



London Stock Exchange Group response to FSB Financial resources to support CCP resolution and the treatment of CCP equity in resolution

Introduction

The London Stock Exchange Group (“LSEG” or “the Group”) is a financial market infrastructure provider, headquartered in London, with significant operations in Europe, North America and Asia. Its diversified global business focuses on capital formation, intellectual property and risk and balance sheet management. LSEG operates an open access model, offering choice and partnership to customers across all of its businesses.

LSEG operates multiple clearing houses. It has majority ownership of the multi-asset global CCP operator, LCH Group (“LCH”). LCH has legal subsidiaries in the UK (LCH Ltd), France (LCH S.A.), and the US (LCH LLC). It is a leading multi-asset class and international clearing house, serving major international exchanges and platforms as well as a range of OTC markets. It clears a broad range of asset classes, including securities, exchange-traded derivatives, commodities, foreign exchange derivatives, interest rate swaps, credit default swaps and euro, sterling and US dollar denominated bonds and repos.

In addition, LSEG operates Cassa di Compensazione e Garanzia S.p.A. (“CC&G”), an Italian central counterparty, covering a broad range of trading venues and asset classes: shares, warrants and convertible bonds, ETFs and ETCs, stock, index futures and options as well as energy futures, futures on durum wheat, closed-end funds, investment companies and real estate investment companies, Italian Government bonds and repos

I. General remarks

LSEG is a strong supporter of a clearly defined Recovery and Resolution regime and will continue to work with global and national regulators to ensure preservation of financial stability in the market. LSEG welcomes the opportunity to provide input to the FSB’s Discussion Paper (“DP”) on Financial resources to support CCP resolution and the treatment of CCP equity in resolution.

The FSB’s five-step approach is a well-structured and helpful framework for determining the appropriateness of the financial resources of a CCP. Concerning CCP equity, we do not find it necessary to adjust the exposure of equity bearing loss in resolution or increase Skin-In-The-Game (“SITG”) since those actions would negatively impact the incentive structure put in place after the financial crisis. Any attempt to impose trading losses to a CCP’s ownership structure or to a CCP’s operating capital would considerably discourage any private investment in the CCP and jeopardise financial stability.

Other key points raised in our detailed comments below include:

- We support the FSB’s proposals to clearly identify possible default and non-default scenarios and consider the CCP’s ownership structure in the tools and resources assessment. In doing so, it is important to take into account specific product factors, especially in the case of physically settled products.
- We support a clear distinction between default losses (“DLs”) and non-default losses (“NDLs”) when defining a CCP’s resolution framework and the associated loss allocation mechanisms that should reflect the respective responsibility structure.
- It is critical to ensure that CCPs can fully deplete their default waterfall and loss allocation tools.
- During a DL scenario, the CCP’s existing default waterfall is structured and assessed effectively to ensure that any resulting loss is fully allocated back to the CCP’s membership and therefore avoids the need to put the CCP in resolution. The Resolution Authority (“RA”) should not intervene until the recovery process is either (i) fully completed or (ii) deemed insufficient to ensure continuity of clearing services and guarantee financial stability.
- During a non-default scenario, the RA should distinguish between the different sources of CCP failure, including the different sources of operational problems that may occur, and specify adapted resolution tools and powers for each situation. Under non-default scenarios, we agree that CCP regulatory capital



- funded by shareholders remains the primary line of defence and has been calculated to respond to the probability and scale of risks in line with national regulations and in agreement with authorities.
- Concerning CCP equity, we believe that decapitalising a CCP, which is already at risk, can limit potential risk management options and impeded the CCP's ability to react to unprecedented market conditions. Any use of equity as part of the first set of tools during resolution could disincentivise market participants from participating in the default management and recovery process. Likewise, increasing CCP SITG in DL scenarios and designating SITG as a loss-absorbing tranche (as opposed to an incentive for the CCP to have strong risk management) would negatively impact incentives and have detrimental effects on financial stability. The discussion on resolution of CCPs should clearly recognise the strong incentives structures currently in place to ensure CCP resilience.
 - Automatically exposing a CCP's operational capital to losses would interfere with the RA's objectives and result in putting a significantly depleted CCP in a worse condition.

II. Specific responses

1. **Do you agree with the suggested five-step process to evaluate the financial resources and tools for resolution? What other elements, if any, should be considered?**

LSEG agrees with FSB's five step process to evaluate the financial resources and tools for resolution. We believe this five-step process creates a framework that allows RAs to assess the adequacy of their local CCPs' financial resources to support resolution based on their specific regulatory framework and unique market characteristics.

However, we would like to note that estimating potential losses in resolution will be particularly challenging. Therefore, we would suggest that in "Step 3" regulators should mainly focus on major and likely scenarios which will give a better indication as to the adequacy of tools and resources for resolution and identification of possible gaps.

2. **The discussion paper outlines a number of CCP and product specific factors that authorities should consider when assessing the adequacy of resources and tools in resolution. Are these factors appropriate or are there other factors that should be considered?**

We broadly agree with the CCP and product specific factors that authorities should consider when assessing the adequacy of resources and tools in resolution.

Regarding membership, LCH and CC&G employ strict membership criteria to determine whether potential members are eligible to join the clearing service and requirements under which they must adhere.

Regarding CCP services involving physical settlement, we agree with FSB's approach particularly with regards to products such as repos, cash equity instruments and physically settled commodities that we believe need to be taken into consideration. As noted in the DP, it is important to distinguish between the different types of products cleared and their risk characteristics when designing resolution strategies. In addition to the distinctions made in the DP, authorities should take into consideration the nature of products cleared, market characteristics and links to specific market and/or liquidity risks. Because of the very nature of the products cleared, CCP clearing services have completely different profiles and require different recovery and resolution approaches. We would note that, the resolution of a cash settled OTC derivatives clearing service would be very different from the clearing products with high liquidity needs (i.e. government debt repos) and which closure of clearing service could have spill-over effects on the broader market and justify heightened involvement of central banks of issue of the government instruments cleared. Likewise, in the case of clearing services dedicated to the clearing of commercial hedging products in several jurisdictions, it is important to ensure strong cooperation between the RAs and Regulators of Clearing Members ("CMs") in all relevant jurisdictions (e.g. via Crisis Management Groups).

Liquidity requirements in recovery and resolution for particular products as well as the inability to manage positions in physically delivered contracts must be taken into account particularly under extreme market conditions. Under such extreme conditions, access to central bank facilities would fundamentally change



the level of risk in resolution. Furthermore, for some commodity products, CCPs guarantee the replacement cost of a failed physical delivery rather than guaranteeing delivery of the actual underlying commodity. LSEG supports the principle of enabling such distinctions between products to be reflected in the default waterfall to account for the level of increased risk these products are carrying.

Finally, we believe that under all circumstances, the triggering of a resolution plan must be a well-coordinated and communicated set of actions involving all relevant parties (local authorities, CCP, CMs etc.) to enable the management of a defaulting event in the most efficient way.

3. Should the assessment of financial resources for CCP resolution take into account (a) different CCP ownership structures; (b) different CCP organisational structures; or (c) the products cleared by the CCP? If so, how?

LSEG believes that the assessment of financial resources should take into account different organisational structures and that CCPs should have bespoke risk management processes and dedicated resources ready to be deployed in extraordinary market conditions. Organisational differences will likely affect how clearing services are segregated at a CCP level. It must be noted that all three CCPs within LCH Group and CC&G maintain segregated pools of collateral per product cleared to avoid propagating shocks through markets. Thus, CMs of an unaffected service do not have to absorb any losses in a default scenario. We believe that financial resources in each segregated pool of collateral should be assessed both individually and in conjunction with financial resources of the entire CCP.

4. Step 1: The discussion paper outlines a number of high-level default and non-default loss scenarios that might lead to resolution. Does this cover a sufficiently broad range of scenarios? What other relevant scenarios, if any, should authorities consider in resolution planning?

LSEG believes DLs and NDLs should be approached individually when defining the CCP's resolution framework and the associated loss allocation mechanisms should reflect the respective responsibility structure.

Regarding DLs, the existing initial margins, guarantee fund, assessment powers, Variation Margins Gains Haircut ("VMGH") and the ability to do contract tear ups, ensure that any resulting loss is fully allocated according to the pre-agreed CCP rules and arrangements. Therefore, for DLs, the only way a CCP can end up with an unallocated loss is if the RA intervenes and prevents the CCP from following its Rulebook by mechanically allocating the loss back to its membership.

With regards to NDLs, the CCP's regulatory capital funded by its shareholders is the primary line of defence and has been calculated to respond to the probability and scale of risks in line with EMIR and in agreement with authorities.

1. Hypothetical default loss scenarios

Regarding hypothetical DL scenarios, specifically case 1(iii) as described in the DP, whereby multiple CMs do not meet their obligations under the CCP's recovery actions, it must be noted that CMs are legally obligated to honour their contractual obligations under CCP's rules and arrangements. If a surviving member were to go back on its obligations to the CCP in a default scenario, then the CCP would be able to place it in default and fully allocate losses back among surviving members and return to a matched book. CMs must ensure that they fulfil their obligations, especially if the recovery plan has kicked in, as the costs of fulfilling their obligations compared to the costs and disruption generated by more defaults is significantly lower. Moreover, it isn't common practice for CMs to withhold payment and risk being put in default for the amounts concerned. Relevant authorities should monitor progress of the recovery plan and intervene only when they determine that maintaining CCP critical services will come at a cost of financial stability. In such cases, we believe that relevant authorities must intervene as per point (iv) on page 7 to ensure that members fulfil their requirements. Besides, this reinforces the need for cross-border enforceability of the resolution plan which should be part of the assessment.



2. Hypothetical non-default loss scenarios

Regarding hypothetical NDL scenarios, we support the FSB's view that resolution plans should look beyond custody and investment losses in an attempt to address all possible non-default losses. We do believe, however, that different types of NDLs should be treated differently under resolution plans. There is a wide variety of non-default risks (e.g. legal risk, operational risk, investment risks, liquidity risks), which will not only need to be addressed on a case-by-case basis, but also in the context of the wider market environment in which each the CCP operates in (markets served, membership, linked financial market infrastructures). The CCP's Resolution framework should therefore require that the content of the resolution plan is sufficiently granular and that its drafting must be fully tailored to the particular CCP in question.

It is against this background that we agree with the DP that, in drawing up the resolution plan, the RA should distinguish between the different sources of CCP failure, including the different sources of operational issues that may occur, and adapt resolution tools and powers for each situation accordingly. In particular, the resolution plan should take into account the implication of stakeholders in the definition of CCP policies towards non-default risk.

In addition, whilst we understand the DP is focussed on financial resources to support CCP resolution, we believe that focus should not only be given on the financial losses incurred by each type of risk defined, but also on potential solutions to address such issues. For instance, regarding potential investment risks, making Central Bank facilities available to CCPs, such as cash deposit accounts in the local currency, can significantly reduce investment risks and ensure a limitation of spill-over on local currencies markets/liquidity shortages.

We agree with the FSB statement that the failure of a custodian bank, settlement platform, payment bank or concentration bank described in the paper could tie up CCP's positions in the third-party failure which could only be unlocked by the appropriate RA. However, in such cases, there is no need for resolution of the CCP if it is not a question of the CCP's solvency but a liquidity issue that needs to be addressed. Liquidity shortfalls do not cause a solvency threat in the longer term to any CCP, provided that it has the right tools in place such as pre-agreed liquidity lines and potential moratorium on payments.

These issues could in fact be addressed by the relevant regulator on a case-by-case basis rather than being characterised as a 'non-default loss' scenarios as suggested in the DP.

3. Different scenarios

Finally, we believe the DP could include potential losses that are an indirect result of a CM's default, resulting from attempting to liquidate the defaulting CM's collateral to meet variation margin payments to non-defaulting CMs. We believe that such risk should be addressed upfront (e.g., via the collateral acceptance policy or minimum cash requirements) but could lead to similar issue (i.e. a liquidity shortfall) such as the failure of a custodian bank, settlement platform, payment bank or concentration bank.

For reference, LCH published a whitepaper on CCP recovery and resolution in August 2016¹ that discusses the various default and non-default scenarios, the current defences in place to mitigate these risks, and what would happen if they were not sufficient.

LSEG would like to emphasise that the content of the resolution plan should be (i) sufficiently granular, (ii) fully tailored to a particular CCP to be successfully implemented and (iii) the "triggers" for resolution clearly defined. We believe that the RA should not intervene before the recovery process is either fully completed or deemed insufficient (i.e. resources fully depleted) to ensure continuity of clearing services and guarantee financial stability.

Furthermore, as mentioned in the DP, it is important to ensure the Resolution plan takes into account specific contractual arrangements for allocating NDLs to participants (including CMs) as the associated

¹Recovery and Resolution a framework for CCPs, August 2016
https://www.lch.com/system/files?file=media_root/CCP%20Risk%20Management%20Recovery%20%26%20Resolution%20-%20An%20LCH.Cleartnet%20White%20Paper.pdf



loss allocation mechanisms should reflect the respective responsibility structure and allocate some of the investment losses to the CCP's membership when the CMs have provided their consent to the investment policy.

5. Step 2: Are the considerations for conducting an evaluation of existing tools and resources appropriate and comprehensive? If not, what other considerations should be included?

LSEG agrees with the FSB's general considerations for conducting an evaluation of existing tools and resources and recognises the need for a CCP to maintain a wide range of tools and assess them on a regular basis. It is crucial to preserve CCP recovery toolkits, as they are integral to a CCP's ability to fully allocate losses and return to a matched book in case of a CM's default. This preservation is critical to the CCP's credibility under business as usual. We strongly believe that assessment calls, VMGH and full and/or partial contract tear-up remain essential components of the CCP's recovery toolkit.

With regards to the general considerations for evaluating existing recovery and resolution tools and resources (page 9):

- We support the inclusion of the potential impact on stakeholder's (including CM) incentives to support recovery or resolution when evaluating existing recovery and resolution tools and resources against potential resolution strategies.
- We would suggest that the assessment of 'design issues' is not limited to the assessment of the operation caps and limitation of the RA powers but should also include recovery tools. In particular "caps" and limitation of recovery tools (such as caps defined by the CCP in the use of VMGH) reinforce the case for the RA to guarantee the CCP's ability to fully allocate losses according to its rules and arrangements as they would be able to use the same tools in resolution but in different orders and with a more important magnitude. This difference in the order and magnitude of the use of the tools (such as VMGH and cash calls) should distinguish what the CCP can impose to CMs and what authorities could impose with a more constraining aspect.

Statutory powers

We support the need for the RAs to consider statutory powers when assessing CCPs tools and resources. We believe authorities should consider including some of their resolution tools (such as cash calls in addition to the assessments included in the recovery plan) in the CCP rules and arrangements to increase legal certainty for RAs and allow them to focus on promoting financial stability by employing the relevant resolution tools in unprecedented market conditions, without being inappropriately constrained by concerns around legal claims. This would also bring additional transparency for CMs, allowing them to measure their risks in resolution and have the right safeguards in place to be ready to respond to the measures defined in the resolution plan. Therefore, this is more likely to promote a successful resolution. This would also allow striking the right balance between efficiency and the necessary need for transparency and predictability for market participants. LSEG would recommend setting out in the CCPs' Rulebooks as much details as possible on the resolution plans, including the potential losses that could arise from the use of the resolution tools.

Non-Defaulting Scenarios

LSEG recommends that in drawing up the resolution plan, the RA should distinguish between the different sources of CCP failure, including the different sources of operational problems that may occur, and specify adapted resolution tools and powers for each situation. In particular, as for the recovery tools, the resolution plan should take into account the implication of stakeholders in the definition of CCP policies towards non-default risk.

6. Step 3: Are the considerations for analysing the hypothetical resolution costs (covering total losses and operational costs) appropriate?



As stated in our response to question 4, we believe that for DLs, the existing initial margins, guaranteed fund, assessment powers, VMGH and the ability to do contract tear ups, ensure that any resulting loss is fully allocated back to the CCP's membership. Moreover, with regards to NDLS, the regulatory capital funded by the CCP's shareholders is the primary line of defence and has been calculated to respond to the probability and scale of risks in line with EMIR and in agreement with authorities.

We would like to emphasise that, as a rule, the CCP's Rulebook including recovery measures stipulated within, should be fully implemented before considering any RA intervention, as these measures are precisely calibrated to respond to extreme scenarios and are fully predictable in their sequence and amounts.

7. **Step 4: Is there merit in relevant authorities and CMGs conducting quantitative analyses for the purpose of identifying and sizing potential additional tools or resources for resolution purposes? If so, what quantitative analysis should relevant authorities and CMGs conduct and how could they obtain the necessary data?**

LSEG wishes to highlight the importance of having a clearly defined recovery and resolution plan which would enable all parties involved in both recovery and resolution to act effectively and efficiently in order to restore confidence in the market. Furthermore, we believe that the "triggers" for resolution must be defined in such a way so that there is a clear indication of both resources available at each stage and the point in time where resolution would kick in. The RA should not intervene before the recovery process is either fully completed or deemed insufficient to ensure continuity of clearing services and a well-defined resolution plan should be included in the CCP's rulebook to provide for transparency and predictability to all market participants.

8. **Step 5: Are the considerations regarding potential means to address funding gaps (including of any proposals to reserve resources for use in resolution) appropriate? Do they adequately address the issues of availability, costs and benefits, impact on and interaction with recovery and business as usual? If not, how should they be framed?**

LSEG believes that CCPs risk management systems are designed in a way that prevents the need for addressing funding gaps. However, in calculating potential funding gaps, we would emphasise the importance to ensure the full enforceability of resolution plans considering risks already assumed by CCPs in conjunction with cross-border complexities.

We would like to emphasise that in addressing a specific funding gap stemming from multiple CMs not meeting their obligations, as mentioned in page 6 (iii), CMs themselves are also subject to recovery and resolution which materially reduces the risk and the potential scale of a CM's default. In case of single/multiple defaults, it will be paramount to ensure that the clearing community (CCP, CMs, clients) benefits from all tools and resources available to restore a matched book. The CCP recovery (let alone resolution) framework aims to address unprecedented extreme cases with several defaults, extraordinary market moves and defaults spreading so largely across CMs that the prevention and resolution measures from their own regulatory regime and authorities' supervision has failed and that cooperation between banks' supervisory authorities did not allow addressing the issue before the CCP's dedicated resources are exposed to potential losses. CCPs are nodes in the market, especially in case of DLs, any event affecting them would necessarily reflect the broader state of the marketplace. CCP handling major defaults would be the result of much bigger problem in the financial system and would therefore require strong cooperation and involvement of Authorities on a cross-border basis, not only to ensure the management of the resolution of a CCP, but to manage the multiple resolutions at stake which led to the situation – including the resolution of defaulting CMs and ensuring that they continue to fulfil their obligations towards the CCP (and the broader clearing community) in line with the Financial Stability



Board (“FSB”) Guidance on Continuity of Access to Financial Market Infrastructures (“FMIs”) for a Firm in Resolution².

CCPs resources for resolution should therefore not be considered in isolation i.e. if CMs are not subject to bail-in, then the CCP would have the absolute benefit of members’ own recovery and resolution plan and resources prior to even reaching the start of the CCP default waterfall. LSEG believes that it is paramount to ensure that members meet their obligations towards CCPs and work collaboratively with local regulators on a continuous basis to ensure that any liquidity issues can be addressed effectively from the very beginning.

9. Do you agree that the key issues to CCP equity bearing loss in resolution have been accurately identified? Are there other key issues regarding equity bearing loss? What are they and how should they be addressed?

LSEG agrees that the key issues to CCP equity bearing loss in resolution have been accurately identified. We welcome clarity on the fact that the CCP SITG is calibrated to further align incentives between the CCP and its members when defining the risk-management incentives of the CCP.

Regarding equity bearing losses, we would like to emphasise that a CCP’s resolution is unlikely to be an isolated event (see question 4) and therefore the treatment of equity in resolution should reflect circumstances under which the CCP was lead to resolution. As described in point (iii) on page 6, when multiple CMs do not meet their obligations under the CCP’s recovery actions, it would not seem appropriate to undermine the CCP’s capital base due to the inability of several members in fulfilling their contractual obligations.

We believe that decapitalising a CCP that is already at risk can limit potential options and ability to react to unprecedented market conditions. Due consideration should be given to the impact that a CCP’s equity write-off could have on other unaffected asset classes cleared by a CCP which maintains segregated pools of collateral per product to avoid propagating shocks through markets.

As noted in the DP, it is important to ensure that the definition of the resolution plan maintains the right incentives including pressure on the clearing community to have strong default management processes and recovery tools. Any automatic use of equity as part of the first set of tools during resolution, could disincentivise market participants to participate in the default management and recovery processes.

Finally, we would like to share concerns on proposals to compensate CMs with instruments of ownership of a CCP as per point (iv) page 2. We believe that compensating CMs with instruments of ownership is not appropriate as it makes (i) the sale of the CCP more difficult and (ii) threatens the independence of the CCP post-resolution (undermining G20 successful efforts in securing the appropriate level of independence for CCPs’ risk management).

We recommend fully separating the principle of wiping out the CCP’s shareholders and the idea of compensating the CMs. Any mechanism for compensation should fulfil three main objectives: (i) the preservation of the right incentives pre-resolution, (ii) the support for continuity and (iii) the preservation of the CCP’s operational capability post-resolution.

10. Should the treatment of CCP equity in resolution take into account different ownership structures? If so, how?

We agree with the DP that RAs should duly consider the possible impact that the resolution of the CCP may have on other legal entities within the group, especially if they provide critical services, to avoid contagion in a crisis scenario – likewise there are cases where CCP parent entities provide guarantees

² Guidance on Continuity of Access to Financial Market Infrastructures (FMIs) for a Firm in Resolution, July 2017
<http://www.fsb.org/2017/07/guidance-on-continuity-of-access-to-financial-market-infrastructures-fmis-for-a-firm-in-resolution-2/>



to ensure that their shareholding in the CCP remains intact. In resolution, such guarantees would arguably be used prior to the CCP's equity to absorb losses and should be considered – if they are contractually agreed and subject to enforceable arrangements.

RAs should consider the different types of ownership structure of CCPs when assessing the treatment of CCP's equity in resolution, and how this might impact loss allocation under resolution. Indeed, some issues become less relevant depending on the CCP's ownership. For example, the treatment of equity in resolution will not have different impact when the CCP is fully owned by CMs, as all DLs will be borne by its members. This is, of course, very different when the CCP is owned (partially or fully) by other financial institutions whereby the allocation of NDL will be borne by the CCP's ownership structure:

- 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, especially in case of investment or losses where the CCP has agreed a detailed liquidity framework with its members upfront.

These elements should however not question the need to ensure the resolvability of the CCP on a standalone basis – especially if the CCP is part of a group with several other FMIs. As pointed out in question 3, LSEG believes that CCPs must be independent entities with bespoke risk management processes and dedicated resources ready to be deployed in extraordinary market conditions. This is also valid in defining recovery and resolution mechanisms.

11. What are your views on the possible mechanisms for adjusting the exposure of CCP equity in bearing loss in resolution set out in Section A? What other possible mechanisms, if any, should be explored?

LSEG acknowledges the CCP, as the entity which is ultimately responsible for its risk management, should (i) contribute to losses that occur beyond the pre-funded resources of a defaulting member (in event of a member's default) and (ii) contribute to losses where there is a NDL alongside its membership in proportion to its level of responsibility.

With regards to NDLs, the regulatory capital funded by the CCP's shareholders is the primary line of defence and has been calculated to respond to the probability and scale of risks. EMIR³ expressly imposes operational capital to address each specific kind of non-defaulting risk. This is reviewed by the relevant supervisory authorities. NDLs are therefore catered for in the definition of the CCP's capital itself and remain CCP's primary responsibility to cover any such losses.

When it comes to losses following a default, the existing initial margins, guaranteed fund, assessment powers, VMGH and ability to do contract tear ups, ensure that any resulting loss is fully allocated. These arrangements are regularly tested by CCPs, on a national level by regulators and in the international level by cross-border fire-drills involving multiple CCPs (e.g., CFTC fire drills⁴ and ESMA EU-wide stress-tests⁵). Therefore, in a default scenario, we believe that unallocated losses in the recovery phase could result only when a CCP is impeded from allocating DL according to its Rulebook in a predictable manner – well beyond any extreme but plausible scenario.

Exposure of CCP equity via modification of the contractual losses

³ COMMISSION DELEGATED REGULATION (EU) No 152/2013 of 19 December 2012 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on capital requirements for central counterparties – Article 1 Capital requirements.

⁴ Clearing Requirement Determination Under Section 2(h) of the CEA; Final Rule; December 13, 2012 <https://www.cftc.gov/LawRegulation/FederalRegister/FinalRules/2012-29211.html>

⁵ ESMA publishes results of the second EU-wide CCP stress test; 2 February 2018 <https://www.esma.europa.eu/press-news/esma-news/esma-publishes-results-second-eu-wide-ccp-stress-test>



As rightly pointed out in the DP, when it comes to DL, CCP's contribution is based on the concept of the CCP having SITG to align its incentives in risk management to those of its CMs. SITG is designed as a capital portion of the CCP and not as a tool to absorb losses in a default scenario. 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 CMs' trades. SITG acts as an incentive for the CCP to maintain high resilience standards: with its own funds at risk immediately after the contributions of the defaulting clearing member, the CCP operator is incentivised to perform prudent risk management and operate margin policies that protect the resources of non-defaulting clearing members. This mechanism aligns CCP's interests with those of its stakeholders but is not designed to be a material component of loss absorption. The design of the CCP's waterfall reflects the respective responsibility structure:

- **Risk takers:** CMs enter into transactions and are responsible for introducing the corresponding risk to the market. Therefore, CMs - as risk takers - provide the vast majority of the resources to the CCP's waterfall: margins and default fund contributions. These resources are calibrated on the risk stemming from their transactions, in order to ensure the CCP has sufficient loss absorption capacity in case of a CM's default.
- **Risk manager:** the CCP has the primary responsibility of implementing a risk mitigation procedure and adequately setting margin levels and default fund requirements. CCP's SITG must be sufficient to align incentives and be proportionate to the risk stemming from activities assumed by the CCP as risk manager.

There is no need for CCPs to increase their SITG. In particular, SITG should not be relative to the size of the default fund or the overall CMs exposure. This would fundamentally change its purpose and the CCP's risk profile: CCPs should not guarantee the trading activities of their CMs:

- **Impact on incentives:** an increase of SITG would create a misalignment of CMs incentives, as members could see potential losses linked to their activities partially funded by the CCP. This would create moral hazard.
- **Increase of systemic risk:** It would fundamentally change the CCP's risk profile. CCPs are designed to manage risk. Increasing SITG may actually weaken the CCP, as it brings forward the point of distress at exactly the time the CCP is most needed to address a stress scenario.
- **Increase in clearing fees:** CCPs would be forced to increase clearing fees in order to fund the additional SITG capital. This would further constrain balance sheet capacity of financial institutions and buy-side firms and create impediments to clearing, in conflict with the original regulatory objective of addressing systemic risk through increasing clearing flow through CCPs.

This last point has been illustrated in a recent paper on clearing fees associated with the increase of SITG⁶: In a typical CCP with minimum regulatory capital need, Kreg, and 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%. 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. This would not be enough to generate any meaningful loss absorbency for member trading losses. The 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. Assuming that, the abovementioned CCP was to earn at least its cost of capital and increase SITG, several consequences would immediately follow:

- An increase in the current levels of SITG by anything greater than a factor of 4 would necessitate an increase in clearing costs.
- Members' clearing costs in this case would have to be increased by at least 50% if SITG were to increase by a factor of about 7.

⁶ Cf. Journal of Financial Markets Infrastructures 7(1), 47-55 – risk.net – Dennis McLaughlin 'Skin in the game'.



- Members' clearing costs would need to be at least doubled if SITG were to be increased by a factor of about 10.

Therefore, we support the current CCP regulatory capital requirements (e.g. under EMIR). We fully agree that SITG is well calibrated and essential to align incentives, but it is not designed to be a material component of loss absorption. We consider that the EMIR standard (25% of regulatory capital) achieves the right incentives and should not be altered. In addition, the above case study clearly demonstrates that, if CCPs' SITG were to increase, CMs would effectively end-up funding the solution. This would then have the knock-on impact on further constraining balance-sheet capacity available to the buy-side, in conflict with the original regulatory goal of addressing systemic risk.

Equity bearing losses in resolution

When it comes to alternative mechanisms for adjusting the exposure of CCP equity in bearing loss in resolution, LSEG would encourage regulators to clearly distinguish between (i) operational capital requirements enabling a CCP to continue to operate and (ii) shareholders' losses in case of resolution due to a sudden dilution as per point (iv) on page 22.

The FSB guidance on resolution⁷ states that '*CCP resolution should have as its objective the pursuit of financial stability and ensure the continuity of critical CCP functions in all jurisdictions where those functions are critical and without exposing taxpayers to risk of loss*'. We believe that to achieve this, as a general rule, the RA should refrain from interfering with the CCP's recovery process unless the CCP breaches material obligations which could have an impact on financial stability, such as a failure to maintain the appropriate level of capital.

Nevertheless, at the point in time when the RA authority steps in, we believe that resources must be available to enable the RA to perform its duties. Automatically exposing CCP operational capital to losses, would interfere with the RA's objectives and result in putting a significantly depleted CCP in a worse condition than it was before:

- Using CCP operational resources to cover CMs market losses, which would theoretically have consumed the entirety of the CCP's default waterfall resources, would prevent the RA from fulfilling the main objective of resolution which is to return to a matched book. CCP regulatory capital is not designed to absorb trade losses of its members.
- A RA would be forced to find ways to replenish a CCP's operational capital in the middle of a scenario which is well beyond the level of extreme but plausible which would complicate further the implementation of the resolution process.
- Placing the CCP in resolution following DLs, would likely to be due to exceptional circumstances, potentially several CMs not fulfilling their contractual arrangements toward the CCP and their own resolution authorities not being able to enforce these commitments, as suggested in the DP. Sanctioning the CCP by exposing the CCP equity to losses under these circumstances would therefore exacerbate market instability (a pro-cyclical effect). The RA should approach these issues in resolution, on a case-by-case basis.

Full or partial write down of equity or cancel the existing shares/Dilution of existing shares

We agree that RAs should have the power to fully or partially write down equity or cancel existing shares as per point (ii) page 21 depending on the circumstances that lead to resolution. Mechanisms for adjusting the treatment of CCP equity in resolution should not however lead to (i) CCPs funding membership's trading losses or (ii) expose CCP's operational capital to losses. As noted in the following question, we do not believe that this should be triggered automatically.

12. Section B outlines different options for the point in time or in the waterfall for imposing losses on equity. What are your views on these options? Are there any other possible options?

⁷ Guidance on Central Counterparty Resolution and Resolution Planning 5 July 2017, <http://www.fsb.org/2017/07/guidance-on-central-counterparty-resolution-and-resolution-planning-2/>



In situations where multiple CMs default, LSEG considers that losses can be fully allocated to members through the existing Rulebook. This includes:

- Funded resources held by the CCP (which are enough to cover the default of at least the largest two members under market stresses going back at least 30 years);
- The guarantee fund being mutualised with all members contributing pro-rata to the risk in their portfolio and this is fully funded at LCH to a “Cover 2” standard and at CC&G at “Cover 4” for bonds and “Cover 3” for equities;
- CCP’s SITG;
- The right to perform VMGH in which the winners’ variation margin “gains” may be haircut, though the losing members are still required to pay;
- The CCP finally might have the power to perform (partial) contract tear-ups, which will terminate the cycle.

We believe that any mechanism imposing automatic losses on equity at a specific point in time applied to DLs (whether it is one or more specific points in the loss allocation waterfall, at the entry into resolution or a specific point after the entry into resolution) would significantly alter the incentive structure put in place by the clearing community. In fact, any attempt to absorb CMs trading losses into the CCP equity will have a profound impact on the current regime and incentive structure resulting in increased systemic risk of a CCP, in that members’ trading losses in one service could then hit the CCP’s capital. It would result in internal contagion by which all services inside a CCP could be affected. 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, regulators have carefully designed the rules that require CCPs to segregate services to prevent from an internal contagion. LSEG would encourage the FSB to ensure that none of the proposed mechanisms, within the upcoming framework, hamper this progress.

When it comes to NDLs – these need to be absorbed by either insurance, appropriate Rulebook powers, or the CCP’s capital itself. In such cases, the CCP shareholders would be subject to a write down of their equity stake in the CCP, similar to a corporate solvency event. Depending on the CCP’s policy, specific arrangements may also hold true for investment losses and liquidity losses.

13. What are your views on the potential constraints and challenges described in Section C? Are there other challenges or constraints to equity bearing loss? What are they and how should they be addressed?

In addition to the challenges discussed in the DP, we believe that RAs could face a situation where they might consider transferring trading losses onto a particular clearing service. This would result in internal contagion by which all services inside the CCP could be affected. Increasing the risk of internal contagion within the CCP, would clearly go against the regulatory objectives of the framework, and of past legislations. Over the past few years, regulators have carefully designed rules that apply to CCPs regarding segregation of services so that this internal contagion can be prevented.

Furthermore, a challenge the RA could face is that its actions could make (i) the sale of the CCP more difficult and (ii) threaten the independence of the CCP post-resolution (undermining G20 successful efforts in securing the appropriate level of independence for CCPs’ risk management).

14. Section D outlines a number of policy considerations for the treatment of CCP equity in resolution. Are they appropriate and comprehensive? Would you suggest any additional policy considerations?

LSEG agrees with FSB’s policy considerations for the treatment of equity in resolution as identified in the DP. We strongly support the recognition of the impact on CMs’ incentives to support recovery and avoid



resolution. Imposing automatic losses on CCP equity in default scenarios would potentially lead to situations where the financial benefits of CMs at the point in time of the CCP entering resolution, could outweigh benefits of CMs active participation in the auction process or CCP Recovery measures.

Besides, when it comes to CCPs risk management processes, we would like to emphasise that the purpose of a CCP's equity or SITG is to demonstrate that the CCP has implemented robust risk management processes and ensures necessary alignment between the CCP's and CMs interests. With CCP's own funds at risk immediately after the contributions of the defaulting CM(s) default fund contributions, and before the allocation of any losses to non-defaulting CMs, CCPs are strongly incentivised to exercise prudent risk management to limit impact on their own funds, therefore limiting the impact on non-defaulted CMs funds.

15. Does the treatment of CCP equity in resolution appear clear under existing arrangements in your jurisdiction or in relation to CCPs you are familiar with?

In the UK, The Banking Act 2009⁸ sets out the objectives that the Bank of England (BoE) must pursue when it carries out the resolution of a bank, which in 2014, was extended to cover CCPs.

Under the BoE's resolution plan⁹, over the course of the resolution weekend "Certificates of Entitlement" ("CEs") are issued by an independent institution and voting rights are transferred to the resolution administrator. It must be noted however, that different classes of CEs will be allocated to different classes of creditors based on their position in the creditor hierarchy. This will allow for different debt-equity exchange rates to be set once final valuations are completed. For example, senior debt may receive compensation which is higher than that for junior debt¹⁰.

A resolution administrator would be appointed by the BoE who will control the voting rights of all shares in the firm during the bail-in period. The existing shares will be transferred to a third-party depository bank, appointed by the BoE, to be held on trust on behalf of the CE holders who will be the future owners of the firm.

In Italy, the applicable crisis regimes to CCPs are (i) the Special Administration Procedure ("amministrazione straordinaria" or "SA") under article 70 of the Italian Banking Act and (ii) the Compulsory Administrative Liquidation ("liquidazione coatta amministrativa" or "CAL") regulated under article 80 of the Italian Banking Act. Both regimes can be adopted in the event of serious (SA) or exceptionally serious (CAL) capital losses and/or administrative irregularities or regulatory violations.

The SA procedure handles reorganization and is applicable to banks and CCPs, where compatible. It has a preventive nature and is adopted at an early stage of a CCP crisis. Under the authorisation of the Bank of Italy the procedure may end with:

- the CCP restructuring and the return to ordinary administration (appointment of a new board of directors and auditors by the shareholders); the combination (merger or acquisition) with a sound entity the initiation of the Compulsory Administrative liquidation procedure.

The CAL is a winding-up procedure, adopted when the crisis is irreversible. Once the liquidation order has been issued, the CCP ceases to exist. The procedure implies: (i) the assessment of CCP liabilities,

⁸ <https://www.legislation.gov.uk/ukpga/2009/1/contents>

⁹ The Bank of England's approach to resolution, October 2017 <https://www.bankofengland.co.uk/financial-stability/resolution>

¹⁰ The use of differential conversion rates might be necessary to ensure that the NCWO safeguard is respected, for example if subordinated debt has been treated pari passu in the bail-in but certain senior debt claims have been exempted from the bail-in on discretionary grounds. Setting a higher conversion rate for those senior creditors who have been bailed in than for the subordinated creditors would, by providing the bailed-in senior creditors with proportionately more equity in the resolved firm, help to ensure they are no worse off than they would have been in insolvency.



(ii) the realisation of assets and (iii) the repayment of creditors. In some cases, the objectives of the procedure are achieved through the assignment of assets and liabilities to another entity. In this instance, the appointed liquidators may transfer assets and also liabilities to third parties with prior authorisation of Bank of Italy.

LSEG notes that in both jurisdictions as described above, treatment of equity is clear and there is a recognition of creditors hierarchy which is reflected through difference calculations in the valuations of equity upon resolution. Furthermore, it must be noted that there is no automatic equity bearing losses mechanism as part of the resolution phase in either of the abovementioned jurisdictions.

Finally, the European Commission adopted a legislative proposal on CCP recovery and resolution in November 2016. Trilogue discussions which are expected to begin Q4 2019 are likely to change current CCP resolution regimes in the EU and the treatment of equity is unclear at this stage as the text is still being negotiated.

16. How could authorities reconcile the expectations that equity bears loss in resolution with the ‘no creditor worse off than liquidation’ safeguard?

LSEG believes imposing additional default losses on equity before resolution would fundamentally disincentivise CMs participation in recovery measures. The clearing community has contractually committed to certain losses through the CCP’s rules and arrangements. Their legal obligations, as defined in CCP’s Rulebook, prevents them from claiming any compensation when their losses are in line with their contractual obligations.

The No Creditors Worse Off than in Liquidation (“NCWOL”) counterfactual is a crucial feature of a well-functioning CCP resolution regime, as it strikes the right balance between RAs legal protection from claims with the clearing community’s incentives to participate in the recovery and resolution of a CCP. We believe that it is important that the counterfactual assumes at least *‘the liquidation of the CCP in accordance with the applicable insolvency laws, assuming a full tear up of contracts at the time of resolution, and full application of loss absorbing financial resources, under the CCP’s rules and arrangements and any other contractual agreements in accordance with the applicable insolvency law’*¹¹.

As stated above, when CMs commit to certain losses through the CCP’s rules and arrangements, they should not be entitled to claim any compensation when their losses are in line with their predefined liabilities. This is the case when recovery tools included in the CCPs rules and arrangements are triggered by the CCP or by the RA. This provides legal certainty for the RAs, as well as transparency and predictability for CMs. Likewise, we support additional clarity and transparency in the powers included in the counterfactual.

Furthermore, we believe that the counterfactual for the NCWOL should encompass the perceived value of CMs and their clients to the continuation of the CCP. The counterfactual of NCWOL for DLs should consider the principle of ‘value of continuity’/financial stability and should take into account the following:

- The CCP’s default waterfall;
- The CCP’s recovery tools, and
- The losses and costs of closing the CCP.

Losses resulting from the above, for which some are clearly defined (i.e. default waterfall and the recovery tools) will need to be added to the losses and costs of closing a CCP. Those losses can be derived from the existing costs of clearing plus an add-on cost to account for the CCP’s replacement costs.

¹¹ Guidance on Central Counterparty Resolution and Resolution Planning 5 July 2017, <http://www.fsb.org/2017/07/guidance-on-central-counterparty-resolution-and-resolution-planning-2/>



Applying those calculations would enable to demonstrate to stakeholders (including shareholders) the value/costs of continuity which will provide them the necessary transparency in advance. On the contrary, a narrower approach to determining counterfactual, would expose RAs to ex-post financial claims if resolution tools were to be used beyond those contractually agreed between the CCP and CMs.

Ultimately, we believe that this approach would:

- Allow for legal certainty for the RA to focus on promoting financial stability by employing all relevant resolution tools without being inappropriately constrained by concerns around legal claims;
- Maintain the incentives of national regulations, such as EMIR, incentivising CMs to fully participate in the recovery actions of the CCP;
- Provide transparency and clarity for CMs to measure the extent of their risks and have the right safeguards in place.

17. What, if anything, should change with respect to the treatment of CCP equity in resolution either to clarify existing arrangements or to potentially adjust the exposure of equity bearing loss in resolution (for example, setting out any additional measures to have equity bear loss in resolution in CCP rulebooks)?

LSEG does not believe that there is a need to adjust the exposure of equity bearing loss in resolution. As illustrated in question 12, we believe that an automatic trigger imposing DL on equity, in addition to the SITG, would directly affect CMs incentives to support recovery and avoid resolution. Besides, the value of a CCP's equity would be immediately impacted if a new resolution regime was to be introduced whereby shareholders were exposed to the possibility of equity dilution. This could discourage private sector funding of CCPs leaving 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.

Any exposure of equity bearing loss in resolution should be decided on a case-by-case basis by the RA, especially where residual losses are being borne by the clearing community (CCP via the STIG, CMs, clients) following the placement into default of several CMs (e.g. when acting under the BRRD framework) or due to multiple CMs not meeting their contractual obligations as described on page 6 of the DP.