



Securities Services

SIX x-clear AG response to the CPMI-IOSCO consultative report on “Resilience and recovery of CCPs: Further guidance on the PFMI”

October 2016

SIX x-clear AG's response to CPMI-IOSCO's Consultation on Resilience and recovery of central counterparties (CCPs): Further guidance on the PFMI (October 2016)

1. Introduction

SIX x-clear AG is a diversified Central CounterParty (CCP) which offers clearing of multiple European trade venues and matching platforms. With a demonstrated excellence in risk management, and as a CCP certified by the European Securities Markets Authority (ESMA), x-clear can step-in as a qualified European risk management intermediary for a range of products - including Equities, Equity derivatives and Fixed Income instruments.

Operating with unique real-time transaction and collateral monitoring systems, and a faultless track-record, it serves financial markets from London, Italy, Switzerland all the way up to Scandinavia. Through its secure links to other CCPs the reach we offers is pan-European. The service proposition comprises consolidation of multiple counterparty positions into one, netting and securing of trades across multiple trade venues, management of major participant defaults and settlement failures, through a comprehensive offering of segregated and omnibus account structures. We support both global clearing service providing entities as well as individual investment entities.

SIX x-clear is a wholly owned subsidiary of the SIX Group, which also operates the Swiss Stock Exchange and the Swiss Central Securities Depository (SIS AG). It is incorporated as a bank in Yurich, Switzerland, with a long-term rating of "AA", and is overseen by the Swiss financial market supervisory authorities.

SIX x-clear is a member of several associations, and among them in particular the European Association of CCP Clearing Houses (EACH), with which the following review and comments have been coordinated. EACH represents the interests of over 20 CCPs from 15 different European countries.

We welcome CPMI-IOSCO's work in ensuring a consistent application of the Principles for Financial Market Infrastructures (PFMIs)¹ across all jurisdictions, and we appreciate the opportunity to provide our comments on the consultative report 'Resilience and recovery of central counterparties (CCPs): Further guidance on the PFMI on resilience and recovery of central counterparties'².

We however also wish to underline:

- **Global consistency** – It is essential that legislators and regulators ensure a consistent application of the CCP regulations, including the recovery and resolution framework principles, at an international level, given the fact that CCPs may operate in multiple jurisdictions and clear products which are traded globally.
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¹ <http://www.bis.org/cpmi/publ/d101a.pdf>

² <http://www.bis.org/cpmi/publ/d149.pdf>

- **Extremeness of the potential event of a CCP default** – The mostly likely scenario that would result in a CCP being placed in recovery or resolution is the simultaneous default of multiple large clearing members. The market stress and losses would have far surpassed any scenario that could be deemed ‘extreme but plausible’.
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- **Robustness of existing CCP resources** - European CCPs are already able to withstand extreme but plausible default circumstances (i.e. the default of their two largest clearing members) as well the potential winding down or restructuring of the CCP’s operations as a result of non-default event. Resolution would therefore be triggered by a scenario far worse than what is considered extreme but plausible.
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- **Recovery must be given every opportunity to work** - A CCP should only be put in resolution once the CCP’s default management and recovery tools and processes are exhausted or have proven ineffective, or the CCP is materially breaching its core obligations as described in the CCP’s rulebook.
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- **Importance of flexibility** – While the resolution authority should use the set of tools prescribed in the CCP’s rulebook, the resolution authority ought to keep a certain degree of flexibility to apply such tools to a different magnitude or in a different order from the CCP’s approach. This framework of ‘constrained flexibility’ would optimise the potential intervention of the resolution authority.
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- **Importance of incentives** – It is essential that the incentive structures for supporting a CCP in difficulties is well balanced. The CCP’s waterfall, and within it the default fund, are designed to not only provide a substantial buffer of collateral to cover counterparty credit risk, but also to ensure that the participants in the system have appropriate incentives to manage the risk they bring to the CCP and to participate appropriately in the default management process.
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- **Importance of restoring a matched book** – We wish to underline the importance of the matched book and restoring this balance as soon as possible in case of defaults. A matched book is a key feature of the CCP’s risk management framework as it ensures that all of the positions that bring risk to the CCP have been adequately dealt with and the CCP operator has no ongoing market exposure.

With these overarching themes in mind we further detail our comments regarding Governance, Stress Testing, Coverage, Margin, the CCP’s own contribution to any losses, as well as the Recovery Planning below. In the interest of time we have refrained from referencing the various relevant sections of Swiss legislation, but herein rely on references to EU legislation, as the former has been deemed as equivalent with the latter³.

³ http://europa.eu/rapid/press-release_IP-15-6075_en.htm?locale=en

2. Governance

Q1: Is the guidance provided on CCPs' governance sufficient and appropriate?

Differentiation between accountability and responsibility (Section 2.2)

While the level of detail included in the consultative report appears sufficient, we would like to clarify the use of the terms 'responsibility' and 'accountability' in the context of the involvement of the Board in a CCP's governance structure.

The consultative report tasks the Board with ensuring the CCP meets several standards, including:

- 'Explicit responsibility' to set and maintain the required level of financial and liquidity resources;
- Retaining the responsibility for any decision to remove any historical scenario;
- 'Explicit responsibility' for identifying and evaluating choices and trade-offs in the design of the margin system;
- 'Explicit responsibility' for assessing and limiting destabilizing, procyclical changes in the overall quantity of financial resources; and
- Considering how material changes impact the risk tolerance of the CCP and how such changes should be incorporated into the margin system and stress testing framework.

While the CCP's Board of directors is indeed *ultimately* accountable for the operation of the CCP, the day-to-day management responsibility lies with the CCP's management. We consider it would be overly demanding to expect any Board to engage in the day-to-day management of the CCP. Requiring the Board to do so would diminish the value of its independence, as the Board would be performing the role of the management.

We agree that the Board needs to make informed decisions on significant matters relating to the risk management and risk profile of the CCP. However, under the EU regulatory framework it is for the CCP to determine the specific role and responsibilities of the Board and in line with that approach⁴, we do not believe it appropriate or practicable for the guidance to prescribe that the Board be involved in the detailed risk management decisions, which are better suited to the senior management of the CCP.

We would therefore suggest replacing the words 'explicit responsibility' with 'explicit accountability' or 'final responsibility'⁵ in the following sub-sections of section 2.2 of the consultative report:

⁴ Article 27(3) of EMIR.

⁵ Article 4(4) of European legislation EMIR RTS 153/2013 state that '*the governance arrangements shall ensure that the Board of a CCP assumes final responsibility and accountability for managing the CCP's risks.*'

- Design and objectives of the margin system and stress-testing framework (2.2.1 to 2.2.5);
- Ongoing maintenance of required financial resources (2.2.6 to 2.2.8);
- Determining the amount and characteristics of a CCP's own financial resources to absorb losses (2.2.9 to 2.2.10);
- Limiting destabilising, procyclical changes (2.2.11 to 2.2.13);
- Review and validation of margin system and stress-testing framework (2.2.14); and
- Disclosure and feedback mechanism for reviewing the margin system and stress-testing framework (2.2.15 to 2.2.20).

This would be more in line with existing general corporate governance principles and best practices.

Additionally, we question how a CCP could 'conduct regular and rigorous due diligence on its participants' understanding of, and their ability to predict and manage, potential changes in margin, default fund and collateral haircuts in times of market stress' (2.2.13). Other than describing the CCP's approach to, for example, margin and default fund calculation and collateral haircutting, and its procyclicality framework, it is difficult to see how a CCP can assess with certainty the degree to which participants understand those approaches.

Q2: Is the current level of public disclosure by CCPs appropriate? In particular, is there a need for further disclosure related to margin and stress testing methodologies? If so, would the disclosure of the items included in the list (or a subset of the list) suggested by an industry group and attached as an Annex be appropriate and sufficient for disclosure and feedback purposes?

Market stakeholder disclosures I (Sections 2.2.15 to 2.2.20)

CCPs currently make available a substantial amount of information to the public and to relevant stakeholders as appropriate. The disclosure provided by European CCPs is in line with requirements included in the PFMLs and the CPMI-IOSCO Public quantitative disclosure standards for central counterparties⁷ in addition to the relevant provisions in the European legislation (EMIR)⁸. A list of the data points made available by CCPs in the CPMI-IOSCO disclosure and EMIR frameworks is included in Appendix 1 of our response.

The CPMI-IOSCO Public quantitative disclosure standards for central counterparties have resulted in CCPs making close to two hundred fields of quantitative data publicly available every quarter. While CCPs are working with regulators to further refine the disclosures, feedback on the publication of this data has been positive and we understand that both private and public institutions have begun using this information⁹. The EACH website for example includes a central hub of public quantitative disclosure information which provides links to the quantitative disclosure information of EACH members¹⁰. It appears from our conversations with the industry that many participants are not aware of the disclosures and the rich information that is already available. We would encourage education of participants on the availability of existing information and its use prior to advocating further disclosures.

⁶ For example, including that contained in the CPMI IOSCO [PFML](#), and the G-20/OECD [Principles of Corporate Governance](#)

⁷ <http://www.bis.org/cpmi/publ/d125.pdf>

⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0648&from=EN>

⁹ <https://www.clarusft.com/ccp-disclosures-1q2016-trends-in-the-data/>

¹⁰ <http://www.eachccp.eu/cpmi-iosco-public-quantitative-disclosure/>

In addition to the quantitative data described above and in line with the international guidance of CPMI-IOSCO, CCPs also disclose a substantial amount of qualitative data to the public through public rulebooks and the CPMI-IOSCO '*Principles for financial market infrastructures: Disclosure framework*'¹¹.

We believe that the quantitative and qualitative information already disclosed by CCPs strikes the right balance between transparency and confidentiality and provides sufficiently comprehensive stakeholder disclosure.

In addition to the publication of quantitative and qualitative information as described above, CCPs have a number of consultative processes (i.e. advisory groups, rule filings, industry forums, regular visits to CCPs by clearing members, etc.) which allow CCPs to solicit views and provide the necessary disclosure to market stakeholders. Furthermore, before launching a new product, CCPs extensively consult with clearing members and involve them in the design of their products.

European CCPs are also subject to annual stress test exercises, which aim to assess the resilience and safety of CCPs and provide authorities with detailed information about the performance of stress testing undertaken by CCPs¹².

A potential requirement for CCPs to disclose additional metrics, such as the detailed information about margins and stress tests as described in sections 2.2.15 to 2.2.20 of the consultative report, would undermine the balanced approach to transparency and confidentiality implicit in the PFMI as it would risk:

- Opening the possibility for market participants to 'game' the CCP (i.e. to structure their portfolios so as to circumvent the CCP's risk management requirements, or to benefit their trading strategies);
- Resulting in participants challenging (with the objective of lowering) the CCP's risk management requirements;
- Creating a 'model monoculture' that leads to industry participants using uniform stress tests, discouraging innovation and creating significant, common risks that are not considered by the common stress tests; and
- Revealing the exposures of other participants.

We would therefore propose that the disclosure framework of CCPs is structured as follows:

- Regular publication (public disclosure) - CPMI-IOSCO public quantitative and qualitative disclosure information in line with the current disclosure practice.
- Regular publication (private disclosure) - Publication of information on the CCPs' margin policies in line with the current disclosure practice.
- Additional information (private disclosure) - Subject to the existing confidentiality safeguards which seek to protect the commercial interests of other clearing members and clients, CCPs may consider the publication of stress scenarios and aggregate stress tests results (not individual stress tests results).

¹¹ PFMI: Disclosure framework and Assessment methodology <http://www.bis.org/cpmi/publ/d106.pdf>

¹² <https://www.esma.europa.eu/press-news/esma-news/esma-publishes-results-eu-central-counterparties-stress-test>

- Additional ad-hoc information (private disclosure) - Transmission to risk committee members of various additional information.

Market stakeholder disclosures II (Section 2.2.9)

Under section 2.2.9, the Board of the CCP is tasked with receiving views from market participants on the amount and characteristics of the CCP's own resources exposed to losses. We believe this requirement would be inappropriate given the interests of market participants. CCPs are by design risk management and mutualisation systems. The CCP's waterfall, and within it the CCP's own resources, are designed to not only provide a substantial buffer of collateral to cover counterparty credit risk, but also to ensure that the participants in the system have appropriate incentives to manage the risk they bring to the CCP and to participate appropriately in the default management process.

Requiring CCPs to consult market participants on the structure of the CCP's own resources in the waterfall risks undermining the incentive structure of the CCP, and with it market discipline and the limitation of counterparty, market and systemic risk. In times of systemic market stress, the current incentive structure promotes good market behaviour, early and proper participation in default management, and aligns the interests of CCPs, clearing members, market participants and regulators thereby prioritising the safety of the markets and the avoidance of taxpayer loss.

As an alternative, we would suggest that the Board of the CCP seeks to consider the views of direct and indirect participants through their representatives on the risk committee.

3. Stress Testing

Q3: Is the guidance provided on stress testing sufficient and appropriate?

General support for the stress testing proposals included in the consultation paper (Section 3)

We generally welcome the stress testing proposals made in the consultation paper.

Porting of client accounts (Section 3.2.51)

The guidance requires that a CCP makes the assumption that it will not be able to port any client accounts of the defaulted clearing member. The proposed guideline does not differentiate between segregated and non-segregated accounts. The assumption that a CCP will not be able to port any segregated client positions is considered beyond extreme but plausible and could potentially disincentivise client clearing involving segregated accounts.

We agree that non-segregated accounts should not be subject to any porting assumptions. The likelihood for a successful porting of such accounts is uncertain or even unlikely due to the fundamental structure of the account. However, we do not believe it would be appropriate to treat segregated accounts in the same way. Although we recognize there will not be full certainty for segregated clients to find a transferee under stressed market circumstances, it is implausible to assume that all client accounts will have to be liquidated in the event of a clearing member default. The segregated accounts have been designed by CCPs and regulators with the objective of creating a robust client account structure which should facilitate successful porting to a high degree of certainty. To require CCPs to apply the assumption that all segregated client accounts cannot be ported and must be closed out

following the default of a clearing member represents a scenario beyond an extreme but plausible one.

By treating the legally segregated accounts the same way as non-segregated accounts, the assumption does not take into account:

- The default management process deployed by CCPs
- Past default experiences involving the porting of clients
- Whether or not accounts have margin calculated on a gross or net basis and if collateral is held in segregated accounts,
- That larger clients (which represent the majority of the exposure for a CCP in relation to segregated client accounts), have multiple relations with potential back-up clearing members.

Q4: In the light of the potential for member positions and market prices to change significantly during the day, is the proposed guidance on capturing intraday positions and price movements in stress tests appropriate and sufficient?

Intraday positions (3.2.34)

We believe that the proposal included in the guideline to capture intraday positions and price movements represents a scenario beyond extreme but plausible, based on the historical and hypothetical scenarios run by CCPs. We suggest that CCPs consider capturing intraday positions and price movements at their own discretion and judgement.

Clearing members' and their clients' portfolios fluctuate for a multitude of reasons, including market volatility, changing market characteristics, or structural changes to the entity's strategy or business model. For these reasons, historical data on position changes, or its use in predicting future changes, provides little value when determining stress scenarios.

Requiring CCPs to attempt to foresee intraday position changes (with a request for clearing members and clients to cover intraday moves) would likely lead to a drain of liquidity as margin requirements would become higher, particularly for directional portfolios. This liquidity drain would be particularly acute for interoperable CCPs.

Intraday exposures are risk-managed using a collection of tools outside of stress testing, including, but not limited to, initial margin, variation margin, and participant monitoring. Initial margin covers potential future exposures, while variation margin removes risk from the system at least once daily. Participant monitoring ensures that no portfolio poses risks disproportionate to the size of that participant's resources or wherewithal to meet payment obligations. CPMI-IOSCO should be cognisant of the toolkit used by CCPs and ensure that no single component is required to be so conservative as to pose liquidity constraints on market participants.

Stressed period of risk (3.2.43)

We understand the stress period of risk (SPOR) as the number of days to be taken into consideration when determining the price movement parameters. As described in our paper '*Best practices for CCPs' stress tests*¹³, We believe that SPOR should be aligned with the margin period of risk (MPOR). A default process can extend over several days with some positions being liquidated before others. The actual close out process will be specific to the type of product and the positions of the clearing member in default.

In order to ensure clarity, it should be assumed that the shock is applied as one movement over the entire SPOR (which makes no assumptions as to when positions are closed out or hedged during the stress period of risk). Different liquidation periods can be applied for different products/accounts when calculating initial margins. Since there is only one theoretical price movement scenario for the whole portfolio, the most conservative practice is to apply the largest MPORs if there is more than one possibility. For example, in the case where house account has a 5-day MPOR and client accounts 7-day, to use the one that leads to the largest price variation.

4. Coverage

Q5: Is the guidance provided on coverage sufficient and appropriate?

Adequacy of current Cover 2 requirement (Section 4)

We believe that the guidance provided on coverage is sufficient and appropriate. While we understand that the Cover1/Cover 2 requirements are minimum requirements, it should be noted that all EMIR-authorized CCPs are at present subject to Cover 2 requirements and therefore able to withstand the default of their two largest clearing members under extreme but plausible market conditions¹⁴. Not only do these requirements provide a substantial buffer of collateral to cover counterparty credit risk, but they also ensure that the participants in the system have appropriate incentives to manage the risk they bring to the CCP and to participate appropriately in the default management process.

Cover 2 requirements are regularly assessed by CCPs to account for changes to the exposures of their participants. CCPs recalibrate the size of their financial resources on the basis of a thorough risk analysis rather than on the basis of automatic triggers. This ensures an appropriate balance between flexibility and predictability and enables the CCP to employ

¹³ <http://www.eachccp.eu/wp-content/uploads/2015/12/Best-practices-for-CCPs-stress-tests.pdf>

¹⁴ Credit Cover 2 - Article 43(2) of EMIR states that '*The default fund referred to in Article 42 and the other financial resources referred to in paragraph 1 of this Article shall at all times enable the CCP to withstand the default of at least the two clearing members to which it has the largest exposures under extreme but plausible market conditions.*'

Liquidity Cover 2 - Article 44(1) of EMIR states that '*A CCP shall measure, on a daily basis, its potential liquidity needs. It shall take into account the liquidity risk generated by the default of at least the two clearing members to which it has the largest exposures.*'

prudent risk management practices that adequately account for the specificities of the products and markets for which they clear. Application of Cover requirements beyond these standards skews the market for comparable, and often times competing CCPs.

Q6: Is the current two-tiered Cover 1/Cover 2 minimum standard still appropriate in relation to the guidance in the report?

We welcome further clarification with regard to the conditions that must be met for a CCP to be considered as non-systemically important and therefore only subject to Cover 1 as per the PFMIs.

5. Margin

Q7: Is the guidance provided on margin sufficient and appropriate?

Evaluation of the reliability and consistency of prices that the CCP receives to detect both stale and erroneous data (Section 5.2.21)

We supports the evaluation of prices to identify instances of stale or erroneous data, however we do not understand the logic behind the proposed requirement to have back-up sources for ETD prices that originate from an exchange. In situations in which the exchange is not operational, there would not be a reliable external source for obtaining pricing data for those products for two reasons:

- the products would not be trading and therefore would not exhibit price changes;
- the exchange is the golden source of prices for its products and proxy pricing is unlikely to be accurate.

Q8: Is the guidance provided on procyclicality appropriate and sufficient?

Add-ons, buffers and floors in margins and guarantee fund (Sections 5.2.12 to 5.2.16, 5.2.35 to 5.2.44)

There are multiple components of the proposed guidance that refer to the possibility for add-ons, buffers, or floors in both margin and guaranty fund requirements. The guidance also proposes that the CCP be able to call for more financial resources, whether as margin or guaranty fund payments, faster and more frequently.

In doing so, the consultative report proposes that CCPs should ensure that margin requirements are consistent with the goal of limiting destabilising, procyclical changes in margin requirements. We support the overall effort to manage procyclicality in the course of prudent risk management. However, despite the overarching goals of ensuring that exposures are adequately covered by financial resources and to limiting procyclical funding requirements, we believe that the guidance, as proposed by CPMI-IOSCO, increases the risk that procyclical funding requirements will occur.

The guidance contains significant prescription around the use of certain tools, primarily related to margin, to reduce procyclicality. Such prescription may ultimately restrict a CCP's ability to appropriately manage risk, especially in times of high volatility or market stress. Guidance around procyclicality that is driven by prescribing the use of specific tools, opposed to being outcomes, principles based approach results in restrictive risk

management, particularly given the unique markets and products for which CCPs provide clearing services.

Approaches to managing procyclicality that are entirely model-driven discount the expertise and skills of a CCP's risk management, which have provided expert judgment during times of stress for managing procyclicality. Additionally, over reliance on model-driven approaches run the risk of creating systemic risk, as it is unlikely that a model can adequately account for all types of risk, for example political risk as CCP risk management expertise had to take into account during the recent changing market conditions related to the UK referendum.

It is also important to consider that although large step changes in initial margin can be procyclical, other aspects of a CCPs practices can create far more destabilizing procyclicality if not managed, such as automatic hard threshold based settlement variation calls (particularly one-way settlement variation calls where liquidity is pulled from the market) or frequent changes to haircuts, both of which can result in even greater procyclical risk in times of stress and likely cause more disruption than initial margin changes.

Despite the overarching goals of ensuring that exposures are adequately covered by financial and liquidity resources and to limiting procyclical funding requirements, we think that the guidance increases the risk that funding requirements will be too large for many participants to fulfil and discourages or creates hurdles for market participants to access cleared markets. We encourages CPMI-IOSCO to assess the collective impact of the proposed guidance on the market and to ensure that it does not enact funding requirements so severe as to impose further constraints on market participants. Such requirements could force some clearing members to exit the business, further concentrating the membership base at many CCPs. If clearing becomes too expensive for more firms, clearing services will ultimately become accessible only to the largest financial institutions. This will result in the positions cleared through the clearinghouse becoming unnecessarily concentrated, increasing the risk and impact of a potential clearing member default. Ensuring that CCPs meet prudent risk management standards whilst also allowing participation from a broad and diverse set of market participants is crucial to protecting the stability of the market.

Intraday settlement cycle and CCP judgement (Section 5.2.22)

The guidance proposes that rather than relying on unscheduled and manual interventions, CCPs should consider using regular and automated margin calculations on an intraday basis, and that CCPs should identify, establish and implement clear triggers and thresholds to recalculate margin requirements on an intraday basis.

We support the use of scheduled, routine margin calls to remove risk from the system; unscheduled cycles in certain circumstances and in those cases with an eye towards managing systemic risk; and when appropriate as driven by price and position changes, use of real-time intraday margin calls. Unscheduled, ad-hoc settlement cycles, without CCP discretion and based on hard thresholds may result in increased systemic risk, rather than reduced overall risk. CCPs should have the authority, ability and operational capacity to apply expert judgment and make intraday margin calls and payments, keeping in mind the balance between procyclical changes to margin requirements and prudent risk management.

Portfolio Margining (Section 5.2.49)

The current PFMI allow offsets to be provided in portfolio margining if the risk of one product is significantly and reliably correlated with the risk of another product. While we support the PFMI's objective of prescribing a prudent risk management approach to

determining if products are eligible for portfolio margining, we believe that choosing correlations as a metric to measure the adequateness of the margin at a portfolio level can be statistically misleading for portfolio margin models. More detailed reflections are included in the paper *'EACH views on portfolio margining'*¹⁵.

We suggest that, in addition to the current provisions in the PFMI, international guidelines also provide the possibility for portfolio margining should take place where the following criteria are met:

- The CCP is able to demonstrate that its margin model is sufficiently robust to prudently model the risk of the financial instrument even when correlations may not be significant nor reliable. The main tool to accomplish this is back testing, including 'micro back tests', which are tests at the small portfolio level (e.g. outright positions and commonly traded spreads), in addition to tests at client or clearing member level.
- The CCP can demonstrate that the group of financial instruments to be portfolio margined can be hedged as one portfolio of risk during a default and/or auctioned in a reasonable period of time (as applicable), consistent with the liquidation process.

Given the incorporation of these prudent considerations in determining risk offsets between portfolio margined products, it would be inappropriate to go further and require CCPs to observe any artificial caps on such offsets. Employing arbitrary artificial caps could negate risk driven determinations for risk offsets, particularly given the breadth of products which would be subject to them. Provided the above conditions are met, CCPs should be able to provide offsets without an artificial cap.

Q9: The PFMI do not explicitly address margin add-ons. Is the guidance provided on margin addons adequate to ensure sufficient coverage by the margin system and other prefunded financial resources in line with the PFMI?

Please see our answer to question 8.

6. CCP contribution to losses

Q11: Is the guidance provided on a CCP's contributions to financial resources to cover losses sufficient and appropriate?

General support for the CPMI-IOSCO proposals (Section 6)

We generally supports the proposals for a CCP's contributions to financial resources to cover losses.

In order to ensure the safety of the markets, CCPs have developed a structure that incentivises appropriate behaviour by market participants. This incentive structure not only facilitates certainty of process during normal market conditions, but most importantly serves to bring markets back into alignment during times of severe market stress. A CCP operates on the basis of shared risk between itself, its members, and their clients and the certainty and reliability of these incentives is critical to returning to normal market function during the

¹⁵ *'EACH views on portfolio margining'*, July 2015, <http://bit.ly/1IkhUq9>

extreme and remote scenarios that could result in triggering the default management waterfall.

Default losses

European CCPs must maintain clear and transparent default management processes, including detailed accounts of the circumstances under which the mutualised funds of non-defaulting clearing members can be accessed and how the CCP plans to replenish that funding. The default waterfall of European CCPs follows a sequence of (i) defaulter pays, (ii) CCP contribution, and (iii) mutualisation across non-defaulting clearing members.

EMIR requires CCPs to contribute some of their own capital to the default waterfall right before the use of the mutualised resources¹⁶. Such dedicated resources (skin-in-the-game or SIG) provide a significant layer of pre-funded resources, in addition to providing additional, direct incentives for the CCP to perform prudent risk management. Furthermore, such resources align the interests of the CCP with those of its stakeholders in managing a default, thereby minimising losses and stabilising the market.

The purpose of SIG is different from the purpose of the clearing members' contributions to the default waterfall. Whilst SIG acts as an incentive for the CCP to undertake prudent risk management, the resources provided by the clearing members are directly derived from the risk they introduce to the CCP and are calibrated to ensure that the CCP has sufficient pre-funded resources to manage the default of a clearing member(s). Such resources serve as an incentive for clearing members to appropriately manage the risk of their portfolios.

For European CCPs, SIG is proportionate to the risk stemming from the activities of the CCP. The magnitude of SIG is revised on an annual basis.

We consider a SIG requirement based on the CCP's regulatory capital appropriate for alignment with the set of risks the CCP is directly responsible (e.g. general business and operational risks). This link incentivises the management of the CCP to ensure resilient operations, prudent risk management and on-going financial viability. It incentivises the clearing members to participate in close-out auctions as they know that their firm will face any residual losses beyond the SIG.

We consider that SIG should not be based on the size of the default fund or any other metric derived from the magnitude of risk brought to the CCP by the clearing members. Any such requirement would result in the CCP subsidising the potential losses arising from clearing members' portfolios and risk undermining the incentives for clearing members to appropriately manage the risk in those portfolios. Linking SIG to the size of the default fund would create moral hazard as clearing members would be incentivised to engage in riskier activities partially subsidised by the CCP operator.

It would also compromise the neutrality of the CCP, potentially encouraging the CCP to reduce the size of the default fund in order to lower its level of SIG, undermining the effectiveness of the CCP's risk management structure. In a crisis situation, the CCPs' risk neutral position is critical to mitigating the impact of a default and quickly returning stability to the market.

¹⁶ Article 35 of the EMIR RTS 153/2013 sets the minimum level of the CCP's SIG to 25% of its capital requirements.

Linking SIG to the size of the default fund may also introduce funding difficulties for the CCP given the dynamism of the size of the default fund. CCPs resize their default fund on a regularly basis (e.g. monthly) which could require the CCP to raise capital frequently and within short periods of time based on the size of portfolios that they do not control.

We consider that the resources held by European CCPs to cover default losses (default fund plus SIG) are sufficient to cover the vast majority of circumstances, including the simultaneous default (and failure of resolution) of multiple large clearing members. When combined with assessment powers, we consider that sufficient resources are available to enable CCPs to withstand market stress and losses that would far surpass any scenario that could be deemed 'extreme but plausible'. This assumption was confirmed by the ESMA EU-wide CCP Stress test 2015 report, which found that even 'reverse stress test scenarios constructed by further increasing the number of member defaults have not revealed plausible scenarios with systemic impact.'

Requiring additional contributions from the CCP would have two detrimental effects:

- It would disrupt the incentive structure previously described. As previously discussed, such structure is of fundamental importance to the success of the CCP's risk management and default management processes.
- It would impose additional cost on all market participants. Not only is there insufficient justification for this cost, considering how improbable it is that such resources will be utilised, but such costs would disproportionately impact smaller market participants, potentially limiting their access to clearing services. It is unlikely that clearing members of all sizes could provide additional pre-funded resources, potentially driving some firms from the market and creating concentration risks. Evidence for this can be found in ESMA's recent proposal to delay the clearing mandate for Category 3 counterparties in Europe due to the lack of access to clearing for smaller market participants as a result of existing cost and capital pressures¹⁷. Discouraging the use of CCPs in such a way would contribute to an increase of credit, market and systemic risk, against the objectives of the G20¹⁸.

Non-default losses

There are a variety of non-default stresses that could lead to losses at the CCP. Given the heterogeneous nature of such stresses, it is important to give separate consideration to each type of stress.

There are three main types of stress scenarios that could give rise to a non-default loss:

- Investment and custody risks - The potential losses faced by the CCP as a result of the investment of the resources of the CCP, and those provided by its clearing members and clients, or as a result of the default of a custodian.
- General business or operational risks - The potential losses that could result from events other than the default of a clearing member or those related to investment and custody risks.

¹⁷ https://www.esma.europa.eu/sites/default/files/library/2016-1125_cp_on_clearing_obligation_for_financial_counterparties.pdf

¹⁸ 'G20 Leaders Statement: The Pittsburgh Summit', Pittsburgh (2009)
<http://www.g20.utoronto.ca/2009/2009communique0925.html>

- Uncovered liquidity shortfalls - The potential losses faced by the CCP in being unable to transform assets in a timely way or transfer assets (collateral and cash variation margin payments) between members. In particular where the CCP has to enter the markets to cover such shortfalls.

Loss allocation for non-default losses should be proportional to the level of responsibility of each stakeholder involved in bringing risk into the CCP or defining the policies to mitigate those risks (e.g. CCP owner or CCP user). The appropriate tool to allocate a particular non-default loss will therefore depend on the type of loss in question:

- **Capital of the CCP** – In line with the PFMRs and the EMIR legislation, European CCPs hold capital, including retained earnings and reserves, proportionate to the non-default risks that the CCP is exposed¹⁹. This capital *'shall at all times be sufficient to ensure an orderly winding-down or restructuring of the activities over an appropriate time span and an adequate protection of the CCP against credit, counterparty, market, operational, legal and business risks which are not already covered'* by the CCP's other lines of defence.

Should it be necessary, a CCP might increase its capital resources through the use of capital preservation tools (e.g. reduction in dividend payments, cost reductions, asset sales), payment of its liabilities in instalments or conversion of its debt into equity (subject to an appropriate agreement between the CCP and its counterparty), or by raising capital raising from investors.

CCP capital is appropriate for the allocation of non-default losses for which the CCP is the only entity with the responsibility for creating and managing those risks. We believe European CCPs are well placed to meet such losses and thus ensure continuity of the CCP's critical services and the preservation of market stability.

- **Clearing member contributions** – Where the clearing members are responsible for determining the manner in which the risks they bring to the CCP are managed, such as directing the investment strategy for their assets, or selecting the custodian at which their assets are deposited, then the CCP should not be held accountable for losses associated with such decisions (or a proportion of such losses where the CCP and its clearing members are jointly responsible). Another example would be where a fraud was perpetrated by a clearing member, in which case that clearing member should be liable for any associated losses.
- **Other potential resources** – CCPs may maintain additional resources for the allocation of those non-default losses for which the CCP is the only entity with the responsibility for creating and managing those risks. These additional resources may include insurance agreements which can in some cases be a potential additional resource to address losses from activities that the CCP undertakes.

¹⁹ <http://bit.ly/1Nr5w4l> European Market Infrastructure Regulation (EMIR) - Article 16 Capital requirements: A CCP shall have a permanent and available initial capital of at least EUR 7,5 million to be authorised pursuant to Article 14. CCP's capital, including retained earnings and reserves, shall be proportionate to the risk stemming from the activities of the CCP. It shall at all times be sufficient to ensure an orderly winding-down or restructuring of the activities over an appropriate time span and an adequate protection of the CCP against credit, counterparty, market, operational, legal and business risks which are not already covered by specific financial resources as referred to in Articles 41 to 44.

7. Recovery planning

Q12: Is the guidance already provided on recovery planning in the Recovery Report sufficient and appropriate?

Adequacy of the current guidance and need for CCPs to be allowed to perform Recovery (Section 7)

We believe that the guidance already provided on recovery planning in the Recovery Report is sufficient and appropriate as it provides a comprehensive list of recovery tools.

If a CCP reaches the point where it has to use recovery tools, the market has already suffered unprecedented stress. In this circumstance, it is even more important that incentive structures for clearing members be maintained. Unless and until recovery is clearly ineffective or it is determined that continuing the recovery plan could result in greater losses for market participants, the recovery plan defined by the CCP should be permitted to run as anticipated by the market. CCPs will have performed the necessary work to define the available tools, their impacts, and the circumstances under which they could be called in, providing the market with as much transparency and certainty as will be available considering the extreme nature of this event.

We would therefore stress the need for CCPs to be allowed to execute fully their default management process and their recovery plan before the intervention of the resolution authority takes place.

A CCP should only be put in resolution once the previously described CCP tools and processes are exhausted or have proven ineffective, at the point where the CCP is at or near default or the CCP is materially breaching its obligations. This is reflected in the FSB's guidelines on resolution which prescribe that resolution is triggered when *'the recovery tools failed to return the FMI to viability, have not been implemented in a timely manner, or relevant authorities determine that recovery measures are not likely to return the FMI to viability'*²⁰.

Early intervention should be considered as a tool of last resort as it would likely distort the incentives to ensure a successful recovery of the CCP. Doing so could arbitrarily truncate, or condemn to failure, the recovery process before the recovery plan has had the opportunity to work properly, weakening its ability to conduct an orderly loss allocation in full. Maximising the likelihood of a private sector recovery arrangement is important in order to avoid a shift of the responsibility to the public sector.

CCP recovery relies on the trust and cooperation of market participants who are willing and able to bid effectively on the defaulters' positions. Since these positions are held by the CCP, and the CCP will remain the counterparty on the other side of the position, market participants must have faith in the CCP to continue its operations in order to bid effectively. If market participants believe they would be better off in resolution then this will severely reduce or eliminate any cooperation from the market in management of the default, they would have no reason to actively bid on a portfolio, and the likelihood of a successful recovery would be significantly undermined.

²⁰ FSB Key Attributes 2014 http://www.financialstabilityboard.org/2014/10/r_141015/

With regard to default-related losses, loss allocation tools serve two main functions: 1) maintain the CCP's services and allow the market more time to cure the losses associated with the default and 2) ensure clearing members are incentivised to participate in the default management process. No loss allocation tool will satisfy all market participants, but in order to establish a comprehensive recovery plan, the various steps the CCP can take to continue operating their critical functions must be considered. It is important to remember that most loss allocation tools will be preferable (both for market participants and the financial market more broadly) to the alternative of the failure of the CCP and the disorder such an event would bring to the market.

The following loss allocation tools meet both of these goals and should be available for inclusion by CCPs in their recovery plans. The CCP should be able to implement these tools in light of the facts and circumstances of the particular stress event and should not be limited to applying such tools in a certain prescribed order:

- **Assessment powers** - Assessment powers, also referred to as 'assessment calls' or 'cash calls', are available to CCPs through their rulebooks if prefunded resources have been exhausted. This ability to request additional contributions from surviving participants is an important recovery tool and is present within most CCPs' rulebooks.

The size of assessment powers is generally relative to the participant's contribution to the CCP's pre-funded default fund. Assessment powers are not pre-funded although the quantum of such assessments is generally much smaller than the amount of variation margin payments previously called by CCPs during periods of significant market stress and as such it is reasonable to conclude that clearing members will continue to be able to meet their assessment obligations. Assessment powers are typically callable immediately from clearing members in cash and in a liquid currency.

- **Gains haircutting (VMGH/profit cropping)** – Gains haircutting is a limited-time tool that allows the market to have continued access to the critical clearing services and operations of the CCP while a matched book is re-established. Such tool is capped under EMIR. It is implemented through the reduction of the net variation margin (VM) gains or profits owed to the non-defaulting members. The VM owed by the defaulter's portfolio – a result of an inability to auction the positions and return to a matched book – is distributed to all clearing members and clients according to their net VM gains/profits, rather than to all clearing members and clients. Different types of contract are subject to varying methods of haircutting/cropping (e.g. mark to market, contingent, profit and loss flows). Gains haircutting may be implemented differently by different CCPs.

Unless capped, the cumulative sum of clearing participants' VM gains/profits following a participant's default will always be sufficient to cover the defaulter's mark-to-market losses in the same period. How haircuts are applied to clients may vary per CCP and depends on the contractual arrangements between the clearing members and their clients.

- **Loss distribution** – Under loss distribution, the defaulter's VM losses may be distributed across all clearing members, usually in proportion to the risk they pose

(i.e. by default fund contribution or initial margin), and not just those clearing members with positive VM, as in VM haircutting and profit cropping.

The factors for determining the tools to be used to return the CCP to a matched book will be dependent on the particular stress scenario threatening the CCP. Again the CCP should be able to implement these tools in light of the facts and circumstances of the particular stress event:

- **Partial/Full tear-up** – These tools should be implemented only after multiple failed auction cycles and after reasonable effort has been made to port the positions of the defaulted clearing member. Multiple unsuccessful auctions indicate that there is no longer an appetite for the products in the market. Partial tear-up is preferable to full tear-up as it allows the isolation and elimination of a smaller, illiquid market segment while allowing the broader market to recover from the relevant stress event. Partial tear-up is one of the least invasive tools available for this purpose.

Loss allocation for non-default losses should in our view be proportional to the level of responsibility of each stakeholder involved (e.g. CCP owner or CCP user) in either bringing risk into the CCP or defining the policies to mitigate those risks. Effective tools to allocate non-default losses include:

- Capital of the CCP
- Clearing member contributions
- Insurance agreements

These tools are described in more detail in our response to Question 11.

8. Other considerations

Q13: Is there a need for further guidance on the role of risk committees as an effective means of achieving proper corporate oversight and for receiving input from persons representing stakeholder interests?

Adequacy of guidance of Risk Committees (Sections 2.2.14, 2.2.18 and 2.2.20)

We believe that the guidance already provided on the role of the risk committee is sufficient.

For European CCPs, the composition of the risk committee is prescribed in EMIR which states that it should be composed of representatives of its clearing members, independent members of the Board and representatives of its clients. Competent authorities, independent experts and employees of the CCP may attend risk-committee meetings in a non-voting capacity.

We consider it particularly important to strike the right balance with regard to the independence of the risk committee members, such that they act in the best interests of the overall market, rather than their employer. It is absolutely critical to ensure the commercial interests of the market stakeholders who employ the risk committee members are not prioritised over the best interests of the clearing ecosystem.

Q15: Is there a need for guidance regarding governance and the organisational (legal) structure of the CCP?

We believe that the guidance already provided regarding governance and the organisational (legal) structure of the CCP is adequate and comprehensive.

Q14: Is there a need for further guidance on the allocation of default fund requirements among clearing participants?

We believe that the guidance already provided on the allocation of default fund requirements among clearing participants is adequate and comprehensive.

Q15: Is there a need for further guidance on the composition of prefunded financial resources?

We believe that the guidance already provided on the composition of prefunded financial resources is adequate and comprehensive.

- END -