Ad-22(e)(6)(i) under the Act for the reason stated below.

The Commission agrees that FICC's proposal to add the PD Charge to its margin methodology would enable FICC to more effectively address the risks posed to FICC by un-margined period-over-period fluctuations to member portfolios resulting from trades that FICC novates and guarantees during the coverage gap between margin collections. In its filing materials, FICC provided information regarding the impacts of the proposed PD Charge on its margin collection.<sup>34</sup> Specifically, the Impact Study shows that if the PD Charge had been in place from April 2022 through March 2023, the number of backtesting deficiencies would have been reduced by 77 (from 498 to 421, or approximately 15 percent) and the backtesting coverage for 44 members (approximately 34 percent of the GSD membership) would have improved, with 14 members who were below 99 percent coverage brought back to above 99 percent.<sup>35</sup> The Commission has reviewed and analyzed FICC's analysis and agrees that adding the PD Charge to FICC's margin methodology would enable FICC to more effectively mitigate the risks attributable to intraday margin fluctuations arising out of member trading activity between margin collections. As a result, implementing the Proposed Rule Change would better enable FICC to collect margin amounts at levels commensurate with FICC's

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<sup>33</sup> 17 CFR 240.17Ad-22(e)(6)(i).

<sup>34</sup> See supra note 20.

<sup>35</sup> See id.

intraday credit exposures to its members.

Accordingly, the Commission finds the Proposed Rule Change is consistent with Rule 17Ad-22(e)(6)(i) under the Act because it is designed to assist FICC in maintaining a risk-based margin system that considers, and produces margin levels commensurate with, the risks of portfolios that experience significant volatility on an intraday basis.<sup>36</sup>

D. Consistency with Rule 17Ad-22(e)(6)(iii) under the Act

Rule 17Ad-22(e)(6)(iii) under the Act requires that each covered clearing agency, such as FICC, establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, at a minimum, calculates margin sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default.<sup>37</sup> The Commission believes that the proposal is consistent with Rule 17Ad-22(e)(6)(iii) under the Act for the reason stated below.

As stated above in Section II, FICC's proposal to add the PD Charge is designed to address FICC's exposure to its members attributable to trading activity that takes place in the interval between margin collections. Specifically, since FICC generally novates and guarantees trades upon comparison, a member's trading activity may result in coverage gaps due to large un-margined intraday portfolio fluctuations that remain unmitigated between margin collections.<sup>38</sup> As discussed above in Section IV.C, based on

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

<sup>37</sup> 17 CFR 240.17Ad-22(e)(6)(iii).

<sup>38</sup> See Notice of Filing, supra note 4, at 57486.

the Commission's review of the filing materials, the Commission agrees that that FICC's proposal to add the PD Charge to its margin methodology should enable FICC to more effectively address the risks posed to FICC by un-margined period-over-period fluctuations to member portfolios resulting from trades that FICC novates and guarantees during the coverage gap between margin collections.

Accordingly, the Commission finds the Proposed Rule Change is consistent with Rule 17Ad-22(e)(6)(iii) under the Act because it is designed to better enable FICC to cover its credit exposures to its members by establishing a risk-based margin system that specifically calculates margin sufficient to cover its potential future exposure to members in the interval between the last margin collection and the close out of positions following a member default.<sup>39</sup>

#### **IV. CONCLUSION**

On the basis of the foregoing, the Commission finds that the Proposed Rule Change, as modified by Amendment No. 1, is consistent with the requirements of the Act and in particular with the requirements of Section 17A of the Act<sup>40</sup> and the rules and regulations promulgated thereunder.

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<sup>39</sup> 17 CFR 240.17Ad-22(e)(6)(iii).

<sup>40</sup> 15 U.S.C. 78q-1.

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act<sup>41</sup> that proposed rule change SR-FICC-2023-011, be, and hereby is, APPROVED.<sup>42</sup>

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>43</sup>

**Sherry R. Haywood,**

*Assistant Secretary.*

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<sup>41</sup> 15 U.S.C. 78s(b)(2).

<sup>42</sup> In approving the Proposed Rule Change, the Commission considered its impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

<sup>43</sup> 17 CFR 200.30-3(a)(12).