



Cassa di Compensazione e Garanzia response to the Financial Stability Board Discussion Note on “Essential Aspects of CCP Resolution Planning”

Introduction

Cassa di Compensazione e Garanzia S.p.A. (hereinafter, “CC&G”) is a joint-stock company incorporated in Italy, entirely controlled by Borsa Italiana S.p.A. and part of the London Stock Exchange Group. Founded in March 1992, offering clearing services on equity markets, CC&G has expanded the central counterparty (CCP) services to cover a broad range of trading venues and asset classes: shares, warrants and convertible bonds listed on MTA market, ETFs and ETCs listed on ETFPlus, stock, index futures and options listed on IDEM Equity as well as energy futures listed on IDEX, futures on durum wheat on AGREX, closed-end funds, investment companies and real estate investment companies listed on MIV, Italian Government bonds listed on MTS, EuroMTS, ICAP BrokerTec and Repo e-MID, Italian Government bonds and corporate bonds listed on MOT, EuroTLX and Hi-MTF. CC&G also provides a guarantee service on the NewMIC interbank collateralised deposits market. CC&G eliminates counterparty risk acting as buyer toward the seller and vice versa, becoming the guarantor of the final settlement of the contracts.

In this context, CC&G welcomes the opportunity to respond to the Financial Stability Board (“FSB”) Discussion Note on “**Essential Aspects of CCP Resolution Planning**”.



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, CC&G would like to make the following recommendations:

1. **Clear trigger point:** We believe that 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 requirements).
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), we consider that these tools should formally be recognised and remain available to the CCP.
3. **CCPs' ability to restore a matched book:** We consider that, 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.
4. **A flexible sequence using a pre-defined set of tools:** To the extent possible, CC&G 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 are exhausted. However, in the cases where the Resolution Authority considers that, for specific macro-stability reasons it should intervene, we consider that the Resolution Authority should have some flexibility in applying its powers under a Resolution framework. To give the market the appropriate level of certainty, we would recommend 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 be 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.
 - This is why we consider 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”):** CC&G 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. We believe 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, are not available to the CCP.
- 7. External resolution fund:** CC&G does not support the establishment of external resolution funds since their introduction would distort the incentives of clearing members and CCPs by reducing the focus on the default management process, which is at the core of the CCPs’ role in the financial system and dilute incentives for proper risk management.
- 8. The appropriate level of Skin-In-The-Game (“SITG”):** CC&G understands the intention behind the idea of increasing CCPs’ SITG to reinforce the incentives. We therefore believe that the introduction of a second tranche of SITG should be left to the single CCP’s rulebook, as currently exists for certain CCPs as CC&G, as a further loss allocation measure in addition to EMIR default waterfall requirements to incentivise the CCP operator to carry out sound risk management rather than to be a loss-absorbent buffer. We would however consider this option as problematic if mandated by a regulatory requirement to all CCPs as a loss-absorbency layer for clearing members’ trades. In such instance, 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:** CC&G recommends that the counterfactual to the NCWO principle be 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 which will result from the Resolution Authorities’ intervention. In addition, we recommend a broader understanding of the concept of NCWO than its initial legal definition, as, in the context of CCP Resolution, this assessment will have to capture the benefit of preserving financial stability.
- 10. International Framework:** CC&G 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.



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?

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

- (a) We encourage the FSB framework 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, we 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 require to be simultaneously implemented by all regulatory jurisdictions. Otherwise, the capital supporting clearing services would flow into the least onerous regulatory jurisdiction.

- (b) We encourage 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. We recommend making further distinction between losses coming from clearing member defaults and NDLS, as these two categories require different solutions.

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?

We believe 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

Preserving incentives for Clearing Members:

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. We strongly believe that CCPs should be allowed to rely on the following measures 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 (where applicable).
- 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.

Preserving incentives for CCP Operators:

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. We would like to highlight that this requirement is not applied in other jurisdictions outside the EMIR regime.

On one hand, we understand the intention behind the idea of increasing CCPs' SITG to reinforce the incentives for the CCP operator to carry out sound risk management. In fact, many CCPs as CC&G have currently in place this measure as additional tool in addition to EMIR default waterfall requirements, designed to incentivise the CCP operator to carry out sound risk management rather than to be a loss-absorbent buffer.

On the other hand, we would however consider the introduction of second tranche of SITG to act as a loss-absorbent buffer mandated by a regulatory requirement to all CCPs 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 our 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 *much 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, or of past legislations. Indeed, over the past few years, the regulators have carefully designed the rules which apply to CCPs to segregate services so that this internal contagion cannot happen. We encourage the FSB to ensure that none of the proposed mechanisms within the upcoming framework hamper this progress.

This being said, we recognise that, under very remote circumstances where, for example, a competent Authority 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.

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. CC&G 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

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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.

For these reasons, with respect to defaulting losses, we recommend that the Resolution Authority intervene in clearly identified circumstances and in particular under the following conditions:

- the CCP has fully executed its default management procedure set out under its rulebook; and
- the Recovery measures undertaken by the CCP in accordance with its Recovery plan are failing to restore the viability of the clearing service or have not been implemented in a timely manner.

With respect to non defaulting losses, we recommend that the Resolution Authority intervene under the following conditions:

- the preventing control measures undertaken by the CCP in accordance with its Recovery plan are failing to restore the viability of the CCP or have not been implemented in a timely manner; and
- the existing CCP's shareholders have decided not to replenish the CCP's capital.

At any rate, we consider 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.
- (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 certain 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).



We believe 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.

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, 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, we consider that 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 proportional to the independence in taking decisions for the CCP. Indeed, we would not support 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 $1.2 * 1.25 * K_{reg}$. 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 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

We consider that, in the vast majority of cases, 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, are not available to the CCP

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, we believe 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 stressed market conditions determined using all available time series.

CC&G’s margins are based on long time series (the whole time series of each instrument – from 1991 where available - versus the minimum of 1 year requested by ESMA Regulatory Technical Standards). The holding periods analysed up to 3/5 days (versus the minimum 2 days requested) and the confidence levels applied are up to 99.8%/99.99% (versus 99.0% requested).

In addition, members must post a default fund contribution. The stress test scenarios related to the sizing of the default fund (both historical and hypothetical) are based on extremely conservative and severe assumptions, providing coverage of all the largest price variations ever registered on the holding period considered – for further prudence – applying further pejorative scenarios where needed. On a regular basis, CC&G performs a comprehensive and thorough analysis of its stress testing scenarios aiming at keeping them well-aligned to market perspectives. Reverse stress tests support the evaluation of the appropriateness of the stress test assumptions.



CC&G's default fund as well embeds very conservative assumptions as it is currently gauged to cover, under extreme market circumstances, at least the four largest Banking Groups on the Bond Section and the three largest Banking Groups on the other Sections (versus the 2 required by EMIR Regulation).

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.

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. We hear the argument according to which a Resolution Authority may need to intervene on "systemic risk grounds" but we believe this raises specific issues as explained under Question 3.

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. .

The discussion on extra resources then turns to other NDLS, where by definition, the margins, guarantee funds, 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.

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, or are quantifiable. The important point is that default losses are covered by the existing CCP procedures, so only the exposure of NDLS need be considered (see the answer to Q13).

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 our response to Question 4, we do not consider sustainable for the CCP industry or the Clearing Members to pre-fund additional resources that would be dedicated to Resolution.

CCPs are by design a risk management and mutualisation system. The CCP's waterfall comprises of a set of pre-funded resources designed to provide a substantial buffer of collateral to cover counterparty credit risk as well as to ensure that the participants in the system have incentives to support an orderly default management process. One of the reasons why CCPs have been so stable even during extreme market moves is this 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.

We do not support the establishment of external resolution fund for three main reasons. First, external resolution funds would distort the incentives of clearing members and CCPs; such an external fund could reduce the focus on the default management process, which is at the core of the CCPs' role in the financial system and dilute incentives for proper risk management.

Furthermore, the creation of external resolution funds would concentrate the risk of the market in fewer number of players, as meeting the funds requirement could prove onerous for those smaller players already contributing to the CCP's default waterfall and committing resources for recovery (e.g. assessment powers).

Finally, external resolution funds would also result in an increase of the opportunity costs as they would require substantial additional resources to be prefunded, for an event that is extremely remote.

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 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.

We understand that some buy side firms have expressed concerns around the use of partial contract tear ups by the CCP. This is why we recommend that further detailed analysis is 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.

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



In most cases, we recommend 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, we would not 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, we would prefer 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 Partial tear ups, 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 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 undermargined 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.

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**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, we recommend that the Resolution Authority refrain from intervening until all Recovery options have been deployed.

In the cases where it decides to intervene, we 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, we believe that 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, we consider important that the diversity of applicable tools is clearly laid out in the CCP Rulebook or in national legislation *a priori* (please refer to our response to Q11 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, CC&G 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 are exhausted. However, in the cases the Resolution Authority considers that, for specific macro-stability reasons it should intervene, we consider that 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.

We encourage 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, we recommend the inclusion of all Resolution tools and actions in the CCP's Rulebook or legislation but understand 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.

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?**

In order to promote full transparency and as much *ex ante* planning as possible, all the tools that could be used by the Resolution Authority must be: (i) clearly set out in the CCP rules and place an obligation on clearing members to respond appropriately; (ii) or, we recommend that the approach, timing and order of the Resolution Authority to allocating losses be clearly set out in the domestic provisions implementing the EU resolution framework, provided this does not delay the application of a harmonised framework across jurisdictions.

Whilst we consider that 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, we understand 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 different approach is required also depending on the different applicable domestic legal framework (e.g in the UK, Investment Losses are allocated to members where these are solvency threatening and driven by the default of a market counterparty).

EMIR requires CCPs to hold capital against business and operational risk as well as for investment and liquidity losses. The CCP Capital 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, we believe that it is difficult to come up with a NDL which cannot be covered by either the capital of the CCP or appropriate insurance cover.

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 its obligations vis à vis the non-defaulted members.

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

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. 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 we understand the link that certain regulators draw between the suggestions to compensate members in equity from the CCP and the need to comply with the NCWO principle, we consider 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. Finally, this would change the ownership of the CCP back to a mutualised structure, going against the evolution of the market.

Finally, we understand that the primary driver for the intervention of the Resolution Authority will be the preservation of financial stability. From this, we believe that, one should have a broader understanding of NCWO than its initial 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

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off, there should still be a case for the Resolution Authority to place the CCP into 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?

CC&G supports the view that the counterfactual for a Resolution scenario involving NDLs should be either the ordinary liquidation of the CCP or its insolvency regime under the national applicable law.

Similar to the point made in our response to Q15, 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 our responses, we consider 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. For this reason, whilst we understand that there could be situations where both default and non-default losses occur at the same time, we believe that they would 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.
- We consider that a successful hack into the Finance system would involve amounts that are orders of magnitude smaller than the numbers in the margin flow (from 1 to 10). Such losses would certainly not be solvency threatening for the CCP.



The large margin pool held by the CCP is carefully ring fenced; therefore we do not consider that material cyber losses are possible by construction. Only cyber losses on the significantly smaller amount of cash at hand within the finance system could potentially be possible but would not threaten the CCP's viability.

In this case as well, we would urge the understanding of the concept of NCWO to be broadened to capture the benefits of maintaining financial stability.

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 Q9 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.

The NDIs need to be absorbed either by insurance 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.

In particular, with respect to Italian provisions on losses impacting capital, the Italian Civil Code provisions address the situation whereby the losses reduce a company's capital so that it becomes lower than the subscribed share capital by more than one third. In this situation, the board of directors must convene an extraordinary general meeting of the shareholders where they may resolve upon: (i) taking immediate remedial actions (e.g., by covering the losses through a reduction of the share capital of the company); or (ii) postponing any decision on such remedial actions until the end of the following financial year; if by the end of the following financial year the losses have not been reduced so as to bring the net worth of the company over two thirds of the subscribed share capital, the shareholders' meeting must resolve a reduction of the share capital to an amount sufficient to cover all the losses that have been generated.

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

CC&G 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.
- We consider that the current regime for CCP resilience (margins, guarantee funds, assessment rights) 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. 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 perform the CCP assessment requests. 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 Q4 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.
- 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, we strongly believe that such cooperation should start 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 fire drills 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, we consider essential the development of 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 or made transparent via express national legislation implementing the new Resolution provisions. 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, we believe that 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.

CC&G, 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. CC&G, however, believes that 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. We understand that, 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 FMI 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.