



VIA CFTC Portal

28 February 2025

Mr Christopher Kirkpatrick

Commodity Futures Trading Commission
1155 21st Street NW
Three Lafayette Centre
Washington, DC 20581

LCH Limited Self-Certification: ForexClear Liquidity Risk Margin enhancements

Dear Mr Kirkpatrick,

Pursuant to the Commodity Futures Trading Commission (“CFTC”) Regulation §40.6(a), LCH Limited (“LCH”), a derivatives clearing organization registered with the CFTC, is submitting for self-certification enhancements to the ForexClear Service’s Liquidity Risk Margin (“LRM”).

Part I: Explanation and analysis

During a default, ForexClear’s Default Management Group (“DMG”) must manage its members’ liquidity requirements arising from Cleared FX exposures. This is done via hedging a defaulting members’ portfolio before they proceed to the auction phase of the Default Management Process (“DMP”). The LRM add-on allows the service to provide an accurate estimation of the hedging cost of said portfolios in the case of member(s) defaulting.

Following reviews of ForexClear’s LRM, LCH has updated its methodology.

Part II: Description of Model Changes

The key changes to LRM are as follows.

Limiting Offset

ForexClear will replace the current diversified portfolio initial margin (“Core IM”) calculation with gross initial margin per currency pair (“IM_{ccypair}”) for LRM calculations and will introduce an ‘Offset Cap’ parameter to reduce the model’s offset.

The replacement of Core IM with IM_{ccypair} serves to enhance the LRM estimate calculations by taking into account the cost to hedge all currency pair sub-portfolios individually as opposed to the portfolio approach under Core IM.

The newly-introduced Offset Cap parameter is calibrated against previous Firedrill portfolios. This will ensure that there would’ve been sufficient liquidity resources in each instance to cover the costs of hedging. As part of ongoing monitoring ForexClear will continue to regularly consult the DMG on the Offset Cap and has tested the updated parameter against further Firedrill portfolios to validate the level set.



Increasing Risk Considerations on Entire Forward Curve

LRM currently uses a single tenor as an approximation for the risk across the forward curve (the “Winning Tenor”, the tenor with the largest Delta). This can lead to under or over estimation the liquidity risk of a given currency pair where Delta risk is present across the entire forward curve of a portfolio. Underestimation occurs when the Delta is marginally larger on the short-end of the curve, with overestimation occurring when the delta is marginally larger on the long-end of the curve where the Initial Margin Multipliers (IMMs) are higher. Small changes in the Delta of a currency pair position may also cause tenors to shift under the current model which can cause jumps in the liquidity add-on charge.

To combat this, ForexClear will introduce a Delta-weighting to $IMM_{ccypair}$ to replace the static single tenor approximation, therefore incorporating the Delta risk of each tenor across the entire portfolio.

Impact on Members

The impact of this change for members will be twofold. Firstly, more broadly, there will be a general increase in Liquidity Risk Margins, although this will be dependent on the Member portfolio in question. Members with offsetting positions will see the largest increases in LRM due to the new offset limitation calculations being implemented.

Secondly, the updated LRM will mean more stable LRM calculation outputs by the model, thereby reducing sudden changes in funding requirements being passed on to members. This is due to the improved risk weighting that will be applied across the entire Member portfolio as risk concentration of a portfolio moves equally along the curve. This ultimately results in a more conservative approach to calculating the add-on.

The new model will also now consider the hedging costs of all tenor points with non-trivial risk, thereby increasing the conservativeness of the calculation.

The LCH Ltd paper for this initiative is attached as **Confidential Appendix I**. These changes will be made effective not earlier than **12 May 2025**.

Part III: Core Principle Compliance

LCH reviewed the proposed change against the requirements of the Core Principles and finds it will continue to comply with all the requirements and standards set forth therein. Specifically, this change has relevance to Core Principles B (Financial Resources) and D (Risk Management).

Core Principle B, at a high level, requires DCOs to have adequate financial, operational and managerial resources to discharge its responsibilities as a DCO. This includes ensuring that its exposures are covered to a high degree of confidence, notwithstanding the default of a clearing member creating the largest financial exposure for the DCO in extreme but plausible market conditions. The enhancements that will be implemented to ForexClear's LRM model serve to ensure that there is adequate liquidity provisions available to the ForexClear DMG in the event of a ForexClear member default by increasing the conservativeness and market representativeness of the add-on. By ensuring that whole portfolio risk is more accurately represented and that the impact of portfolio offset is altered in the add-on, LCH's liquidity resource will be better suited to deal with such



situations and will be more reflective of the true cost of hedging member portfolios based on market conditions (including those falling under extreme but plausible).

Core Principle D broadly requires DCOs to have the ability to discharge the risks associated with operating a DCO through the appropriate tools and measures. LRM is a key tool used by ForexClear to manage its liquidity requirements. Looking specifically to the requirements under 17 CFR 39.13(f)(1)-(2), by updating its LRM model for the ForexClear service LCH demonstrates its commitment to limiting exposure to potential default losses. By ensuring a more conservative and portfolio-accurate level of coverage for hedging costs of its members' portfolios, LCH ensures that it will retain the necessary levels of coverage to ensure no service disruption or uncontrollable and/or unanticipated exposure of non-defaulting members by taking into account a more accurate picture of the risk landscape in its margin add-ons.

Part IV: Public Information

LCH has posted a notice of pending certification with the CFTC and a copy of the submission on LCH's website at: [Proposed Rule Changes | LSEG](#)

Part V: Opposing Views

There were no opposing views expressed to LCH by governing board of committee members, members of LCH or market participants that were not incorporated into this proposal.

Certification

LCH hereby certifies to the CFTC, pursuant to the procedures set forth in CFTC Regulation §40.6, that the attached submission complies with the Commodity Exchange Act, as amended, and the regulations promulgated thereunder.

Definitions

Words which begin with a capital letter, but are not defined, in this document shall have the meaning specified in the General Regulations of the LCH Rules, which rulebook is located at: [LCH Ltd Rulebook | LSEG](#).

Should you have any questions, please contact me at james.woolley@lseg.com

Yours sincerely,

James Woolley
Regulatory Compliance Analyst
LCH Limited



CONFIDENTIAL
Appendix I