LCH Response to the Financial Stability Board Discussion Note on "Essential Aspects of CCP Resolution Planning"

Introduction

LCH is a leading multi-asset class and international clearing house, which services major international exchanges and platforms, as well as a range of OTC markets. It clears a broad range of asset classes including cash equities, exchange traded derivatives, commodities, energy, freight, interest rate swaps, credit default swaps, bonds, repos, and foreign exchange derivatives.

LCH is majority owned by the London Stock Exchange Group ("LSEG"), a diversified international exchange group that sits at the heart of the world's financial community. The Group can trace its history back to 1698.

Recently LCH has published a Whitepaper on the topic of CCP Recovery and Resolution which can be found at http://www.lch.com/documents/731485/762444/-and-resolution-a-framework-for-ccps.pdf/. It provides more details on the positions on this topic which are scattered throughout this questionnaire.

In this context, LCH welcomes the opportunity to respond to the Financial Stability Board ("FSB") Discussion Note on ***"Essential Aspects of CCP Resolution Planning".***

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Part A. General Remarks

While defining the Recovery and Resolution framework for CCPs, one of the key decisions for the Regulatory Authorities is where to draw the line between Recovery and Resolution. Clearly, when this is possible, it is preferable for a CCP to recover rather than be placed into Resolution (with the undesirable associated consequences that we propose to review in our detailed responses below). To this end, LCH would like to make the following recommendations:

1. **Clear trigger point:** The decision to place a CCP into Resolution should only be made after the default management tools and all Recovery options have been ruled out and the CCP is unable to meet its core obligations (e.g. not meeting payment to non-defaulted members or breaching capital requirement).

2. **Recognition of Risk Waterfall and Recovery tools:** CCPs typically have specific tools available to manage losses associated to clearing member(s) default (e.g. Assessment powers, Variation Margin Gains Haircutting, Contract Tear Ups (full or partial), and these tools should formally be recognised and remain available to the CCP.

3. **CCPs' ability to restore a matched book:** In the scenario where one or several clearing member(s) default(s), the CCP's tools mentioned above will result in all losses being allocated to surviving members. Provided that the CCP adds the power of Partial Contract Tear Ups to its Rulebook (carefully explained and detailed for its members and clients), the CCP will, in the vast majority of cases, be in a position to restore a matched book.

   In the case where the auction among members has failed, LCH believes that the CCP should open the auction to clients of members as there will be more capacity to absorb the defaulted members portfolio without having to resort to partial tear ups of the positions in the defaulters portfolio.

4. **A flexible sequence using a pre-defined set of tools:** To the extent possible, LCH does not support the concept of early intervention and would recommend that the Resolution Authority does not place the CCP in Resolution before the Default Management tools and Recovery options ar exhausted. However, in the cases where the Resolution Authority considers that, for specific macro-stability reasons it should intervene, the Resolution Authority should have some flexibility in applying its powers under a Resolution framework. To give the market the appropriate level of certainty, it is desirable that the Resolution Authority uses the existing powers of the CCP

Rulebook, but allow itself some flexibility in the order in which they are to be applied. This flexibility would be the main difference between the CCP applying its Rulebook and the Authority taking a different decision in light of specific market conditions.

5. **Proportionality:** In the new Resolution regime that will emerge, a key requirement will be to ensure proportionality.
    - Since some CCPs have multiple services of varying size, care needs to taken not to place the entire CCP in Resolution for the failure of a smaller service which has little impact on the larger services or systemic stability. This may be difficult for Regulators to achieve, as Resolution applies at the CCP level and not at the service level inside the CCP.
    - LCH considers it essential that the possibility for the CCP to conduct service closure remains an option which forms part of the Authority's assessment when it considers whether to intervene or not.

6. **Distinction between Default losses and Non-default losses ("NDLs"):** LCH considers it critical that any Resolution framework distinguishes between responses to clearing member defaults vs. responses to NDLs. Resultant actions needed to address these situations are likely to be very different, with different powers and resources available. Indeed the issue of a CCP potentially failing can be more pressing in the case of NDLs as these situations occur outside the CCP's powers associated with clearing member defaults, where margins, guarantee funds, assessments, VMGH and (partial) Contract Tear Ups are not available to the CCP. Some elements of these NDLs could be allocated back to clearing members depending on the level of responsibility they have in designing the CCP's policy.

7. **Alternative source of funding for Resolution - the re-purposing of wind-down capital:** Under EMIR, each CCP is required to hold capital for wind-down risk. If each CCP were to contribute its wind down capital to a central fund under independent regulatory control, then the size of the resulting fund would be enough to capitalise the simultaneous failure of the largest 2 CCPs in the sense that there would be enough to cover the minimum capital requirements of both failed CCPs. Should the FSB be interested in exploring this option, LCH would recommend further legal and operational feasibility study led by the Authorities approaching this possibility from a systemic point of view.

8. **The appropriate level of Skin-In-The-Game ("SITG"):** Whilst the intention behind the idea of increasing CCPs' SITG to reinforce incentives is clear, it is in fact problematic

when it aims at creating a loss-absorbency layer for clearing members' trades. Indeed, in this case, the increase would have to be so high that (other things being equal) it would cause the returns of the CCP to fall below its cost of equity. This would be unsustainable in the long term, as it would both increase clearing fees and discourage private sector capital from providing clearing services.

9. **Interpretation of the No-Creditor-Worse-Off ("NCWO") principle: The literal** counterfactual to the NCWO principle is the application of the CCP's rulebook by the CCP itself, or the application of the relevant insolvency regime, without any intervention from the Resolution Authority. This is likely to remain a theoretical assessment between what would have been the losses incurred by each creditor under those scenarios and the losses that will result from the Resolution Authorities' intervention**. However this ignores the systemic risk concern which is the very reason normally given for the Resolution Authority to intervene in the first place. Hence the literal NCWO principle needs to expanded from a series of individual tests to incorporate an assessment as to whether the system as a whole is better off from the viewpoint of financial stability.**

10. **International Framework:** LCH fully supports the continued efforts of CPMI IOSCO, the FSB and policy makers around the world to create a regulatory framework that will further enhance the resiliency of CCPs. The international nature of this framework is crucial, as coordination between the Resolution Authorities will play a key role in avoiding contagion losses across jurisdictions. In addition, sufficient granularity at the international level will mitigate the risk of deviation among the jurisdictions, and the potential regulatory arbitrage and unlevel playing field that these deviations may cause.

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Part B. Responses to Questions

Q1. Does this discussion note identify the relevant aspects of CCP resolution that are core to the design of effective resolution strategies? What other aspects, if any should authorities address?

LCH recommends that the FSB considers a few additional elements as part of its current thinking process:

(a) The FSB framework ought to consider the different types of ownership structure of the CCPs, and how this impacts loss allocation under resolution. Indeed, there are prominent examples of large CCPs which are:

- 100% owned by a parent financial services firm
- Majority owned by a financial services firm
- Completely owned by clearing members (fully mutualised).

Some issues are not relevant for all three types of CCP: e.g. SITG is not a factor when the CCP is fully mutualised, as all losses flow back to the members, given their dual role as members and CCP owners. This is, of course, very different when the CCP is owned (partially or fully) by another financial institution.

The type of CCP ownership structure also plays an important role when examining the suggestions of CCP equity in exchange for a mandatory cash call in Resolution. Indeed, LCH would encourage the regulators to consider the immediate impact on existing shareholders' equity in case of sudden dilution, or even the threat of sudden dilution. Such a mechanism would also need to be simultaneously implemented by all regulatory jurisdictions. Otherwise, the capital supporting clearing services would flow into the least onerous regulatory jurisdiction.

(b) LCH also encourages the FSB to further detail where the financial resources to cover NDLs should come from; other than the suggestions of allocating losses to members or applying mandatory cash calls in return for equity in the CCP. It is crucial here to make the distinction between losses coming from clearing member defaults and NDLs, as these two categories require different solutions.

As mentioned in the response to Question 6, LCH suggests a possible source of capital to restore a failed CCP to its minimum capital requirements, while the Resolution Authority engineers a sale or orderly closure.

Incentive effects of resolution strategies

Q2. What is the impact on incentives of the different aspects of resolution outlined in this note for CCP stakeholders to support recovery and resolution processes and participate in central clearing in general? Are there other potential effects that have not been considered?

It is indeed crucial to ensure that the development of Resolution strategies take into account the potential effects on incentives for the different stakeholders of the CCP. One of the reasons why CCPs have been so stable even during extreme market moves is their incentive/disincentive structure, and it is critical that the Recovery and Resolution framework does not diminish but rather increase the market discipline that central risk management creates.

The Resolution framework should reinforce the right incentives for all market participants towards optimal risk management, preservation of market integrity and avoidance of moral hazard. These over-arching principles clearly establish the following hierarchy: the use of the regular risk management waterfall must remain preferable to Recovery, and Recovery preferable to Resolution.

A lot of progress has been achieved in ensuring that all CCPs' stakeholders are appropriately incentivised through regulatory guidance or regulations such as:

- CPMI IOSCO Principles for Financial Markets Infrastructure ("PFMIs")
- FSB Key Attributes of Effective Resolution
- EMIR

<u>Preserving incentives for Clearing Members:</u>

It is crucial to ensure that surviving members actively participate in the default management process.

- The CCP powers to use legitimate Recovery tools is an integral part of the incentive structure. LCH strongly believes that the following tools should be recognised as part of the CCP's Recovery tools: Rights of assessments on members for further financial resources in case the prefunded resources prove inadequate; Variation Margin Gains Haircutting ("VMGH"); Partial or Full Contract Tear Up.

- Restricting the use of these essential Recovery tools to the sole purview of the Resolution Authority would undermine the incentive structure.
- Some of the considerations, like equity compensation, would exacerbate this issue further. They would potentially create contrary incentives, with situations where the outcome for clearing members of the CCP entering into Resolution may be preferable to active participation in the auction process or CCP Recovery measures.

<u>Preserving incentives for CCP Operators:</u>

For one thing, under EMIR, the current incentive structure ensures that all participants play an active role in all aspects of default management. The CCP, in particular, is incentivised through the mandated 25% SITG to operate margin policies in order to protect the resources of non-defaulters. Note that this requirement is not applied in other jurisdictions outside the EMIR regime.

Whilst it is clear that the intention behind the idea of increasing CCPs' SITG is to reinforce the incentives for the CCP operator, LCH considers the introduction of second tranche of SITG somehow problematic in that:

- In order to maintain proportionality (cost of equity vs. return on equity), liquidity and appropriate incentives, this second tranche would still not be meaningful in terms of loss absorbency.
- Regardless of where the SITG layers are created, they are effectively a deduction from capital (as detailed in the response to Question 4); for the increase to turn SITG into a meaningful loss absorbency it would have to be so large that it would drag down the CCP return on capital below the shareholder cost of equity.
- This issue on cost of equity could be mitigated if the regulators were to envision a m*uch lower* capital weight on the second tranche (justified as it is deeper in the loss waterfall).

The CCP Rulebooks currently tend to be written so that all losses related to a clearing member default (and, for certain CCPs, some types of investment and liquidity losses) can be allocated back to the clearing members. Shareholders of a CCP have therefore taken stakes in the CCP with this understanding. Indeed, shareholders consider themselves only exposed to losses associated with operating the CCP, and not to excessive losses generated from trading activities of members beyond those covered by CCP Rulebook powers. If this were to change, the CCP shareholders would suffer an immediate hit to their equity positions.

In fact, any attempt to push clearing member trading losses onto shareholders will have a profound impact on the current regime and incentive structure. Indeed, it would in fact *increase* the systemic risk of a CCP, in that member trading losses in one service could then hit CCP capital. It would result in internal contagion by which all services inside the CCP could fail. Increasing the risk of internal contagion within the CCP would clearly go against the regulatory objectives of the framework, and of past legislations. Indeed, over the past few years, the regulators have carefully designed the rules that apply to CCPs to segregate services so that this internal contagion cannot happen. LCH would encourage the FSB to ensure that none of the proposed mechanisms within the upcoming framework hamper this progress.

This being said, there are very remote circumstances where, for example, a competent Auhtority would prevent the CCP from placing a member into default (e.g when acting under the BRRD framework), certain loss allocation mechanisms may lead to an imbalance on clearing members which may lead to a non-zero residual loss to the CCP.

However, the Resolution Authority should not forbear any member contributions to running the Rulebook process, as this would, by definition, create a non-zero loss which needs to be allocated. The systemic risk arguments for the Resolution Authority to forbear certain members from taking part in the loss process are mitigated by moratoriums implicit in the CCP Rulebooks. These prevent any member from placing the CCP in default for a certain period due to non-payment of VM. This will give enough time to restore the situation until the relevant member can continue to meet its contractual obligations under the Rulebook.

Timing of entry into resolution

Q3. What are the appropriate factors for determining timing of entry into resolution? How might a presumptive timing of entry (or range of timing), if any, be defined in light of the criteria set out in the FMI Annex to the *Key Attributes*? If defined, should the presumptive timing of entry be communicated to the CCP and its participants?

The point at which the CCP is placed into Resolution is very important. LCH recommends that this point be after the default management tools and all Recovery options have been ruled out and at the point when the CCP is unable to meet (or is judged by the Resolution Authority to be unlikely to meet) its core obligations. This effectively means that the CCP has (or will imminently have) difficulty meeting its variation margin payments to non-defaulted members. In many ways, this definition would complement the CCP's criteria for placing a member in default, as the CCP would do so when the member is unable to meet its own obligations. To the extent possible, we do not support the concept of early intervention.

If the point at which the Resolution Authority declares a CCP in Resolution were not correctly specified, there could be serious potential consequences:

- The CCP might be placed into Resolution too early, i.e. pre-empting market driven successful Recovery.
- The CCP might be placed into Resolution too late, i.e. too late to execute any meaningful Resolution actions, or have any access to financial resources as they would all have been consumed in the failed efforts to recover the situation.
- An incorrect specification of the point of Resolution may result in *damaging* members' incentives to ensure the success of recovery tools which could lead to the CCP being put in Resolution. The damage to the incentives would be greater in the case where certain mechanisms, by which the possibility of an equity stake in the CCP, would be introduced.

At any rate, LCH e considers that there are a number of metrics which indicate whether a CCP could have potential difficulty:

(a) If the CCP exhausts (or is about to exhaust) the funded part of the guarantee fund. This could happen for example if a number of members (well in excess of the cover 2 standard) default. The CCP will then need to rely on unfunded assessments to continue loss allocation. For some CCPs, this could also happen in the case of an investments loss.

(b) Liquidity event: if margins held are adequate, but are not fully liquid, preventing the CCP from paying out its VM calls on time to the "winners".
(c) If the CCP experiences a hit to its capital from other Non Default Loss events.

These factors are already monitored closely by Regulators. Indeed, under EMIR, there is a minimum regulatory capital requirement defining (c), while the elements (a) and (b) are reported daily (and more frequently during a stress event).

LCH considers that it is possible to create a definition of the point of Resolution from these criteria, and it is important that the market (in particular the CCP) is fully aware of the criteria chosen.

The case (a) of having to call unfunded assessments is mitigated by the fact that members are contractually obligated to pay such assessments to the CCP if required. Failure to do so would put the members' resources at increased risk, in that contribution to the default fund may be juniorized (i.e. exposed first in this context) in the loss waterfall. In any event, it would also result in the offending member being placed into default and the resulting loss allocated among the smaller pool of surviving members. Either way the loss will be fully allocated here. Note that if there are any concerns about calling a member into default for non-payment of any assessments, then:

- This cannot be done without permission of the Regulator
- Some CCPs have moratorium powers built into their Rulebook, where no member can place the CCP in default for non-payment of VM until a certain amount of time has elapsed (certainly enough to weather systemic risk concerns).
- If an Authority prevents the CCP from calling a member into default for non payment of assessments, then this will create an imbalance in the CCP loss allocation back to surviving members and create a non-zero residual loss. But it is difficult to imagine any such forbearance needing to persist beyond the moratorium period (1 month for LCH).

The case (b) above may require the help of Regulatory Authorities to address; the margins are there in securities form, but need to be liquidated for the CCP to recover fully. There is a strong mitigant here in that CCPs are typically very conservative in the collateral they accept (mainly sovereign bonds), so liquidity is less of an issue.

The case (c) occurs when an event hits the CCP capital directly and member margins, guarantee funds, the Rulebook powers of assessments, VMGH and Partial Contract Tear ups are not available to the CCP. Mitigants are typically in place to manage these risks and ensure any loss is either covered by insurance, or else is bounded and ultimately covered by the CCP capital.

Regarding early intervention, it is crucial that the legal status attached to this situation is fully clarified in the final framework. Indeed, it is very important that the legal responsibility of either the CCP management or the Resolution Authority is clear at all times to avoid a a situation whereby the CCP's management would find itself only partially independent but fully legally accountable for the decisions taken.

Adequacy of financial resources in resolution

Q4. Should CCPs be required to hold any additional pre-funded resources for resolution, or otherwise adopt measures to ensure that there are sufficient resources committed or reserved for resolution? If yes, what form should they take and how should they be funded?

Holding prefunded resources in a CCP which are reserved for Resolution will inevitably lead to an increase in clearing costs for members and for the CCP. Although the situation is different for both, members will end up bearing the cost:

- For members, the capital requirements are increasing all the time with the advent of the Supplementary Leverage Ratio ("SLR") and establishment of margin rules for uncleared derivatives. Available balance sheet capacity to serve clients has contracted across the industry, and notably with regards to central clearing, as recognised by ESMA in its recent consultation proposing to delay the entry into force of the clearing obligation for clients belonging to "Category 3" under EMIR. The situation would be exacerbated if, in addition, members were required to contribute prefunded resources for Resolution. Indeed, holding further dead capital for what remains a tail risk would constitute a disproportionate increase in BAU cost and would further dampen prospects of growth in the economy.

- If a CCP were to hold a prefunded Resolution fund, this would effectively be a deduction from CCP capital and would lower returns. Indeed imagine a typical CCP with minimum regulatory capital need ***Kreg*** and a SITG of 25%. If the CCP is running a 20% notification buffer, then the total capital held by the CCP is ***1.2*1.25*Kreg***. Suppose further that the CCP cost of capital is 10% currently. If the CCP has a current return on capital of *r%*, then one can calculate the maximum amount of SITG it can afford as *12.5*r – 1* before breaching its cost of equity to the shareholders. This would not be enough to generate any meaningful loss absorbency for member trading losses. This analysis also shows that there is not much scope for a CCP to carry "dead capital" before it would start returning less than the cost of equity and would discourage private capital from funding the CCP. Certainly having to prefund an amount which creates a meaningful loss absorbency to excessive member losses would create this problem. In other words, mandating a CCP to capitalise its own Resolution fund would conflict with the policy of having a private sector solution to the problem of systemic risk, unless the CCP were to raise clearing fees substantially. In this case, the clearing members would effectively end up funding the solution. This would then have the knock on impact of further constraining balance sheet capacity available to the buy-side, in conflict with the original regulatory goal of addressing systemic risk through increasing clearing flow through CCPs

LCH considers that the default of a clearing member(s) is covered by the existing Rulebooks and believe that the issue of a CCP potentially failing is more pressing in the case of NDLs. Indeed, these situations occur outside the CCP’s powers associated with clearing member defaults, where margins, guarantee funds, assessments, VMGH and (partial) Contract Tear Ups are not available to the CCP. Part of these NDLs could be allocated back to clearing members depending on the level of responsibility they have in designing the CCP’s policy. This is detailed on Question 13.

In terms of holding resources that could be dedicated to Resolution and used by Resolution Authorities, LCH suggests an alternative solution under Question 6.

Q5. How should the appropriate quantum of any additional CCP resources be determined? In sizing the appropriate quantum, what factors and considerations should be taken into account? Do your answers vary for default and non-default losses?

In situations where multiple clearing members default, LCH considers that there is no need for any additional resources to the financial resources already provided by the members, and the powers implicit in the CCP Rulebook. The funded resources held by the CCP are enough to cover the default of at least the largest two members under market stresses going back at least 30 years.

At LCH, initial margins are calculated at a 99.7% confidence level over the relevant holding period for each particular product. Members are also subject to other bilateral margins such as concentration risk, basis risk with add-ons for wrong-way risk and a decline in credit quality.

In addition, members must post a guarantee fund contribution. The guarantee fund is sized as the difference between the financial resources needed upon default of the largest two members and the bilateral resources held for both members.

The guarantee fund is *mutualised* with all members contributing prorata to the risk in their portfolio and this is fully funded at LCH to a “Cover 2” standard.

If a default event is large enough to burn through all funded resources, then the CCP will invoke assessment rights to collect more resources from members to help in the process of liquidating the defaulted members’ portfolio.

Following this, the CCP typically has the right to perform VMGH in which the winners' variation margin "gains" may be haircut, though the losing members are still required to pay. To prevent a daily perpetual cycle of VMGH, the CCP finally has to power to perform (partial) Contract Tear ups, which will terminate the cycle.

Some services in the CCP may have other powers such as the ability to mandate reverse repos with members to generate needed liquidity, or to mandate bidding in the auction of the defaulted members' portfolio

The upshot of all these Rulebook powers is that *any loss arising from member defaults will be fully allocated to surviving members*, and so, in that sense, there is no immediate need for a Resolution Authority to intervene.

The argument that a Resolution Authority may need to intervene on "systemic risk grounds" is not as strong as as it might appear at first sight and this is dealt with under Question 3.

This discussion can also apply to Investment Losses, where the CCP has to store margins and expose them to market risk. In the cases where the CCP agrees an Investment policy upfront with its members and follows it, there is a strong case that any resulting investment losses can be allocated back to members, though one may have to introduce another "skin in the game" to ensure the incentives are correctly aligned.

For Liquidity Risk, the question is really one of transforming the correct quantum of margin into cash promptly enough to continue meeting VM requirements. Extra resources are not really the issue here, it is more about cash liquidity and any help from Regulatory Authorities in facilitating the margin transformation would be critical. Moreover, in the case where the CCP agrees a Liquidity policy upfront with its members, there is strong case that any liquidity-related losses should be allocated ultimately back to members as explained under Question 13.

The discussion on extra resources then turns to other NDLs, where by definition, the margins, guarantee funds, and other powers such as VMGH, partial tear ups etc are not available to the CCP. Any resulting loss must come ultimately from CCP capital, after exhausting mitigants built into the Rulebook powers and Insurance cover. Indeed this is precisely the role of CCP capital and exposing this capital is how the CCP earns a return.

Even if such NDL losses were ultimately to be allocated back to the membership, it is unclear how this could be done. NDL losses vary widely in type, with very different drivers. There is no one size fits all.

What is clear is that if one attempts to list out potential NDL types, they are either insurable, can be covered by some Rulebook powers, or are quantifiable. The important point is that default losses are covered by the existing CCP procedures and Rulebook, so only the exposure of NDLs need be considered (see the answer to Question 13). LCH suggests that the FSB explores the re-purposing of the EMIR wind down capital as explained under Question 6.

Q6. Should resolution funds external to the CCP be relied upon? If so, how should such funding arrangements be structured so as to minimize the risk of moral hazard, including for CCPs with significant cross-border participation? Where these are pre-funded, how should the target size be determined and which entities should be required to contribute?

As demonstrated in the response to Question 4, LCH considers it unsustainable for the CCP industry or the Clearing Members to pre-fund additional resources that would be dedicated to Resolution.

For precisely this reason, LCH suggests a possible source of capital which could be made available to restore a failed CCP to its minimum capital requirements, while the Resolution Authority engineers a sale or orderly closure.

Under EMIR, each CCP has a component of capital designated as resources to cover wind-down risk. If each CCP were to place these resources in a central escrow account, then the size of the resulting fund would provide enough resources to a Resolution Authority to handle the simultaneous collapse of at least the largest two CCPs in Europe, and in many circumstances, even more. Of course, the fund would need to be controlled by a third party, which could permit the drawdown of monies as appropriate.

Indeed the Resolution Authority would only require, at the outset, enough funds to restore a distressed CCP's capital to the minimum regulatory requirement, so that the CCP could be kept running while longer-term solutions were being crafted. Any new buyer would be required to replenish the CCP contribution to the funds in the escrow account. Of course, if no buyer were to come forward, the funds would instead be used to wind down the CCP.

Should the FSB be interested in exploring this option, LCH would recommend further legal and operational feasibility study led by the Authorities approaching this possibility from a systemic point of view.

Tools to return to a matched book

Q7. What factors should the resolution authority consider in choosing and exercising tools to return the CCP to a matched book? Is one (or more) of the tools for restoring a matched book preferable over others and if so, why?

The factors that should guide the choice of tools to restore matched book are continuity of clearing and systemic risk.

The specific tools that would be used to restore a matched book would be:

Full contract tear up of a particular clearing service which ultimately will force a CCP to return to a matched book, while maintaining continuity in its other segregated clearing services. However in many circumstances, *Partial* Contract Tear Ups may be preferable as there is little sense in closing an entire clearing service when only a small segment of trades may be causing the particular problem at hand. In this sense, it is one of the least invasive tools available for this purpose.

In fact, **Partial Contract Tear Up** is the only tool where there is any real choice in precisely how it is executed. Either the CCP or the Authority must decide which contracts are to be torn up based on many factors and it can be challenging to specify *a priori* objective criteria defining the appropriate segment of the market to tear up.

This is why LCH recommends that further detailed analysis be undertaken to make Partial Contract Tear Ups an objective framework and one that is transparent to members and clients to enable them to plan accordingly.

LCH understands that some buy side firms have expressed concerns around the use of partial contract tear ups by the CCP arguing that they were not directly facing the CCP in the contracts that would be impacted by such tools. In this regard, it is useful to highlight the following:

- Buy side firms gain a distinct advantage from CCPs in that the CCP facilitates the availability of the required balance capacity, which the member in turn provides to the buy side firm.
- Without the CCP, buy side firms would be trading bilaterally, in which case they would be subject to partial tear up were the counterparty to default, as that is a likely tool of the counterparties' Resolution Authority. In view of this,there is a case for buy side firms to share the impact of a partial contract tear up when trading through a member of a CCP.

However, it is worth noting that the need for contract tear-ups is caused by the failure to liquidate or auction the defaulted member(s) portfolio. There are two cases to consider here:

(i) If the underlying assets were exchange traded, then it should be possible to (eventually) liquidate the defaulted members' portfolio as long as the market was functioning and there was an exchange price for each of the relevant instruments. Hence, a tear up in this circumstance would only be justified if the underlying market was not functioning and there was no exchange price for a particular instrument. Of course, this then raises the issue of what is the price at which the positions are settled after being torn up. Typically, the CCP would have in its Rulebook the power to determine a fair market value for the problematic instrument.

(ii) A more difficult problem occurs in the case of OTC cleared trades where the underlying valuations are driven by general market risk factors (so no specific issuer risk). The key examples are Interest Rate Swaps, Swaptions and FX products. Here the exit mechanism is no loger via an exchange but rather via an auction and the question then is why would the auction fail? It is very unlikely that assets in the portfolio of the defaulted member cannot be valued, so the underlying reason must be specific to how member portfolios are related inside the CCP. In particular, if there is a concentration on the other side of the defaulted members positions, (i.e. there are too few members who are in opposite alignment to the defaulted members portfolio), then there will be a greater risk that the auction may fail as there is not enough capacity within the CCP for its members to absorb the defaulters portfolio without increasing their risk to the CCP. This would also mean that there are too many members who are aligned to the defaulters' portfolio, and so *it is also highly likely that the clients of the non defaulted members are in fact on the other side of the defaulters portfolio.* This suggests that:

In cases where the auction among members has failed, the CCP should open the auction to clients of members as there will be more capacity to absorb the defaulted members portfolio in an auction without having to resort to partial tear ups of the positions in the defaulters portfolio.

Q8. Should any tools for restoring a matched book only be exercisable by resolution authorities? If so, which tools and subject to what conditions?

LCH recommends that the Resolution Authorities refrain from intervening until all Recovery options have been deployed; or the CCP has failed to duly implement the Recovery measures.

In the cases where the Resolution Authority would decide to intervene for macro-stability reasons, LCH would <u>not</u> recommend the exclusive use of certain tools by the Resolution Authority and consider it preferable that all tools which could potentially be used by the Resolution Authority are the ones that already included in the CCP Rulebook.

Regarding the specific tools that would be used to restore a matched book, it is desirable that both the CCP and the Resolution Authorities have the possibility to use the same tools.

Indeed, it is preferable that the CCP has the power to perform <u>Partial tear ups</u>, so that the offending trades can be isolated and removed from the picture. It would not be the right outcome if a relative small segment of trades were to cause the tear up of the entire clearing service in a given product.

Allocation of losses in resolution

Q9. What are in your view effective tools for allocating default and non-default losses and what are the pros and cons of these tools? Should initial margin haircutting be considered as a tool for the allocation of losses in resolution? Is one or more of the tools preferable over others? What are your views on the use of tools to restore a matched book as a means of loss allocation?

Cash calls can be used to request members to provide further funds when prefunded resources have been exhausted. This ability to request additional contributions from surviving participants, referred to as “Assessment power” or “Assessment calls”, is recognised as an important recovery tool and is present within most CCPs’ Rulebooks. Cash calls could potentially be used by Resolution Authorities which will have to consider whether, in this case, the cap should be preserved.

Variation Margin Gains Haircutting (“VMGH”) is acknowledged to be a powerful tool for loss allocation and is present within most CCPs’ rulebooks. It is similar to loss allocation under general insolvency but has the benefit of avoiding the costs and delays associated with insolvency proceedings. It also has an important advantage over the hypothetical use of uncapped cash calls (under EMIR, the cash calls applied by the CCPs have to be capped) in that it does not create an unlimited contingent exposure from a clearing member to the CCP. A clearing member can lose no more than the amount by which its position has gained in value since the default. Clearing members can therefore model their claims on the CCP and estimate any potential exposure.

Initial margin haircutting would prove problematic on two counts. First, non-defaulting members’ initial margin is already being used as collateral against the CCP’s potential future exposures to those members. Depleting this resource would lead to members being under-margined and trigger immediate margin calls. Second, it would change the cash/non-cash mix of margins posted by members and this could in turn have a profound impact on members’ behaviour and the liquidity profile of the CCP. Members would be incentivised to post as little cash as possible during a stress event if they felt that cash posted as initial margin would be vulnerable to being confiscated in resolution. Liquidity would then be non-existent at the very time it is most needed. It would also disincentivise the posting of excess margin to the CCP, potentially decreasing the efficiency of clearing in non-crisis periods.

Q10. Which, if any, loss allocation tools should be reserved for use by the resolution authority (rather than for application by a CCP in recovery)?

In general, LCH recommends that the Resolution Authority refrain from intervening until all Recovery options have been deployed.

In the cases where it decides to intervene, LCH would not recommend the exclusive use of certain tools by the Resolution Authority. Under current rules, Authorities can execute any of the CCP's rules as it sees fit, and maintaining this is appropriate. However, it should be noted that a CCP has mechanisms in place to execute cash calls and perform VMGH very quickly. This speed is needed to ensure Recovery progresses at pace. The Resolution Authorities should be mindful of this when deciding whether they should be the one exercising certain tools.

In addition, it is important that the diversity of applicable tools is clearly laid out in the CCP Rulebook *a priori* (please refer to our response to Question 11 for further details).

Q11. How much flexibility regarding the allocation of losses is needed to enable resolution authorities to minimise risks to financial stability? For example, to what extent should a resolution authority be permitted to deviate from the principle of pari passu treatment of creditors within the same class, notably different clearing members in resolution? What would be the implications of a resolution strategy based primarily or solely on a fixed order of loss allocation in resolution set out in CCP rules vs. a resolution strategy that confers discretion to the resolution authority to allocate losses in resolution differently to CCP rules?

To the extent possible, LCH does not support the concept of early intervention and would recommend that the Resolution Auhtority does not place the CCP in Resolution before the Default Management tools and Recovery options are exhausted. However, in the cases the Resolution Authority considers that, for specific macro-stability reasons it should intervene, the Resolution Authority should have some flexibility in applying its powers under a Resolution framework.

Financial stability relies to a great extent on actions by all participants, Authorities and infrastructures being as transparent as possible *ex-ante*. This transparency gives the market the ability to plan for, capitalise against and react quickly to an event.

Deviation from this principle will leave the market in an unpredictable and therefore highly unstable state, both now and, in particular, during a stress event.

LCH encourages the FSB to strike a balance between transparency, predictability and the difference that the intervention of the Resolution Authority is expected to make for the market. To achieve this, LCH recommends the inclusion of all Resolution tools and actions in the CCP's Rulebook but understands that the Resolution Authority will need to retain flexibility in the order in which these tools will be used.

Indeed, from the perspective of the CCP Rulebook, the order in which the tools are applied is clear and result in a complete loss allocation among surviving members.

However, from the perspective of the Resolution Authority, there will likely be a need for some flexibility to restore the situation differently from what the CCP would have done (should this be needed). Clearly, flexibility in the order in which these tools are to be applied may be important. For example, when used by the CCP, Partial Contract Tear up is typically performed after several rounds of assessment calls and VMGH. Under certain market conditions, the Resolution Authority might consider preferable to use this tool early in the process to minimise the losses.

However, the Resolution Authority should not forbear any member contributions to running the Rulebook process, as this would, by definition, create a non-zero loss which needs to be allocated. The systemic risk arguments for the Resolution Authority to forbear certain members from taking part in the loss process are mitigated by moratoriums implicit in the CCP Rulebooks. These prevent any member from placing the CCP in default for a certain period due to non-payment of VM. This will give enough time to restore the situation so that the relevant member can continue to meet its contractual obligations under the Rulebook.

Finally, in general, LCH would not recommend any action whereby clearing members in the same class would be treated differently by the Resolution Authority. The reason is that deviating from the Pari Passu treatment would not comply with the NCWO principle.

Q12. What are your views on the potential benefits or drawbacks of requiring CCPs to set out in their rules for both default and non-default losses:

- **(i) The preferred approach of the resolution authority to allocating losses;**
- **(ii) An option for, or ways in which, the resolution authorities might vary the timing or order of application of the loss allocation tools set out in the rules?**

For both NDLs and clearing losses due to a member default:

All the tools that could be used by the Resolution Authority must be clearly set out in the CCP rules and place an obligation on clearing members to respond appropriately. Full transparency and as much *ex ante* planning as possible should be favoured. Alternatively, and provided this does not delay the application of a harmonised framework across jurisdictions, the preferred approach, timing and order of the Resolution Authority to allocating losses could be embedded in national law.

Whilst the set of tools that can be used by the Authority should be the same as the tools available to the CCP, therefore clearly listed in the Rulebook, LCH understands that the Authority will need to retain a certain level of flexibility with regards to the timing or order.

Non-default losses

Q13. How should non-default losses be allocated in resolution, and should allocation of non-default losses be written into the rules of the CCP?

The allocation of non-default losses cannot be defined independently from the ownership structure of the CCP.

- In a mutual structure, all NDLs are ultimately borne by the membership, acting both as members and owners.

- When the CCP is owned (partially or fully) by another financial institution, a more granular approach is required, based on the nature of the event.

    - **Investment losses:** The CCP must call margins to risk manage the member positions. These margins can be in the form of cash or securities. The securities can be stored at a custodian until there is a default event and they need to be liquidated. Dealing with cash margins is more problematic. Under EMIR, the CCP can have no more than 5% (on average) of margins in unsecured deposits with commercial banks and is not allowed to use money market funds. Without access to the relevant Central Banks, this means that the CCP is forced to store the cash in the repo markets and so is reluctantly exposed to market risk. In the cases where the CCP has agreed upfront a strict investment policy with its members for how to carry out the required investments (which dictates counterparty credit quality, collateral acceptability criteria, limits etc...), there is a strong argument that, if the CCP experiences an investment loss under these criteria, these losses could be allocated back to the membership.
      In the UK, Investment Losses are allocated to members where these are solvency threatening and driven by the default of a market counterparty. The size of the loss is calibrated against the amount of IM posted by members which represents the degree of risk they have introduced to the system.

    - **Liquidity losses:** A similar argument holds for liquidity related losses, in the case where the CCP has agreed a detailed liquidity framework with members upfront.

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- **For NDLs other than Investment Losses or Liquidity Losses:** EMIR requires CCPs to hold capital against business and operational risk. The CCP Capital, the CCP Rulebook and Insurance Cover will play the lead role in absorbing losses. For instance, it is difficult to argue that clearing members should bear any loss related to operational risk (e.g. defective processes, human error, fraud...) in the CCP, as this is entirely the fault of the idiosyncratic processes and procedures put in place by CCP management. Any such NDL should hit the CCP capital directly and not be "subsidised" by member resources. However it is difficult to come up with a NDL which cannot be covered by either the capital of the CCP, appropriate insurance cover or appropriate rulebook provisions. Even the case of cyber losses can be managed if the CCP has the ability to promptly reset files to the most recent uncontaminated date. This will mean less than 24-hour exposure, as members already receive daily files listing all positions with the CCP.

Whilst not entirely related to the allocation of non-default losses in resolution, LCH would like to draw FSB's attention to the relationship between CCPs, CSDs, payment systems, Concentration Banks and Central Banks, as these connections are relevant to the resilience of the CCP:

Risks arising from **moving margins between members and the CCP**:

- For margins in the form of securities, these are handled by a custodian and are bankruptcy remote.
- For cash margins, these are invested in several ways by the CCP. As explained before, these are invested to meet EMIR constraints, with the largest share invested on a secured basis in repos (through an (I)CSD), most of the remainder invested in high grade securities and the balance in unsecured deposits at a Commercial Bank.

Potential issues may arise here:

If the (I)CSD fails, then the CCP (and potentially nobody in the market) can transform securities into cash and vice versa. This would make it virtually impossible for the CCP to meet its VM calls. The failure of such a systemically important institution as a (I)CSD requires rapid coordination amongst Authorities, and cannot be addressed by the CCP on its own. Indeed from the CCP perspective, its securities are bankruptcy remote, so the problem here is how to access them rapidly.

For securities owned outright by the CCP, there are some protections in place which can allocate solvency threatening losses back to members. For example the Statutory Instrument put in place by the Bank of England covering investment losses in 2014.

This leaves the residual unsecured cash deposits to commercial banks, which arise when the CCP is not able to deposit the cash in the relevant currency at the appropriate Central Bank. The need for the CCP to have such a deposit facility is a key requirement to manage systemic risk. Without this, the CCP has no choice but to leave cash at a commercial bank during a stress event; hardly a desired outcome. There is a clear argument for such deposit access for a CCP on systemic risk grounds which would greatly reduce the risk inherent in CCP operations in general.

There is also the related risk arising **when the CCP cannot participate in a protected payment system** (such as Target 2 in Europe and the NSS in the US) and has to construct its own version of the protected payment system PPS using designated commercial banks. In this construct, members pay cash margins to a PPS bank and these margins are then forwarded to a "concentration bank", so cash is "concentrated" at a select commercial bank. The CCP also distributes cash margin back to members by following this process in reverse.

If a PPS bank were to fail, then of course the CCP would have fall back arrangements for receiving and paying margin. If for some reason, member cash was lost here, then there is "Extended Member Liability" protection available in that the member is still responsible for that cash and that responsibility only ceases when the cash reaches the Concentration Bank, whereupon the CCP assumes the risk.

If the Concentration Bank were to fail, then again the CCP has backups in place to direct margin flows, but the CCP would be exposed to losing the cash balance already at the Concentration Bank. This balance is one of the key risks for a CCP, and is managed by ensuring a strict limit on the aggregate activity with the Concentration Bank.

This risk would not arise in the first place if the **CCP were able to leverage the relevant Central Bank to take its cash deposits** and so direct its margin payment flow without the exposure to Commercial Banks. This effectively is what happens under the Target 2 system for funds denominated in euros. A similar process exists for dollars with the NSS. While this risk is increasingly considered by Authorities, such Central Bank access has not been granted universally to large CCPs. The perception that this may be a bail out for CCPs is incorrect; in that the essence of the argument is that the CCP is asking to deposit currency at the Central Bank of issue and not to repo securities with the Central Bank.

Each day, there are CCP cash balances at the (I)CSDs representing cash received in the CCP account after some transactions have rolled off. The CCP may instruct some of these funds to be paid into opening repo legs with new counterparties, some of these funds to be used to purchase outright securities and some to be paid to the Concentration Bank. Except for the Concentration Bank activity, these are Delivery Versus Payment activities.

In fact all accounts in this process form a closed network; an account cannot be opened at the (I)CSD unless a strict account opening process is followed involving many independent signatories. There are relatively few accounts and these are reconciled daily by the CCP and by the (I)CSD, so money cannot be physically sent outside the system of accounts. This means that if there is a cyber attack on the CCP would result in a disruption of cash flows between accounts, but not a loss of cash per se outside the system. This can be handled by a system reset to the last known trusted statements (at most 24 hours reset) and the damage corrected accordingly. This may require a Rulebook amended to ensure the CCP is not liable for losses associated with the fictitious trades.

There is a small amount of money required for day to day bill payments by the CCP, but the loss of this amount would certainly not be a solvency threatening event and could easily be absorbed by the CCP capital.

The remaining potential NDLs are the same as for any corporation, where the usual Resolution considerations apply: the company is put into Resolution when its capital is depleted. These are related to Operational Risks, Legal Risks, Fraud etc and any losses are applied to CCP capital without benefit of member margins and other Rulebook powers. These losses should not be solvency threatening, as they do not involve exposure to the large sums associated to excess trading losses and margins of the members. There is also standard insurance available in the market to cover these risks.

Q14. Aside from loss allocation, are there other aspects in which resolution in non-default scenarios should differ from member default scenarios?

The point at which the Resolution Authority would call the CCP into Resolution would be the same for default losses as for NDLs: it would be at the point where the CCP is unable to (or deemed unlikely to be able to) meet the VM obligations to the non-defaulted members.

Aside from loss allocation, the difference between default losses and NDLs will be the type of tools that are applicable.

Indeed, the CCP could face NDLs to the point of Resolution while still holding a matched book, in which case VMGH or Partial Contract Tear Ups would not be appropriate. On the contrary, Assessment powers could be used in both cases.

Application of the "no creditor worse off" (NCWO) safeguard

Q15. What is the appropriate NCWO counterfactual for a resolution scenario involving default losses? Is it the allocation of losses according to the CCP's rules and tear-up of all the contracts in the affected clearing service(s) or liquidation in insolvency at the time of entry into resolution, or another counterfactual? What assumptions, for example as to timing and pricing or the re-establishment of the CCP's matched book, will need to be made to determine the losses under the counterfactual?

At the point where the Resolution Authority would like to place the CCP in Resolution, an assessment should be made to see whether each member would be no worse off under Resolution than if the CCP were to continue allocating losses and executing its powers according to the Rulebook. This would mean assuming that members were to honour their contractual assessment rights, and VMGH/contract tear ups were applied. At this stage, the CCP would have a good estimate of the financial impact, as it would have the results of the (presumably failed) auction at hand. These estimates would of course be available to the Resolution Authority through the CCP regulators. However, it is important to note that any loss allocation by a Resolution Authority that differs from the CCP Rulebook allocation could create a class of creditors for which NCWO fails.

Furthermore, whilst the link that certain regulators draw between the suggestions to compensate members with equity from the CCP and the need to comply with the NCWO principle is clear, LCH considers this proposal problematic. In addition to compromising the incentive structure, this proposal will effectively bind the members to the CCP in a stress event and may expose these members to further losses. Moreover, this would change the ownership of the CCP back to a mutualised structure, going against the evolution of the market. It would result in the control of Clearing ultimately resting with large multinational banks.

Finally, LCH understands that the primary driver for the intervention of the Resolution Authority will be the preservation of financial stability. This should imply that one should have a broader understanding of NCWO than its strict legal definition as, in the context of Resolution, this assessment will have to capture the benefit of managing systemic risks and maintaining financial stability. In other words, if everybody except one creditor was no worse off, there could still be a case for the Resolution Authority to place the CCP in Resolution as the counterfactual would be the financial instability, systemic risk and chaos resulting in the market from letting the CCP fail under its rules.

Q16. What is the appropriate NCWO counterfactual for a resolution scenario involving non- default losses? Is it the liquidation of the CCP under the applicable insolvency regime, assuming the prior application of any relevant loss allocation arrangements for non-default losses that exist under the CCP's rules or another counterfactual?

LCH supports the view that the counterfactual for a Resolution scenario involving NDLs should be the liquidation of the CCP under the applicable solvency regime, assuming the prior application of any relevant loss allocation arrangements for NDLs that exist under the CCPs Rulebook.

Similar to the point made in the response to Question 15, the understanding of the concept of NCWO in the context of Resolution will need to be broader than its initial legal definition as it will need to capture the benefits of preserving financial stability.

Q17. How should the counterfactual be determined in cases that involve both default losses and non-default losses?

As explained throughout these responses, LCH considers that the situations where the CCP would be facing default losses and the ones where it would be facing non-default losses should be considered separately, as they require different set of tools and correspond to different responsibility structure. Althoughthere could be situations where both default and non-default losses occur at the same time, they could be treated as two simultaneous but separate situations requiring their own set of actions.

Taking, for example, the scenario under which the CCP would be facing a cyber-attack while managing a default, it is important to note that:

- The flow of member margins (where the largest share of the money is) is a closed system: there are only a small number of accounts from which money can be sent by the CCP to a small number of accounts where the monies can be received. The setup of these accounts can only be done by having the sign off of several independent people from both institutions. The setup is a significant event and must pass through internal governance from both the CCP and the receiving institution. This takes a significant time. Hence, an outsider cannot hack into the system, create a new account and wire money to it outside these governance processes.
- The impact of any cyber-attack on the margin flow would then not be to lose money out of the system, but rather to potentially contaminate accounts, by send money to an unintended account. But these accounts are reconciled at least daily with independent validations by the institutions involved, so any issue would be detected

very soon, and the systems reset to the last verified file. There could only be a small possible loss here, certainly not solvency threatening for the CCP.

- It follows that successful hack into the Finance system would involve amounts that are orders of magnitude smaller than the numbers in the margin flow. Such losses would certainly not be solvency threatening for the CCP.

Equity exchange in resolution

Q18. Should CCP owners' equity be written down fully beyond the committed layer of capital irrespective of whether caused by default or non-default events?

For default losses, the answer given in Question 9 shows that equity write-down would not be necessary, as we consider that all these losses can be fully allocated to the members through the existing Rulebook.

As discussed in Question 13, the same may also hold true for Investment Losses and Liquidity losses, depending on the CCP's policy.

The remaining NDLs need to be absorbed by either insurance, appropriate Rulebook powers, or the CCP Capital itself. In these cases, the CCP shareholders would be subject to a write down of their equity position in the CCP, just as for a normal corporate solvency.

Q19. Should new equity or other instruments of ownership be awarded to those clearing participants and other creditors who absorb losses in resolution?

LCH disagrees with the principle of compensating clearing members with the CCP's equity for cash calls for the following reasons:

- CCP members have already signed up to be subject to the CCP Rulebook powers without requiring further incentives in terms of instruments of equity ownership as compensation.

- The current regime for CCP resilience (margins, guarantee funds, assessment rights, VMGH and (partial) Contract Tear ups) precludes a CCP from entering into Resolution in the context of member default, unless some clearing members fail to meet contractual assessments levied by the CCP, or do not participate in full good faith in the auction process. If this were to happen, the CCP could place the offending member(s) in default, and the resultant losses would then be allocated among the smaller pool of surviving members.

- There could be situations where the clearing members might not be incentivised in the optimal way to avoid resolution if a mechanism providing compensation in the CCP's equity were introduced. Indeed, there could be cases where clearing members are incentivised not to bid on the auction of a defaulted members' portfolio and engineer a failure of the CCP. This could compromise the sound incentives structure of the CCP's risk management waterfall and would create moral hazard. In fact, the FSB itself recognises the risk that participants may prefer an entry into Resolution rather than support recovery if an equity compensation mechanism is introduced. In this respect, the FSB suggest that additional contribution of the CCP's own resources, such as a second SITG, could be considered. However, we do not consider that this second tranche of SITG would strengthen the clearing members' incentives or could be a meaningful loss absorbing layer. Moreover, a second tranche of SITG deeper in the waterfall would still raise the same issues as those discussed under Question 4 and would degrade the ROE of the CCP to below the cost of equity. Requiring CCPs to provide additional pre-funded resources is likely to have a knock-on effect on the cost of central clearing, while not providing significant benefits as the potential amounts involved would not provide meaningful loss absorbency.

- There is an interesting possibility which might partly mitigate the argument against having two layers of SITG. Indeed, a potential approach would be for Regulators to change capital weights to allow for the different positions of the tranches in the loss waterfall. In that case, the first layer would contribute proportionately more per unit than the second deeper layer. This could be calibrated so that the overall capital is the same whether it is structured as 1 layer or 2 layers, provided the total amount is the same in both cases. This could address the concern on ROE deterioration on the CCP Capital as being counter to having a private sector clearing solution.

- We consider that a change in the ownership structure of a CCP during Resolution would be highly undesirable. Indeed, it would introduce uncertainty in CCP ownership precisely at a time of stress in the markets, which may create further instability and would therefore be counterproductive.

The value of CCP equity would be immediately impacted if a new Resolution regime were introduced whereby shareholders were exposed to the possibility of equity dilution. This could easily make the returns on holding such equity unattractive. The same problem would apply to any future shareholders, and would effectively discourage private sector funding of the CCP solution. This would leave the Government (i.e. taxpayer) as the sole provider of funds, which, of course, was the very situation that regulators were trying to avoid in the first place.

Cross-border cooperation

Q20. What are your views on the suggested standing composition of CMGs? Should resolution authorities consider inviting additional authorities to the CMG on an ad-hoc basis where this may be appropriate?

CCP Resolution will require rapid and effective decision making and is, therefore, more suited to the clear direction of one single Resolution Authority, underpinned by a recognition framework between the relevant jurisdictions and their respective insolvency regimes. CCP Resolution will be most effective if it is led by the Resolution Authority of the jurisdiction in which the CCP is established. The home Resolution Authority will be most familiar with the CCP's operations and will be able to act decisively.

The CMG should also include other regulatory bodies, notably the relevant Authorities of any systemically important member from other jurisdictions. During a crisis event, these bodies will be the ones managing systemic and contagion risks. Depending on the jurisdictions, the Resolution Authorities may differ from the day-to-day supervisory regulator, in which case, it may be more appropriate to have the supervisory regulator on the CMG, and to invite the Resolution Authority on an ad hoc basis, when required.

Q21. What should be the nature of engagement with authorities in jurisdictions where the CCP is considered systemically important, for the purpose of resolution planning and during resolution implementation?

When a CCP is considered likely to fail, there needs to be a very close interaction between the Resolution Authority of the CCP and the regulators of each member of the CCP in any country where the CCP is deemed systemically important. The impact on each country of any actions undertaken by the Resolution Authority of the CCP can then be properly assessed, and the appropriate Resolution Authorities can be brought into the discussion if a contagion effect on members in the particular country is judged likely.

However, Such cooperation should start well before a crisis occurs. There needs to be a common understanding, prior to the event, of how the various bodies could work together in practice. Hence the need for firedrills during peace time (similar to those run by a CCP), to ensure awareness of available powers, how they would concretely work, the circumstances in which they would be used and the potential impact on financial institutions. The Authorities could also consider the potential actions that would be taken by the Resolution Authority of the CCP, and examine if these could have systemic consequences in another country. To achieve this, such bodies need to have a very good understanding of contagion effects throughout the financial system; the trigger points, potential firewalls and impacts beyond clearing per se into other institutions like ICSDs, Custodians, Central Banks etc.

These cross border complexities must be considered when Resolution plans for CCPs are developed. It should also be noted that the applicable Resolution regime and legal framework will be that of the home jurisdiction of the CCP.

For these reasons, it is essential to develop information sharing mechanisms *ex ante* to allow Authorities to fully understand the impacts of their actions, both at home and abroad. Commercial sensitivities or legal obstacles must be overcome to enable Competent Authorities to fully comprehend the very connected world in which markets operate.

Q22. Should CCP resolution authorities be required to disclose basic information about their resolution strategies to enhance transparency and cross-border enforceability? If so, what types of information could be meaningfully disclosed without restricting the resolution authority's room for manoeuvre?

The full suite of powers available to Resolution Authorities should be agreed *ex-ante*, disclosed publicly and, where necessary, added to CCP rulebooks. Regulators in many jurisdictions will need to be fully aware of these powers and in which circumstances they can be employed. Members will also need to be fully aware, as they will need to build these powers into their own recovery plans. For these reasons, we believe that there should be transparency on the powers of the CCP Resolution Authority.

This being said, the notion that Authorities need to have room to manoeuvre is not contrary to the need for transparency to maintain financial stability. The tools and potential actions of the Resolution Authority could be determined and made public in peace time, and any room for manoeuvre could take the form of flexibility in the order in which these are implemented on the day. It is difficult to envision any action which could be undertaken by the Resolution Authority which should not be publicly disclosed *ex-ante*.

Cross-border effectiveness of resolution actions

Q23. Does this section of the note identify the relevant CCP-specific aspects of cross-border effectiveness of resolution actions? Which other aspects, if any, should also be considered?

The note correctly outlines the need for a close cross border cooperation given the fact that the actions taken in one jurisdiction are likely to have significant systemic impacts on other jurisdiction(s).

In addition to the ad-hoc interaction of CMGs, cross border fire drills and stress tests could form part of the remit of the cross border cooperation. Ideally, these would be executed on a regular basis and the tests applied should take into account both historic and antithetical scenarios.

Q24. What should be the role, if any, of the suspension of clearing mandates in a CCP resolution and how should this be executed in a cross-border context?

Under EMIR, the suspension or the termination of the clearing obligation for a specific class can only be performed through the amendment of the relevant Regulatory Technical Standards. Such amendment could take up to several months through the standard legislative validation cycle.

LCH, therefore, understands the view of certain Authorities and market participants that there might be a need for specific tools, such as regulatory forbearance or No Action letter, to suspend a clearing obligation within a shorter timeframe, if appropriate. Such mechanism should only be used in very specific and extremely remote circumstances resulting from significantly disruptive market events, as outlined below:

- Scenario 1: Sudden, sustained and material drop in liquidity for a mandatory cleared product. This particular case could, for instance, arise in the event of one or multiple defaults of major market participants. In such scenario, while the CCPs may have successfully managed the defaults, they could retain significant exposure on some illiquid products, with insufficient market capacity to manage a subsequent default. In this specific case, the suspension of the clearing obligation could enable market participant to close out their cleared positions and revert to uncleared contracts, as required.
- Scenario 2: A major CCP failing to operate, either as a result of a CCP default or of operational incapacity. Indeed, some market participants may only be members of

the distressed CCP, which may impede their ability to clear. In addition, from the CCP's perspective, a suspension of the clearing obligation may reduce the volume of new transactions cleared. It would allow the CCP to concentrate on resolving the issue at hand, while facing a less dynamic and therefore less complex situation than if it had to accept a lot of new transactions. However, it is important to note that, a CCP entering into recovery or resolution should not be, in and of itself, a trigger for suspending clearing obligations. The Resolution Authority, in cooperation with the relevant authorities, will be the best placed to assess whether the clearing obligation should be maintained, either through the transfer of positions and clearing activities to another viable CCP, or through other actions.

- Scenario 3: Failure of another PFMI such as a (I)CSD or failure of a systemically important service such as T2S or NSS. In these cases, the market will cease to function, so clearing will most likely not be an option anymore. Members could be allowed to trade with each other with the suspension of the clearing mandate, and later these trades could be backloaded into the CCP when the problem is addressed.

As the central clearing mandates result from the G20 commitments and are established to secure market stability, the suspension of such mandates should exclusively be the result of dialogue and discussions between the relevant authorities, and should be decided from a macro-prudential perspective, taking into account the benefits of central clearing in terms of systemic risk reduction, the current market conditions, the implications of reverting to bilateral transactions and the corresponding margining framework.

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We hope that the Financial Stability Board finds this submission useful and we look forward to engaging further as policies are developed. Should you have any questions on the response or wish to discuss it in detail, please do not hesitate to contact us at Corentine.Poilvet-Clediere@lch.com or Jean-Philippe.Collin@lch.com.