CPMI-IOSCO PAPER ON CCP PRACTICES TO ADDRESS NON-DEFAULT LOSSES

LSEG RESPONSE TO THE CPMI-IOSCO PAPER ON CCP PRACTICES TO ADDRESS NON-DEFAULT LOSSES

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Introduction

LSEG (London Stock Exchange Group) is a diversified global financial markets infrastructure and data business, headquartered in London, with significant operations in Europe, North America, and Asia. With extensive experience, deep knowledge and worldwide presence across financial markets, we enable businesses and economies around the world to fund innovation, manage risk and create jobs. At LSEG, we help to drive financial stability, empower economies and enable customers to create sustainable growth through three business divisions: data and analytics, capital markets and post-trade.

LSEG has majority ownership of the multi-asset global central counterparty clearing house ("CCP") operator, LCH Group ("LCH"). LCH has two licensed CCP subsidiaries – LCH Ltd in the UK and LCH S.A. in France. Both are leading multi-asset class and international clearing houses, serving major international exchanges and platforms as well as a range of OTC markets. They clear a broad range of asset classes, including securities, exchange-traded derivatives, commodities, foreign exchange derivatives, interest rate swaps, credit default swaps, Euro and Sterling denominated bonds and repos.

Executive summary

LSEG welcomes the opportunity to respond to CPMI-IOSCO discussion paper on CCP practices to address non-default losses (NDLs). We would like to make the following key observations:

- We believe that NDLs as described under the PFMIs are comprehensive and that the CCP's regulatory capital funded by the CCP's shareholders is the primary line of defence and has been calculated to respond to the probability and scale of risks stemming from NDL.
- In the EU, EMIR expressly imposes operational capital to address each specific kind of non-defaulting risk. This is reviewed by the relevant supervisory authorities. NDLs are therefore catered for in the definition of the CCP's capital itself and remain CCP's primary responsibility to cover any such losses.
- We do not find that a prescriptive approach to address NDL scenarios is appropriate or capable of better mitigating such risks. It is important to maintain the flexibility and diversity of current risk management practices in managing NDL risk related scenarios consistent with a given jurisdiction's local implementation of the PFMIs to allow for a CCP to effectively manage their unique risks.
- We believe it's important for a CCP to account for the simultaneous occurrence of default and non-defaulted related events. In line with EMIR, LCH's Ltd.'s recovery plans, which are approved by regulators, include such cases where there could be a potential risk from a defaulting member which could also be a service provider. It is worth noting that services often provided by clearing members to CCPs can include settlement/custodian services or even act as concentration banks.
- Regarding due diligence for relevant third parties on which CCPs rely on, CCPs have well-defined processes for conducting due diligence on critical third parties and what controls their providers have in place (i.e., service and liquidity providers) and thus, we believe that unique treatment for NDL events may not be necessary. At LCH, we complete annual cyber and resilience due diligence on all critical supplier in line with the LCH Due Diligence Framework.
- Finally, due to confidentiality reasons, it might not be appropriate to involve clearing members or other stakeholders in NDL discussions. In cases where NDLs are caused by the realization of legal risk or cyber security risk, for example, the testing and review of the NDL plan would be more appropriately managed internally by each CCP, with inputs from external stakeholders by CCPs at their discretion.

Overarching questions

1. ***Are there areas in the context of CCP NDLs where further guidance under the PFMI might be helpful? If so, what are the potential areas where further guidance might be most helpful?***

We believe the areas in the context of CCP NDLs under the PFMIs as described in the introductory section are comprehensive. Indeed, as per Principle 15 of the PFMI which states that "liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services." CCPs' regulatory capital funded by the CCP's shareholders is the primary line of defence and has been calculated to respond to the probability and scale of risks stemming from NDL.

In the EU, EMIR[1] expressly imposes operational capital to address each specific kind of non-defaulting risk. This is reviewed by the relevant supervisory authorities. NDLs are therefore catered for in the definition of the CCP's capital itself and remain CCP's primary responsibility to cover any such losses.

Also, recovery and resolution plans developed and approved by, the LCH Risk Committees, the LCH Boards and regulators ensure that each CCP maintain a comprehensive plan and resources dedicated to each NDL in a timely and decisive manner.

2. ***Are there any additional points of consideration or practices, in addition to those mentioned in this discussion paper or in the PFMI and existing guidance, that would help CCPs effectively and comprehensively address losses from non-default events? Are there areas that require additional clarity from authorities? If so, what are they?***

We believe the areas in the context of CCP NDLs under the PFMIs as described in the introductory section are comprehensive. As noted in the discussion paper, NDL risk management practices that CCPs employ are numerous and scenarios CCPs use to quantify potential NDLs are mostly informed by expert judgement given the challenges of modelling losses from low probability, high-impact events with limited historical data. As such, we believe the diversity of these practices and use of expert judgement should be welcomed to the extent that they are consistent with a given jurisdiction's local implementation of the PFMIs, as they allow a CCP to effectively manage their unique risks. Granular or over prescriptive approaches would negatively impact CCPs' NDL risk management. It would be challenging for policymakers to be able to identify all the unique NDL-related risks to which a CCP is subject to. Therefore, current flexibility under the PFMIs is immensely important.

3. ***Are there particular challenges that CCPs face in planning for an orderly wind-down in a NDL scenario? Are there means to motivate further progress in orderly wind-down planning?***

We don't find that there are particular challenges in planning for an orderly wind-down in a NDL scenario. LCH Ltd and SA have both developed Wind-down plans which include triggers from non-

[1] COMMISSION DELEGATED REGULATION (EU) No 152/2013 of 19 December 2012 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on capital requirements for central counterparties – Article 1 Capital requirements.

clearing member default scenarios. The Wind-down plan is reviewed and approved annually by LCH Management Teams, Executive Risk Committees, LCH Risk Committees (which include members, clients and independent non-executive directors) and LCH Boards. The LCH Wind-down plans are also shared with regulators upon request.

4. ***Would a similar review of practices in the context of NDLs for FMIs other than CCPs be helpful? Would further guidance under the PFMI be helpful in this context?***

A review of practices in the context of NDLs for FMIs, especially custodians (including ICSDs), may be helpful subject to any comparisons or recommendations being made are done so on a pari passu basis (see response to question 12).

Identifying NDL scenarios, quantifying NDLs and assessing the sufficiency of resources (Section 2)

5. **How can a CCP identify potential NDL scenarios comprehensively as well as with an appropriate degree of granularity?**

In line with EMIR, LCH calculates and regularly monitors capital requirements associated with (i) operational and legal risks, (ii) market and credit risk and (iii) business risks. The monitoring of those risks form part of LCH's Recovery Plans which are reviewed and approved annually by LCH Management Teams, Executive Risk Committees, LCH Risk Committees (which include members, clients and independent non-executive directors), LCH Boards and regulators.

Regarding the level of granularity, we believe that a CCP's internal processes should enable it to monitor amounts of any single event (i.e., short term shock/loss) or a combination of events and highlight if loss(es) could be greater than the amount of capital in any of the above-mentioned categories.

6. **Given that a CCP's efforts to prevent losses from non-default events may fail, what are effective approaches to prepare for and address resulting losses, in particular from low-probability, high impact events?**

Preparing for NDLs based on a very limited set of actual data requires a degree of expert judgement to ensure the losses remain "plausible".

We believe that a well-established risk management framework is able to identify risks, and with the appropriate set of controls and actions in place, enable a CCP to prepare for NDLs even from low-probability high-impact events.

At LCH, individual business lines are responsible for identifying their own risks and controls which are reviewed at least quarterly by 2nd Line Risk. In addition, we regularly perform scenario analysis which considers extreme but plausible risk scenarios.

7. **Are approaches such as sensitivity analysis, scenario simulations, drills or stress-testing analysis useful for quantifying resource needs and assessing adequate NDL coverage? If so, what are potential obstacles hampering progress in this area and what could be possible avenues for reducing those obstacles?**

We agree that the above-mentioned approaches are helpful and widely used by CCPs in quantifying resource needs and assessing NDL coverage. CCPs use of such practices will vary due to their different risk exposures.

At LCH, managing NDL scenarios can be broadly split into 3 categories.

Investment Activities

For investment activities, LCH uses an array of approaches such as stress testing, scenario simulations and drills, in addition to the setting of limits and application of haircuts, to ensure that exposures to counterparties or concentration to particular instruments do not breach LCH Board standards.

LCH maintains pre-arranged and highly reliable relationships with a wide range of high-quality counterparties enabling swift execution and settlement of transactions. LCH also tests the ability to liquidate such financial assets with little, if any, adverse price effect with these counterparties according to a regular programme.

Activities involving FMIs

All (I)CSDs and custodian banks are subject to the requirements described in LCH Board standards for payment, settlement and custody risk, as well as the criteria set out for counterparty credit risk. These include a minimum internal credit score, legal review, due diligence and the application of exposure limits.

LCH's monitoring of compliance with these criteria, and the overall suitability of (I)CSDs and custodians, is performed via a regular programme of due diligence.

In relation to collateral, LCH satisfies itself via the due diligence process and legal review that it would have access to the assets in the event of the custodian bank's default. Where the custodian is a commercial bank and where cash balances are held on account at the custodian temporarily in connection with investment activity, LCH manages transactions such that its intraday unsecured exposure to the custodian remains below a pre-defined percentage of capital.

LCH uses a range of (I)CSDs and custodian banks to diversify where collateral is held.

Other Scenarios

For other NDL scenarios (e.g., operational risk events, legal risk events, non-performance of vendors / service providers / IT suppliers), LCH adopts a robust enterprise risk management framework including: (i) Operational risk library; (ii) Materiality matrix; (iii) Serious incident review; (iv) Risk and Control Self-Assessment process; and (v) Reporting MI.

LCH holds economic capital for operational risk calibrated using a standard loss distribution approach where no correlation benefit is allowed which might implicitly provide an offset between market/credit risk and operational risk. LCH calculates the operational risk element in economic capital as the maximum of (i) the regulatory capital for operational risk (under the basic indicator approach); and (ii) the AMA power law approach or leverages on qualitative assessment.

8. Are there particular types of NDL scenario that CCPs could consider to help assess potential resource needs and coverage for NDLs? (eg stressed business and operational risk scenarios extrapolated from past events, NDL scenarios exacerbated by wider macroeconomic stress, or other hypothetical NDL scenarios)?

In line with the CMPI-IOSCO consultation paper, we include a number of past events which have resulted in a wider macroeconomic stress to our scenario planning such as recent financial crises, Covid-19 etc.

9. How and to what extent can the potential simultaneous occurrence of default and non-default related events be taken into account?

We believe it's important for a CCP to account for the simultaneous occurrence of default and non-default related events. In line with EMIR, LCH's recovery plans include such cases where there could be a potential risk from a defaulting member which could also be a service provider. It is worth noting that services often provided by clearing members to CCPs can include settlement/custodian services or even act as concentration banks.

10. What factors, in addition to those suggested in the PFMI, might a CCP helpfully consider when calculating the amount of liquid net assets funded by equity that is sufficient to implement its recovery and orderly wind-down plans? How can a CCP effectively incorporate its general business risk profile and the length of time required to achieve recovery or orderly wind-down into this analysis?

We believe that the PFMIs are appropriate for calculating the amount of liquid net assets funded by equity to implement the LCH Ltd recovery / wind-down plans. Such recovery and wind-down plans are comprehensive and are systematically reviewed and challenged through CCP governance frameworks (both internal and external), supervisors (both primary and secondary), and often, by other stakeholders. Under EMIR, CCPs must hold a minimum of 6 months operating expenditure for an "orderly" wind down". On top of this they hold 3 months operating expenditure for business risk, no matter if the entity is profit making or not.

11. Given the limited availability of historical data on severe NDL events, what do you consider the most important sources of information in developing plans to address NDLs, particularly for potential recovery situations (e.g. internal expertise, key stakeholders such as clearing participants and service providers, external market experts, relevant authorities, frameworks and practices in place for other types of financial institution)?

LCH agrees that internal expertise, clearing members and clients provide important sources of information for developing plans to address NDLs. We believe that all available data should be considered, while keeping in mind the limitations of each type of data. External data from other market participants may be an option to the extent available and applicable to the CCP in question. The very specific nature of a CCP's operating model, makes data provided by other financial institutions not directly relevant for the CCP to address NDLs.

The sharing of best practices within the CCP community could enhance understanding of NDL scenarios.

12. Do you have any suggestions for how the clearing industry could leverage loss data from other industries or collaborate to share anonymised loss data?

We urge caution in leveraging loss data from other industries. We note that in the latest ORX Annual Banking Loss Report a total gross loss from operational risk losses in 2021 of €20.3bn was reported (of which the total coronavirus event gross loss was reported as €3.4bn). Furthermore, in the latest ORX Annual Insurance Loss Report a total gross loss from operational risk losses in 2021 of €523mn was reported (of which the total coronavirus event gross loss was reported as €362.6mn). CCPs are not exposed to the same types of operational risk events than those within the banking or insurance industry and therefore there is a risk of adopting extreme and implausible scenarios if such loss data was leveraged without due care and attention.

13. What key measures can help to ensure that capital replenishment could be achieved in a timely and effective manner? Does the clear definition and testing of processes to obtain backup funding from affiliates or external sources underpin the credibility of that funding? How do you assess the current availability of committed or legally binding funding arrangements?

We find that (i) regular risk identification, (ii) continued monitoring of risk thresholds and (iii) a clear process for the escalation of breaches are key to ensuring that any capital shortfalls can be addressed by the management in a timely manner. In line with the PFMIs, CCPs' recovery plans describe practices and procedures to promote its recovery, including the estimation of financial resources needed to complete such processes and mechanisms for capital replenishment. LCH's recovery plan includes a well-defined equity capital raising strategy as well as a framework for capital replenishment.

At LCH, we have implemented a daily monitoring of the capital headroom ensuring that there is sufficient capital headroom above the EMIR minimum and above the EMIR notification threshold (currently 10%). If capital headroom falls below that 10% notification threshold it triggers an assessment of the situation and if capital raise is necessary, an escalation process kicks in informing the CEO and CCO who in turn notify the relevant regulators.

Finally, we believe that CCPs are best placed to estimate the resources needed to recover and replenish its capital adequacy following local regulatory requirements. Prescriptive requirements on the other hand could result in complex and lengthy processes.

14. What role should insurance play for NDL, considering potential uncertainties about coverage, pay-out delays and performance risk? Are there certain types of NDL risk for which insurance may be a more appropriate loss-absorbing resource than for other types of NDL risk?

In line with CPMI's report, we believe that insurance is not suitable for immediate recovery of losses. Nevertheless, insurance plays an integral role in managing NDLs and can cover areas such as:

- Civil Liability and Crime Insurance
  - Internal fraud
  - Loss of Property & External Fraud (non-computer)
  - External fraud (computer related) and electronic assets
  - Civil Liability
- Property Damage / Business Interruption
- Combined Liability

15. What practices might improve CCPs' planning for an orderly wind-down necessitated by NDLs?

We believe that CCPs should have the necessary discretion and flexibility to determine how to address NDLs in their planning. Such discretion is important for planning and implementation because it enables CCPs to determine, based on appropriate analysis, the sequence and combination of tools to be used whether losses are caused by NDLs or member default events. Nevertheless, we consider a detailed plan for a wind-down event to be hugely important. LCH has developed Wind-down plans which include triggers from non-clearing member default scenarios.

Achieving operational effectiveness (Section 3)

16. Are there any additional notable practices that could promote the operational effectiveness of plans to address NDLs?

We are of the opinion that proper due diligence particularly with regards to operational risks that are out of the CCP's control (i.e., custody/settlement etc.) is a useful practice to ensure that all relevant risks are captured and addressed in timely manner. In line with the consultation paper and LCH's practices, we believe it's important for CCPs to focus on prevention of NDLs.

17. What approaches might be helpful to ensure that relevant third parties (such as service and liquidity providers) fully understand and are prepared for their potential role in addressing NDLs?

In line with our response to question 16, we find that a thorough due diligence process can be a valuable tool for both CCPs and relevant third parties in their preparations to address NDLs.

18. What are the essential elements of appropriate due diligence vis-à-vis relevant third parties on which CCPs would expect to rely in an NDL event?

In line with PFMI Principle 17 (Operational Risk), CCPs have well-defined processes for conducting due diligence on critical third parties and on controls their providers have in place (i.e., service and liquidity providers) and thus, we believe that unique treatment for NDL events may not be necessary.

At LCH, we complete annual cyber and resilience due diligence on all critical supplier in line with the LCH Due Diligence Framework. All suppliers who support a default are critical per the following definition: A Critical Supplier is any business or organisation which:

- Supports critical BAU or default management operations of LCH Ltd (impacting service availability) through the provision of products, services or information.
- Provides critical infrastructure to the business (including IT, utilities, facilities providers).
- Has access to critical LCH data (e.g., member positions/credit score) or connectivity to LCH infrastructure.
- Supports the recovery of the business during a crisis.

19. What are the key factors and constraints that impact the choice and order of different tools for the various types of NDL scenario?

LCH Recovery plans include a wide range of recovery tools to address NDLs (including the triggers). Those tools are designed to adhere to both international and national standards and have the following characteristics:

- Comprehensive
- Effective including the reliability, timeliness and legal basis for each tool
- Transparent
- Provide appropriate incentives
- Minimise negative impact

Factors and constraints that impact the choice and order of different tools can include:

- Barriers/constraints pre-existing with the tool itself
- High level steps and time to implement (if not already available as a tool)
- Likely effectiveness
- Risk of execution
- Potential impacts on participants / markets generally
- Sequencing of the use of the tools where multiple tools may be required
- Legal basis of the tool

The proposed tools to address NDLs form part of the recovery plan including an assessment of the suitability of each tool under various circumstances. In addition, all NDL tools largely rely upon the existing Rulebook or tools and processes that exist within LCH.

20. What technological tools should be developed to promote the operational effectiveness of plans to address NDLs?

Existing technological tools for the management of operational risks which could cause NDLs should be sufficient.

Reviewing and testing plans for NDLs (Section 4)

21. Are there additional notable practices for reviewing and testing plans to address NDLs?

We believe that a clear and effective governance for recovery and wind-down plans (which includes the involvement of Risk Committees) is critical.

22. What challenges are there to achieving the goal of increasing the involvement of additional stakeholders in different stages of review and testing of plans to address NDLs?

In line with our response to question 21, we do not believe additional stakeholders are required to review the recovery tools for NDLs identified within the LCH Recovery plans. Due to confidentiality or security reasons, not all types of NDLs should involve clearing members or other stakeholders in discussions. In cases where NDLs are caused by the realization of legal risk or cyber security risk, for example, the testing and review of the NDL plan would be more appropriately managed internally by each CCP, with the solicitation of inputs from external stakeholders by CCPs at their discretion.

23. Are multi-CCP crisis management drills an effective tool for testing preparedness to address NDLs? Are there any barriers to effectively conducting this type of exercise? What role should authorities play in supporting these exercises?

We do not believe that multi-CCP crisis management drills are an effective tool for testing preparedness to address NDLs. As noted in previous responses, it is highly unlikely that NDL scenarios, will be the same for a given CCP or amongst a group of CCPs. Moreover, any such exercise would need to take a more holistic view, and assess the measures and practices in place, not only at the CCP, but at CCP counterparties, such as, settlement banks, commercial banks, central banks, and custodial banks, etc. which makes the exercise highly complex and with a questionable outcome as to the conclusions that can be drawn given that those scenarios are likely to go beyond “extreme and plausible”. Also, actions taken by local regulators and participants active in the respective jurisdictions will be fundamentally different given the specificities of each local market.

Providing effective governance, transparency and engagement with participants and authorities

(Section 5)

24. Are there additional notable practices for providing effective governance, transparency and engagement with participants and authorities in the context of NDLs?

Please see previous responses with regards to the governance approach for recovery and wind-down plans.

25. What are the most important elements of appropriate processes and governance arrangements for rule-based loss allocation to support clearing members in anticipating and preparing for potential exposures

We believe that transparency in the CCP’s processes is the most important element of appropriate element for rule-based loss allocation support. At LCH we could implement rule-based loss allocation as a result of a default of a sovereign, issuer or investment counterparty. However, our Rulebook provides transparency and legal certainty to our members on how the residual loss will be allocated and most importantly the level of impact that this could have which is proportionate to their total margin requirements. Its worth noting that changes to our Rulebook follow a well-defined governance path ensuring that our members are kept abreast and in agreement with all changes.