



**Discussion Paper**  
**CCP Cross-Margining Arrangements**  
**Default Fund Contributions Under the U.S. Regulatory Capital Rules**  
**July 14<sup>th</sup>, 2025**

The International Swaps and Derivatives Association, Inc. (“ISDA”), the Futures Industry Association (“FIA”) and the Securities Industry and Financial Markets Association (“SIFMA”) and, together with ISDA and FIA, the “Associations”) have prepared this discussion paper to supplement the presentation, dated September 5, 2024 (the “Presentation”), and the discussion paper, dated October 15, 2024 (the “Cross-Product Netting Discussion Paper” and, together with the Presentation, the “Cross-Product Netting Materials”), which were previously provided to the staff of the Board of Governors of the Federal Reserve System (the “Federal Reserve”), the Federal Deposit Insurance Corporation (the “FDIC”) and the Office of the Comptroller of the Currency (the “OCC” and, collectively with the FDIC and the Federal Reserve, the “Agencies”).

The Cross-Product Netting Materials provided an overview of cross-margining arrangements developed by qualifying central counterparties (each, a “QCCP”) and described forms of cross-product netting agreements that banking organizations may enter into with customers, including in the context of implementing market reforms with respect to U.S. Treasury securities clearing. Those market reforms include the anticipated expansion of QCCP cross-margining arrangements for U.S. Treasury securities, U.S. Treasury repurchase (“repo”) transactions and U.S. Treasury futures in light of the U.S. Treasury clearing mandate issued by the U.S. Securities and Exchange Commission (the “SEC”).<sup>1</sup> The Cross-Product Netting Materials also proposed potential changes to the U.S. regulatory capital rules to more appropriately reflect banking organization cross-product netting agreements with customers, in particular through (i) treating repo transactions as forward-settling interest rate derivatives and (ii) determining the exposure at default (“EAD”) of a portfolio of repos and derivative contracts subject to a cross-product netting agreement under the standardized approach for counterparty credit risk (“SA-CCR”).

This discussion paper broadly addresses the current treatment under the U.S. regulatory capital rules of banking organization contributions to a QCCP default fund and proposes potential targeted changes to the U.S. regulatory capital rules applicable to default fund contributions to more appropriately reflect the economics and risk offsets of QCCP cross-margining

---

<sup>1</sup> See, e.g., Securities and Exchange Commission, *Standards for Covered Clearing Agencies for U.S. Treasury Securities and Application of the Broker-Dealer Customer Protection Rule With Respect to U.S. Treasury Securities*, 89 Fed. Reg. 2,714, 2,750-51 (Jan. 16, 2024), available at <https://www.govinfo.gov/content/pkg/FR-2024-01-16/pdf/2023-27860.pdf> (“SEC Treasury Clearing Final Rule”).



arrangements. Our proposal would use the expanded SA-CCR methodology described in the Cross-Product Netting Materials.

## **I. Overview of QCCP Cross-Margining Arrangements**

As described in the Cross-Product Netting Materials, QCCP cross-margining arrangements broadly permit market participants to post initial margin to QCCPs based on the aggregate risk of a portfolio containing multiple products. A clearing member's aggregate initial margin requirement for a cross-margining portfolio may be reduced to the extent that there are positions with offsetting risks.<sup>2</sup>

In connection with the potential for cross-margining participants to post reduced initial margin, QCCP cross-margining arrangements also generally include procedures for QCCPs to manage the default of a cross-margining participant. For example, the cross-margining arrangement between the Chicago Mercantile Exchange ("CME") and the Government Securities Division of the Fixed Income Clearing Corporation ("FICC") includes provisions outlining the procedures for CME and FICC to manage a default of a cross-margining participant. This arrangement includes provisions that address how CME and FICC would share gains and losses in the event of a cross-margining participant default. Cross-margining arrangements also broadly provide for each QCCP to share data with the other QCCP with respect to the portfolio of positions subject to cross-margining, including to facilitate each QCCP calculating the aggregate initial margin requirements for the cross-margining portfolio and determining the appropriate potential reduction in aggregate initial margin requirements.

Market participants expect that cross-margining arrangements will play an important role in the expansion of the cleared U.S. Treasury securities markets in response to the SEC's U.S. Treasury clearing mandate.<sup>3</sup> In this regard, for example, CME and FICC have indicated an intent to expand the CME and FICC cross-margining arrangement to cover customer positions by December 2025, subject to regulatory approval.<sup>4</sup> Other CCPs have indicated an intent to engage in clearing with respect to U.S. Treasury securities and U.S. Treasury repos. The Associations expect that these CCPs may also implement cross-margining arrangements.

---

<sup>2</sup> QCCPs may also establish a "floor" with respect to minimum initial margin requirements on a cross-margining portfolio as a matter of conservatism.

<sup>3</sup> SEC Treasury Clearing Final Rule at pp. 2,750-51.

<sup>4</sup> *CME Group and DTCC to Enhance Existing Cross-Margining Arrangement, Extending Benefits to End Users in December 2025* (Feb. 24, 2025), available at <https://www.prnewswire.com/news-releases/cme-group-and-dtcc-to-enhance-existing-cross-margining-arrangement-extending-benefits-to-end-users-in-december-2025-302382818.html>.

## II. Current U.S. Regulatory Capital Treatment of Default Fund Contributions

In general, the U.S. regulatory capital requirements for default fund contributions currently do not recognize the economic risk offsets that result from a cross-margining arrangement across QCCPs.

Under the current U.S. regulatory capital rules, a clearing member banking organization's capital requirement for its default fund contribution to a QCCP is a function of, among other things, the hypothetical capital requirement of the QCCP. The QCCP's hypothetical capital requirement,  $K_{ccp}$ , broadly reflects the exposure amount of the QCCP to each of its clearing members.

Specifically, under Section 133(d)(5) of the U.S. regulatory capital rules,  $K_{ccp}$  is equal to the following formula:

$$K_{CCP} = \sum_{CM_i} EAD_i * 1.6 \text{ percent}$$

Where:

- $CM_i$  is each clearing member of the QCCP; and
- $EAD_i$  is the exposure amount of the QCCP to each clearing member of the QCCP as determined under Section 133(d)(6).

Under Section 133(d)(6)(i) of the U.S. regulatory capital rules, the EAD of a QCCP to a clearing member is equal to the sum of the EAD for derivative contracts determined under Section 133(d)(6)(ii) and the EAD for repo-style transactions determined under Section 133(d)(6)(iii).

Under Section 133(d)(6)(ii), the EAD for derivative contracts is based on the exposure amount of the QCCP to the clearing member for all derivative contracts and guarantees of derivative contracts as calculated under SA-CCR in Section 132(c) (using a value of 10 business days for purposes of determining the maturity factor in Section 132(c)(9)(iv)), *less* the value of all collateral held by the QCCP posted by the clearing member or client of a clearing member in connection with a derivative contract for which the clearing member has provided a guarantee to the QCCP and the amount of the prefunded default fund contribution of the clearing member to the QCCP.

Under Section 133(d)(6)(iii) of the U.S. regulatory capital rules, for repo-style transactions between the QCCP and a clearing member that are cleared transactions, EAD is equal to:

$$EAD_i = \max\{EBRM_i - IM_i - DF_i; 0\}$$

Where:

- $EBRM_i$  is the exposure amount of the QCCP to each clearing member for all repo-style transactions between the QCCP and the clearing member, as determined under Section 132(b)(2) and without recognition of the initial margin collateral posted by the clearing member to the QCCP with respect to the repo-style transactions or the prefunded default fund contribution of the clearing member institution to the QCCP;
- $IM_i$  is the initial margin collateral posted by each clearing member to the QCCP with respect to the repo-style transactions; and
- $DF_i$  is the prefunded default fund contribution of each clearing member to the QCCP that is not already deducted in Section 133(d)(6)(ii).

Section 133(d)(6)(v) of the U.S. regulatory capital rules further provides that, if any account or sub-account contains both derivative contracts and repo-style transactions, the EAD of that account is the sum of the EAD for the derivative contracts within the account and the EAD of the repo-style transactions within the account.<sup>5</sup>

Based on the foregoing, the current  $K_{ccp}$  calculation for QCCP default fund contributions in the U.S. regulatory capital rules does not appropriately reflect the reduced risk of QCCP cross-margining arrangements. In general, although the  $K_{ccp}$  calculation would reflect that a QCCP collects less financial resources, in particular initial margin, from clearing members as a result of cross-margining arrangements, the  $K_{ccp}$  calculation would not recognize the corresponding economic risk offsets attendant to QCCP cross-margining arrangements. The EAD calculations for derivative contracts and repo-style transactions in Section 133(d)(6)(i) cross-reference SA-CCR (for derivative contracts) and the collateral haircut approach (for repo-style transactions), neither of which currently permits netting across derivative contracts and repo-style transactions. In particular, for purposes of calculating  $EAD_i$ , the exposure amount of a portfolio of transactions subject to cross-margining would remain the same but the sum of initial margin and prefunded default fund contribution amounts would decrease, which (all else equal) would overstate regulatory capital requirements for positions subject to cross-margining.

Accordingly, the Associations are concerned that, absent revisions, there would be an overcalibration of capital requirements for default fund contributions with respect to QCCPs that have cross-margining arrangements. This overcalibration is expected to become increasingly

---

<sup>5</sup> If independent collateral is held for an account containing both derivative contracts and repo-style transactions, then that collateral must be allocated to the derivative contracts and repo-style transactions in proportion to the respective product specific exposure amounts calculated, excluding the effects of collateral, according to Section 132(b) for repo-style transactions and Section 132(c)(5) for derivative contracts.



important as QCCP cross-margining arrangements expand, including in connection with the implementation of the SEC’s U.S. Treasury clearing mandate.

### **III. Proposals to Revise Regulatory Capital Treatment of Default Fund Contributions to Address QCCP Cross-Margining Arrangements**

We have described below a preferred approach and an alternative approach to revise the U.S. regulatory capital treatment for default fund contributions that reflect QCCP cross-margining arrangements, including in respect of the combined portfolio of products subject to a qualifying cross-margining arrangement (*i.e.*, derivatives and repos). Each of these approaches uses the expanded SA-CCR methodology described in the Cross-Product Netting Materials.

As an initial matter, each proposed approach to revise the U.S. regulatory capital rules would include a concept of a “**qualifying cross-margining arrangement**” with respect to which the expanded SA-CCR methodology could be applied in the calculation of  $K_{ccp}$  as the input for capital requirements for default fund contributions.

In general, in order to be considered a qualifying cross-margining arrangement under these proposals:

1. The cross-margining arrangement would provide for clearing members or their clients to post aggregate initial margin or other prefunded contributions based on a combined portfolio that may include different products (*i.e.*, derivatives and repos);
2. Each CCP involved in the cross-margining arrangement must be a QCCP as defined in Section 2 of the U.S. regulatory capital rules; and
3. The cross-margining arrangement must have been approved by the applicable regulator for each CCP.<sup>6</sup>

Each approach to determine the QCCP’s hypothetical capital requirement ( $K_{ccp}$ ) described below would use the proposed extended SA-CCR methodology described in the Cross-Product Netting Materials. In particular, the QCCP would calculate its EAD to a clearing member by treating repos as forward purchase or forward sale derivatives under SA-CCR, in the manner described in the Cross-Product Netting Materials.

---

<sup>6</sup> In addition to addressing a cross-margining arrangement between multiple QCCPs, the concept of a qualifying cross-margining arrangement also applies in respect of an arrangement in which one QCCP clears multiple products (*i.e.*, derivatives and repos) to the extent the conditions for a qualifying cross-margining arrangement are otherwise satisfied.

These potential approaches would more appropriately recognize the economic risk offsets with respect to a QCCP cross-margining arrangement than the current framework. In particular, although QCCP cross-margining arrangements do not fall within the literal definition of a qualifying master netting agreement (“QMNA”) or qualifying cross-product master netting agreement (“QCPMNA”), QCCP cross-margining arrangements have economic characteristics similar to a QMNA or QCPMNA.

In particular:

- As a general matter, QCCP cross-margining arrangements generally provide a mechanism for QCCPs to share gains and losses with respect to a portfolio of a cross-margining participant in the event of a participant default. These arrangements are economically similar to netting agreements that permit a banking organization to calculate its exposure to a counterparty on a net basis, including exposure across multiple products in the case of a QCPMNA.
- QCCP cross-margining arrangements—including the methodologies used to determine potential reductions in aggregate margin collected and default management, loss sharing and related provisions—are subject to regulatory approval.

More generally, QCCPs are subject to regulation and oversight in the United States by the CFTC (for CFTC-registered derivative clearing organizations) and the SEC (for SEC-registered clearing agencies). Under these regulatory frameworks, QCCPs must comply with requirements relating to, among other things, margin methodologies, financial and liquidity resources, risk management, default management, governance and related obligations.

The preferred approach described below would be simpler to implement than the alternative approach, including because the QCCP would perform one  $K_{ccp}$  calculation instead of two.

**Preferred Approach:** Under our preferred approach, with respect to each clearing member (including guaranteed client positions), the QCCP would determine  $K_{ccp}$  by adding its EAD (i) with respect to positions cleared by that QCCP in respect of the clearing member including guaranteed client positions and related margin, excluding the positions subject to the qualifying cross-margining arrangement (“**Non-XM Positions**”) and including initial margin or other prefunded contributions of the clearing member related to the Non-XM Positions, and (ii) with respect to the cross-margined positions (“**XM Positions**”) cleared by that QCCP and another QCCP that is party to the qualifying cross-margining arrangement, including initial margin held by each QCCP with respect to the cross-margining arrangement, multiplied by an allocation factor that is based on how the loss-sharing arrangement between the QCCPs subject to the qualifying cross-margining arrangement would allocate losses or gains. The allocation factor would be determined jointly by the QCCPs that are party to the qualifying cross-margining

arrangement. This means that the allocation factor may vary between qualifying cross-margin arrangement based on the joint determinations of the relevant QCCPs. With respect to (ii), the EAD of the XM Positions would be the same calculation for each QCCP that is party to the qualifying cross-margining arrangement. The allocation factor for the two QCCPs would sum to 1.

The  $K_{ccp}$  calculation for this approach may be represented by the following formula:

$$EAD_{QCCP(i)} = EAD_{non\ XM,i} + Allocation\_Factor_i * EAD_{XM}$$

Where:

- $EAD_{QCCP(i)}$  equals the EAD for  $QCCP_i$  under the proposal;
- $EAD_{nonXM, i}$  equals the EAD for the Non-XM Positions of  $QCCP_i$  (including initial margin or other prefunded contributions of the clearing member and its clients related to the Non-XM Positions);
- $Allocation\_Factor_i$  equals the appropriate allocation factor for  $QCCP_i$  based on the loss-sharing arrangement between the applicable QCCPs;
- $EAD_{XM}$  equals the EAD for the XM Positions of the applicable QCCPs under the cross-margining arrangement, including initial margin held by each QCCP with respect to the cross-margining arrangement.

For example, in respect of the CME-FICC cross-margining arrangement, CME would calculate its hypothetical capital requirement in respect of a clearing member by adding:

- (i) its EAD with respect to its Non-XM Positions, including initial margin or other prefunded contributions of the clearing member and its clients related to the Non-XM Positions; and
- (ii) the EAD with respect to all XM Positions with respect to the CME-FICC cross-margining arrangement (including initial margin related to the XM Positions), multiplied by the appropriate CME allocation factor.

Similarly, FICC would calculate its hypothetical capital requirement in respect of a clearing member by adding:

- (i) its EAD with respect to its Non-XM Positions, including initial margin or other prefunded contributions of the clearing member related to the Non-XM Positions; and



- (ii) the EAD with respect to all XM Positions with respect to the CME-FICC cross-margining arrangement (including initial margin related to the XM Positions), multiplied by the appropriate FICC allocation factor.

This proposal would be relatively simple for a QCCP to implement, including because the QCCP would perform only one EAD calculation for each clearing member. The proposal also would be risk sensitive because the calculation would reflect the EAD of the QCCP's Non-XM Positions and the total XM Positions, as allocated between the QCCPs based on the loss-sharing arrangement.

**Alternative Approach:** Under an alternative proposal, with respect to each clearing member (including guaranteed client positions), the QCCP would perform two EAD calculations by clearing member to determine  $K_{ccp}$ .

- One EAD calculation would be based on the QCCP's Non-XM Positions and initial margin or other prefunded contributions related to that QCCP's Non-XM Positions.
- The second EAD calculation would be based on the XM Positions cleared by that QCCP and another QCCP that is party to the qualifying cross-margining arrangement. Specifically, this EAD calculation would reflect the XM Positions of the QCCP in respect of the clearing member and its clients and initial margin related to that QCCP's XM Positions or other prefunded contributions to the extent not already reflected in the EAD above and the XM Positions of that clearing member subject to the qualifying cross-margining arrangement that are cleared by another QCCP that participates in that qualifying cross-margining arrangement and initial margin related to the XM Positions held by the other QCCP.

The QCCP would use the sum of those two EAD calculations to determine its hypothetical capital requirement to the clearing member, subject to a cap equal to the hypothetical capital requirement calculation based on all positions cleared by that QCCP with respect to the clearing member, as the QCCP performs currently under the U.S. regulatory capital rules.<sup>7</sup>

This proposal may be represented by the following formula:

$$EAD_{QCCP(i)} = \min(EAD_i; EAD_{non\ XM,i} + EAD_{XM})$$

<sup>7</sup> Section 133(d)(5) provides that, where a QCCP has provided its  $K_{ccp}$ , a banking organization must rely on that disclosed figure instead of calculating  $K_{ccp}$  under Section 133(d)(5), unless the banking organization determines that a more conservative figure is appropriate based on the nature, structure or characteristics of the QCCP.



Where:

- $EAD_{QCCP(i)}$  equals the EAD for  $QCCP_i$  under the proposal;
- $EAD_i$  equals the EAD for  $QCCP_i$  as calculated under the current U.S. regulatory capital rules;
- $EAD_{nonXM, i}$  equals the EAD for the Non-XM Positions of  $QCCP_i$ , including initial margin or other prefunded contributions of the clearing member and its clients related to the Non-XM Positions;
- $EAD_{XM}$  equals the EAD for the XM Positions of the applicable QCCPs under the cross-margining arrangement, including initial margin held by each QCCP with respect to the cross-margining arrangement.

For example, in respect of the CME-FICC cross-margining arrangement, CME would calculate its hypothetical capital requirement in respect of a clearing member based on the sum of the hypothetical capital requirement determined using:

- (i) CME's Non-XM Positions and initial margin or other prefunded contributions of the clearing member related to CME's Non-XM Positions; and
- (ii) CME's XM Positions and initial margin related to CME's XM Positions or other prefunded contributions of the clearing member to the extent not already reflected in (i) above and FICC's XM Positions of the clearing member that are subject to the CME-FICC cross-margining arrangement and initial margin related to FICC's XM Positions.

CME would apply that calculation as its hypothetical capital requirement in respect of a clearing member, subject to a cap equal to the hypothetical capital requirement based on all of CME's positions that it clears with respect to the clearing member (as CME currently performs).

Similarly, FICC would calculate its hypothetical capital requirement in respect of a clearing member based on the sum of the hypothetical capital requirements determined using:

- (i) FICC's Non-XM Positions and initial margin or other prefunded contributions of the clearing member relating to FICC's Non-XM Positions; and
- (ii) FICC's XM Positions and initial margin related to FICC's XM Positions or other prefunded contributions of the clearing member to the extent not already reflected in (i) above and CME's XM Positions of the clearing member that are subject to the CME-FICC cross-margining arrangement and initial margin related to CME's XM Positions.



FICC would apply that calculation as its hypothetical capital requirement in respect of a clearing member, subject to a cap equal to the hypothetical capital requirement based on all of FICC's positions that it clears (as FICC currently performs).

Under this alternative proposal, XM Positions across two QCCPs effectively would be counted twice in calculating the hypothetical capital requirements of the QCCPs, which would incorporate an element of conservatism through the effective inclusion of XM Positions twice. In the context of the CME-FICC cross-margining arrangement, for example, the XM Positions would be reflected once in CME's hypothetical capital requirement calculation and a second time in FICC's hypothetical capital requirement calculation. The Associations expect that, in many circumstances, a QCCP's hypothetical capital requirement calculation would be lower when including the XM Positions at another QCCP as a result of risk offsets, such that the cap generally would not apply. On the other hand, if the hypothetical capital requirement calculation that includes the XM Positions at another QCCP does not result in a lower calculation on the basis that the combined portfolio does not have sufficient risk offsets, however, then the QCCP would determine its hypothetical capital requirement based on all of the QCCP's positions (as the QCCP performs under the current U.S. regulatory capital rules).



Please reach out to the below ISDA, FIA and SIFMA contacts with any questions.

### ISDA Contacts

Mark Gheerbrant  
Global Head of Risk & Capital  
[mgheerbrant@isda.org](mailto:mgheerbrant@isda.org)

Panayiotis Dionysopoulos  
Head of Capital  
[pdionysopoulos@isda.org](mailto:pdionysopoulos@isda.org)

Lisa Galletta  
Head of U.S. Prudential Risk  
[lgalletta@isda.org](mailto:lgalletta@isda.org)

Paola Rensi  
Head of Capital Models Benchmarking  
[prensi@isda.org](mailto:prensi@isda.org)

Ulrich Karl  
Head of Clearing Services  
[ukarl@isda.org](mailto:ukarl@isda.org)

### FIA Contacts

Jacqueline Mesa  
COO and Senior Vice President, Global  
Policy  
[jmesa@fia.org](mailto:jmesa@fia.org)

### SIFMA Contact

Guowei Zhang  
Managing Director, Head of Capital Policy  
[gzhang@sifma.org](mailto:gzhang@sifma.org)



### **About the Associations**

Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 1,000 member institutions from 77 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on ISDA's website: [www.isda.org](http://www.isda.org).

FIA is the leading global trade organization for the futures, options and centrally cleared derivatives markets, with offices in Brussels, London, Singapore and Washington, D.C. FIA's mission is to support open, transparent and competitive markets; protect and enhance the integrity of the financial system; and, promote high standards of professional conduct. FIA's membership includes clearing firms, exchanges, clearinghouses, trading firms and commodities specialists from about 50 countries as well as technology vendors, law firms and other professional service providers.

SIFMA is the leading trade association for broker-dealers, investment banks and asset managers operating in the U.S. and global capital markets. On behalf of our industry's nearly 1 million employees, we advocate for legislation, regulation and business policy, affecting retail and institutional investors, equity and fixed income markets and related products and services. We serve as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. We also provide a forum for industry policy and professional development. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association ("GFMA").