I. Introduction

On December 3, 2019, Banque Centrale de Compensation, which conducts business under the name LCH SA (“LCH SA”), filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”), and Rule 19b-4 thereunder a proposed rule change (“Proposed Rule Change”) to amend its Liquidity Risk Modeling Framework (the “Framework”). The Proposed Rule Change was published for comment in the Federal Register on December 10, 2019.3

II. Description of the Proposed Rule Change

LCH SA is proposing to amend its Framework, which describes the Liquidity Stress Testing framework by which the Collateral and Liquidity Risk Management department of LCH Group Holdings Limited (“LCH Group”) assures that LCH SA has enough cash available to meet any financial obligations, both expected and unexpected, that may arise over the liquidation


period for each of the clearing services that LCH SA offers. The Framework identifies LCH SA’s sources of liquidity and corresponding liquidity risks; identifies LCH SA’s liquidity requirements with respect to its members and its interoperable central counterparty; describes the metrics and limits that LCH SA monitors; and describes the scenarios under which these metrics are computed. The proposed rule change would make revisions to three aspects of the Framework related to physically-settled options, Fixed Income Clearing System, and stress tests.

A. Physically-Settled Options

LCH SA is proposing to amend the Framework in order to address more accurately its liquidity requirements in the event of the assignment and exercise of physically-settled options involving a defaulting clearing member during the liquidation period of such clearing member. Specifically, the amended Framework will address LCH SA’s liquidity requirements in the event options that are in the money are exercised either on the day (“T”), or on the business day immediately following the day (“T+1”), on which the clearing member that is a seller of the options defaults.

If a defaulting clearing member is a seller of a Call option that is in the money, LCH SA would have to purchase the underlying securities in the market at a stressed price and await payment at the strike price from the non-defaulting purchaser of the Call option at settlement. If such defaulting clearing member is a seller of a Put option that is in the money, LCH SA would

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4 The following description is substantially excerpted from the Notice.

5 Notice, 84 FR at 67488.

6 Id.

7 Notice, 84 FR at 67488 – 67489.

8 Notice, 84 FR at 67489.
have to purchase the underlying securities at the strike price from the non-defaulting purchaser of the Put option. Although margins should cover any potential loss, liquidity outflows as a result of the sales’ proceeds are included as liquidity requirements, in each case.

In the current Framework, there is no liquidity provision related to the risk of assignment and exercise of options at expiration. In order to address this concern, the amended Framework will anticipate, prior to the expiration dates, the amount of liquidity funding that may arise from options that may be exercised, in the event of the default of LCH SA’s two largest members (“Cover 2”). On a daily basis, LCH’s liquidity coverage ratio (“LCR”) calculation will identify all of the potential positions that are in the money or at the money on that day and the next business day. Given the potential option exercise, the LCR calculation will generate a liquidity need. The additional liquidity amount that LCH SA could potentially need will be equal to the sum of the equities to source following the option assignments at expiration and/or the difference between the underlying securities and the strike price or the strike price minus the asset in the event of a cash settlement.

In practice, the process would work as follows on a daily basis:

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9 Id.
10 Id.
11 Id.
12 Id.
13 Id.
14 Id.
15 Id.
• The liquidity needs arising from the options that are in the money or at the money, having their expiries on T or T+1, will be computed by applying no market stress to the equities.

• The liquidity needs arising from the options that are in the money or at the money, having their expiries on T or T+1, will be computed by applying a stress scenario to the equities.

• LCH SA will select the positions consistent with the Cover 2 for both modes described above and will retain the most punitive one.

This amount would be added to the current cash equity amount in the LCR calculation, which LCH would then retain through qualified liquid resources.\textsuperscript{16}

B. Fixed Income Clearing System

LCH SA is proposing to amend the Framework to take into account the expansion of sovereign debt for which LCH SA provides clearing services through its Fixed Income Clearing System.\textsuperscript{17} LCH SA initially provided clearing services only with respect to French sovereign debt.\textsuperscript{18} The Fixed Income Clearing service subsequently added the sovereign debt of Italy, Spain, Germany, and Belgium.\textsuperscript{19} More recently, the Fixed Income Clearing System has been extended to eight additional Euro markets: Austria, Netherlands, Finland, Ireland, Portugal, Slovakia, Slovenia and Supranationals.\textsuperscript{20}

\begin{flushleft}
\textsuperscript{16} Id. \\
\textsuperscript{17} Id. \\
\textsuperscript{18} Id. \\
\textsuperscript{19} Id. \\
\textsuperscript{20} Id. \\
\end{flushleft}
In this regard, therefore, the Framework would be revised to provide that all securities resulting from the settlement of all repurchase contracts ("repos") on behalf of a defaulting clearing member, not just repos on the sovereign debt of France, Italy and Spain, may be used to generate liquidity at the Banque de France.\textsuperscript{21} The amended Framework would also clarify that, in the event that a Central Bank Guarantee ("CBG") is triggered by the default of a clearing member posting the CBG, the relevant Central Bank will pay the liabilities of the defaulting clearing member in cash.\textsuperscript{22}

Further, the Framework would be revised to (i) identify the relevant central securities depository ("CSD") through which transactions in the sovereign debt of the different jurisdictions may settle, (ii) describe the manner by which LCH SA injects liquidity into each settlement platform, in particular, Euroclear Bank and Clearstream Luxembourg, and (iii) modify the limits by settlement platform on the main liquidity drivers (\textit{i.e.}, cash injected into the platforms, auto-collateralization and gross fails).\textsuperscript{23}

C. Stress Tests

The proposed rule change would make clarifications with respect to certain aspects of its stress tests.\textsuperscript{24} With respect to the operational liquidity target, which is a metric allowing LCH SA to confirm that the business as usual liquidity sources are sufficient for a five day period in stressed situations, consistent with the LCR time horizon, the Framework would note that LCH

\textsuperscript{21} Id.
\textsuperscript{22} Id.
\textsuperscript{23} Id.
\textsuperscript{24} Id.
SA uses a three-day window with regard to margin reduction.\(^{25}\) The Framework would further clarify that, in calculating liquidity resources, LCH SA deducts funds required to facilitate settlements, cover end of day fails at Euroclear Bank and Clearstream Luxembourg, and avoid Target 2 Securities fails.\(^ {26}\) In addition, the Framework assumes that members allowed to post CBGs will switch from cash or ECB-eligible non-cash collateral to CBGs (although the Framework does not currently take such switches into account, since all eligible members, \textit{i.e.}, Dutch and Belgian members, have already done so).\(^ {27}\) Moreover, the amended Framework would confirm that, in calculating required variation margin payments to CC\&G, LCH SA assumes a theoretical 5-day holding period.\(^ {28}\)

The amended Framework would also clarify how stressed liquidity requirements and impact are calculated for each clearing member, in particular with respect to the cash equity settlement requirement for options.\(^ {29}\) These calculations are used to determine the two clearing members that would potentially cause the largest aggregate liquidity exposure for the CCP in extreme but plausible market conditions.\(^ {30}\)

Finally, the Framework would clarify how LCH SA conducts reverse stress tests in order to determine if there is a combination of changes in LCH SA’s liquidity that could lead to a

\(^{25}\) Id.

\(^{26}\) Id. Target 2 Securities is a Eurosystem technical platform to which CSDs assign the management of securities settlement in central bank money.

\(^{27}\) Id.

\(^{28}\) Id.

\(^{29}\) Id.

\(^{30}\) Id.
liquidity shortfall. In particular, the amended Framework would consider whether there is a combination of changes in LCH SA’s liquidity resources that could lead to a liquidity shortfall, even in the absence of stress in the market.

III. Commission Findings

Section 19(b)(2)(C) of the Act directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to the organization. For the reasons given below, the Commission finds that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Act and Rule 17Ad-22(e)(4)(ii) thereunder.

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

Section 17A(b)(3)(F) of the Act requires, among other things, that the rules of LCH SA be designed to promote the prompt and accurate clearance and settlement of securities transactions and, to the extent applicable, derivative agreements, contracts, and transactions, to assure the safeguarding of securities and funds which are in the custody or control of LCH SA or for which it is responsible, and, in general, to protect investors and the public interest.

As described above, the proposed rule change would amend the Framework to anticipate, prior to expiration dates, the need for LCH SA to step in and meet a defaulter’s obligation in the event of the assignment or exercise of physically-settled options involving a defaulting clearing

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31 Id.
32 Id.
35 17 C.F.R. § 240.17Ad-22(e)(4)(ii).
member by utilizing the LCR calculation, on a daily basis, to identify all of the potential positions that are in the money or at the money on that day and the next business day. LCH SA will then be able to calculate the additional need and ensure it holds sufficient qualified liquid resources to meet that need. The Commission believes that, by anticipating and ensuring that it meets its liquidity needs in this manner, the proposed rule change would help ensure that LCH SA is able to meet its financial obligations in stressed situations, which in turn would allow LCH SA to continue to meet its obligation to promptly and accurately clear and settle securities transactions in such situations.

Further, as noted above, the proposed rule change would amend the Framework to take into account the expansion of sovereign debt for which LCH SA provides clearing services through its Fixed Income Clearing System. Specifically, LCH SA would revise the Framework to provide that all securities resulting from the settlement of all repos on behalf of a defaulting clearing member, not just repos on the sovereign debt of France, Italy and Spain, may be used to generate liquidity at the Banque de France, and clarify that, in the event that a CBG is triggered by the default of a clearing member posting the CBG, the relevant Central Bank will pay the liabilities of the defaulting clearing member in cash. The Commission believes that, through these changes, the proposed rule change would enhance LCH SA’s sources of liquidity and thus LCH SA’s financial condition, which in turn would support LCH SA’s ability to continue to promptly and accurately clear and settle securities transactions. Additionally, the Commission believes that by specifying the CSD through which transactions in the identified foreign sovereign debt may settle and describing the manner by which LCH SA injects liquidity into each settlement platform, the proposed rule change would strengthen LCH SA’s procedures for
safeguarding securities and funds for which it is responsible and facilitate prompt and accurate clearance and settlement by clarifying procedures for interacting with such platforms.

For the reasons stated above, the Commission believes that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Act.37

B. Consistency with Rule 17Ad-22(e)(4)(ii)

Rule 17Ad-22(e)(4)(ii) requires that, among other things, LCH SA establish, implement, maintain and enforce written policies and procedures reasonably designed to, as applicable, effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by maintaining additional financial resources at the minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the two participant families that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions.38

As described above, the proposed rule change would amend the Framework to clarify certain aspects of LCH SA’s stress tests. Specifically, the proposed rule change would clarify how stressed liquidity requirements and impact are calculated for each clearing member. Because these calculations would then be used by LCH SA to determine the two clearing members that would potentially cause the largest aggregate liquidity exposure for LCH SA in extreme but plausible market conditions, the Commission believes that the proposed rule change would support LCH SA’s ability to effectively identify, measure, monitor, and manage its credit exposures to participants, and ultimately maintain additional financial resources at the minimum

38 17 C.F.R. § 240.17Ad-22(e)(4)(ii).
to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the two participant families. Further, by clarifying how LCH SA conducts reverse stress tests in order to determine if there is a combination of changes in LCH SA’s liquidity that could lead to a liquidity shortfall even in the absence of stress in the market, the Commission believes that the proposed rule change would enhance LCH SA’s ability to manage its credit exposures and maintain additional resources.

Finally, as discussed above, under the proposed rule change the Framework would anticipate, prior to expiration dates, the need for LCH SA to step in and meet a defaulter’s obligation in the event of the assignment or exercise of physically-settled options involving a defaulting clearing member. The Commission believes that this change as well would enhance LCH SA’s ability to manage its credit exposures and maintain additional financial resources to cover foreseeable stress scenarios involving Cover 2 by identifying the liquidity need ahead of time and then retaining the amounts through qualified liquid resources.

For the reasons stated above, the Commission believes that the proposed rule changes are consistent with Rule 17Ad-22(e)(4)(ii).39

IV. Conclusion

On the basis of the foregoing, the Commission finds that the proposed rule change is consistent with the requirements of the Act, and in particular, with the requirements of Section 17A(b)(3)(F) of the Act40 and Rule 17Ad-22(e)(4)(ii) thereunder.41

39 17 C.F.R. § 240.17Ad-22(e)(4)(ii).
41 17 C.F.R. § 240.17Ad-22(e)(4)(ii).
IT IS THEREFORE ORDERED pursuant to Section 19(b)(2) of the Act\(^{42}\) that the proposed rule change (SR-LCH SA-2019-007) be, and hereby is, approved.\(^{43}\)

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.\(^{44}\)

**J. Matthew DeLesDernier,**

*Assistant Secretary.*

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\(^{43}\) In approving the proposed rule change, the Commission considered the proposal’s impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

\(^{44}\) 17 CFR 200.30-3(a)(12).