Response to Consultative report

Resilience and recovery of central counterparties (CCPs): Further guidance on the PFMI

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Singapore Exchange

Contents

I Introduction

Singapore Exchange Limited ("**SGX**") welcomes the Consultative report *Resilience and recovery of central counterparties (CCPs): Further guidance on the PFMI* published in August 2016 by the Committee on Payments and Market Infrastructures ("**CPMI**") and the Board of the International Organization of Securities Commissions ("**IOSCO**") and the opportunity to provide our response. The PFMI has helped ensure that financial market infrastructures (FMIs) continue to operate safely and are able to withstand future shocks to the financial system, and SGX is supportive of further initiatives to enhance the resilience of FMIs.

II Statement of Interest

SGX is the holding company of The Central Depository (Pte) Limited ("CDP") and Singapore Exchange Derivatives Clearing Limited ("SGX-DC"). The CDP operates as a CCP to clear securities listed on Singapore Exchange Securities Trading Limited, and as a securities settlement system and central securities depository. SGX-DC functions as a CCP to clear derivative products listed on Singapore Exchange Derivatives Trading Limited, over-the-counter commodities products and financial derivatives.

III Response to Consultative Report

1 General observations

SGX welcomes the further guidance provided in this consultation. Nonetheless, SGX observes that the many granular and specific guidelines, in particular on governance, stress testing and procyclicality, may be viewed as overly prescriptive. One way of working towards a balanced approach is for regulation and guidance to focus on principles and outcomes rather than on specific tools. We would for instance encourage CPMI-IOSCO to make it very clear which parts of the consult are intended as guidance and which parts are merely stated as examples of possible specific solutions.

It is important to note that over-prescription comes with the risk of stifling innovation. Although FMIs have stood the test of time, there is nothing to say that there is not an even safer and more efficient way of setting up a CCP, and we as an industry must ensure that the avenues of innovation are not closing.

2 Governance

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

SGX is of the view that the guidance places explicit responsibility on the board for numerous granular matters that are better handled by management. The board should provide an oversight role, and should review and endorse policies and principles for managing risks. It would however be unreasonable to expect the board to undertake granular management of the FMI. By imposing such explicit and granular responsibilities on the board, it would become challenging to staff the board with persons with CCP expertise and requisite skill-sets. The role between management and the board could also be blurred, decreasing management's accountability and effectiveness in managing risk.[1]

The following are examples of specific areas which we view as responsibilities that should reside with management, rather than the board as alluded to in this guidance.

- The guidance places explicit responsibility on the board for design and maintenance of the margin system and stress testing framework. That should reside with management. Instead, the results of periodic reviews could be reported to the board for their endorsement.
- The board should endorse the overall principles and criteria for establishing margining assumptions and stress testing scenarios, instead of examining individual scenarios and events.
- Similarly, the guidance places explicit responsibility on the board for assessing procyclical changes in quantity of financial resources collected from participants. It is further stated that the board should establish quantitative and qualitative criteria for procyclicality. We are of the view that the board's role should be to provide appropriate oversight of the various frameworks that could impact procyclicality, but should not be required to delve into such details and to prescribe specific measures.
- The requirement to disclose to participants material changes is in line with the move towards more transparency and disclosure. Nonetheless, the responsibility should reside with management. The board should ensure that management has a mechanism to solicit views from participants and stakeholders, instead of having explicit responsibility to do so.

It is important that the board provides effective ongoing oversight of material risks and overloading the board with day-to-day information does not necessarily strengthen governance but may dilute effectiveness and accountability. On many matters such as credit and liquidity stress test coverage and procyclical effects, reporting on an exception basis is more suitable.

SGX is in agreement with the guidance on the importance of a working feedback mechanism and communication with stakeholders. However, the requirement that the board considers all feedback should be tempered by recognition that feedback from market participants may be influenced by commercial interests and may not provide appropriate guidance on safety.

With regards to records being kept when participants and other relevant stakeholders are consulted, we interpret this to refer to existing levels of due diligence in documentation that accompany official meetings of say risk committees and working groups and formal member consultations, rather than for every bilateral meeting or call, which would seriously stifle communication and feedback.

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

[1] We also assume that all references to "the board" can be replaced with "the board or a relevant subcommittee of the board".

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?

The industry recently worked together with CPMI-IOSCO on the public quantitative disclosure standards for CCPs to provide the appropriate level of transparency. It is premature to conclude that even more information is needed across the board.

SGX cautions against providing a false sense of comparability as viewing metrics in isolation seldom paints the full picture. For smaller CCPs, there is also a balance where disclosure has to be weighed against the risk of participants trying to estimate other participants' position or exposure. This may have negative consequences for the market, especially during periods of stress. In addition, some of the additional disclosures suggested, such as reverse stress testing, may only be relevant to home regulators and not necessarily to the general public and could be misinterpreted.

SGX would further like to point out that there are commercial offerings which will compile the CPMI-IOSCO quantitative disclosure information from different CCPs into a common format which might be useful for interested parties to subscribe to.

3 Stress testing

Is the guidance provided on stress testing sufficient and appropriate?

The financial and liquid resources of CCPs are already sized to withstand "extreme but plausible" scenarios and we applaud guidance which will further strengthen the robustness of these pillars of risk management. SGX agrees that use of multiple and comprehensive historical and forward looking stress scenarios is required, and that the exclusion of observed historical scenarios on the basis that reoccurrence is implausible should be explicit and subject to a governance process.

It is useful to have such a comprehensive set of guidelines for stress testing. Nonetheless, SGX notes that it will be very onerous to apply all the guidelines set out in this section. For example, intraday peak to trough price movements layered on top of hypothetical intraday portfolios, in addition to stressed slippage costs may push coverage into the realm of "extreme and implausible". Instead, the correct approach is for the CCP, together with its home regulator, to study the relevance of the various factors for the purpose of coverage. Factors may instead be incorporated into for-information-only scenarios as appropriate. Otherwise, the guidance may have the unintended consequence of making clearing unviable. We encourage CPMI-IOSCO to distinguish hard requirements from guidelines for the CCP's consideration, taking into account varying market profiles.

We are of the opinion that it is unnecessary to conduct sensitivity analysis of stress testing models with a monthly frequency to the extent set out in the guidance, which included a mix of sensitivity analysis of key parameters and assumptions, reverse stress testing and selected for-information scenarios. Stress testing by its construct covers extended historical period and very high coverage, and should not materially change month-on-month. It suffices that quarterly reviews are complemented by ad-hoc reviews following stress events.

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?

SGX views the guidance that CCPs could consider the effects of intraday positions and prices to be helpful but an appropriately outcome-based guidance is necessary here or requirements may become too onerous. With regard to "intraday price movements", we are of the view that suitability should be evaluated by each CCP, and even on a case-by-case basis for each individual scenario. Peak to trough price changes will not be meaningful if applied mechanically as it is not plausible that a CCP closes out every product and position at the worst intraday price. Further, in many cases, reliable historical intraday market data that would give meaningful stressed movement may not always be readily available.

4 Coverage

Is the guidance provided on coverage sufficient and appropriate?

SGX agrees with the explicit guidance that voluntary, excess contributions should be ignored. Any excess collateral would in all likelihood be withdrawn in a potential stressed environment.

SGX notes that the consult states that a CCP should maintain the required level of prefunded financial and liquid resources "on an ongoing basis". SGX has maintained its default funds to this standard since 2007 with no exceptions. We agree with the view that CCPs should be proactive in maintaining coverage and ensuring that any shortfall is addressed in a timely manner. The CCP will be in the best position to determine how coverage should be restored given specific circumstances[2].

5 Margin

Is the guidance provided on margin sufficient and appropriate? The PFMI do not prescribe a minimum margin period of risk or closeout period. Is further guidance in this area needed?

SGX appreciates that the guidance takes a risk-based view for margin period of risk and does not impose a minimum. It is again important to note that CCPs operate in different markets and it is unlikely that a global standard would be able to capture the actual risks which differ from market to market, region to region and CCP to CCP.

Is the guidance provided on procyclicality appropriate and sufficient?

SGX notes that the guidance has taken an inflexible stance with regards to procyclicality and requirements appear in several sections of the report. It is important to recognize that procyclicality requires a balanced approach and must be weighed against many other goals such as safety, responsiveness and potentially even coverage under market expectation of future volatility. We also view that it will be challenging to establish "quantitative metrics" which are useful for practical applications[3].

We note the requirement to predict the impact of the financial requirements that the CCP imposes on the members. In particular, the guidance in 2.2.13 seems to place onus on the CCP to ensure that members are able to manage their liquidity, which is beyond the responsibility of the CCP.

[2] As examples, coverage could be restored though increasing the default fund, additional margin or reduction of positions.

[3] Although there have been academic papers published suggesting different quantitative measures, we are of the view that it is not clear that there does indeed exist a measure which is stable and useful for practical applications.

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

Margin add-ons are used by CCPs for a multitude of reasons. A few areas where margin add-ons have been used[4] are concerns with credit worthiness of member, gap/jump risk, liquidity risk, model risk, ensuring continuous coverage and maintaining appropriate balance between risk mutualisation and "user-pay", etc. It would set a dangerous precedent if global standards were to provide specific guidance in areas which are so different across markets and CCPs.

6 CCP contributions to losses

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

SGX is of the view that CCPs should have substantial skin-in-the-game in default related losses. This will align the incentives of CCPs to properly manage the risk of member defaults and ensures that margining, default management and other risk practices are prioritized over and above other business considerations.

On the other hand, SGX believes that CCP contributions to absorb custodian and investment losses is an area where global regulations should leave flexibility to cater for local conditions. Collateral composition, cash levels and investment objectives vary significantly across CCPs and jurisdictions. For example, there may be limited options available to CCPs with regards to custody and short of alternatives; a CCP may be prudently parking members' collateral at commercial and custodian banks. Skin-in-the-game to enhance alignment of incentives is therefore misconceived when applied to custodian losses and any skin-in-the-game requirement will be purely symbolic. However, where a CCP invests members' collateral actively and profits from this activity, it may be more appropriate to view the CCP as responsible for resulting losses.

We would also like to echo much of the rest of the industry in encouraging regulators and central banks to allow FMIs to place members' collateral with central banks, both home and foreign jurisdictions, as this will significantly decrease systemic risk in the system.

7 Recovery

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

SGX is in agreement that CCPs' recovery plans should comprehensively address a variety of scenarios. CCPs should have tools to allocate losses arising from and beyond (not caused by) member default, to re-establish a matched book following a member default and to replenish depleted financial resources, including a viable plan to raise capital. Nonetheless, we caution against adopting a prescriptive one-size-fits-all approach as the full set of recommended tools may not be suitable for all CCPs or jurisdictions. Local practices and context of the CCP's jurisdiction should be considered carefully together with the CCP's regulator, in developing the recovery plan. Adopting relevant tools and procedures provides a higher confidence of recovering the CCP.

[4] Listed are general examples, and not necessarily practiced at SGX.

In particular, we agree with the adoption of voluntary tools and accompanying incentives to restore a matched book, to avoid the need of mandatory tools such as forced allocation or tear-up of contracts. We view a complete tear-up to be equivalent to a trigger for resolution and should be avoided as much as possible. However, SGX also cautions against delaying the use of mandatory tools over a prolonged period and the timely use of mandatory tools should take into account the availability of default resources and the repeated attempts at restoring a matched book through voluntary means. Another example where tools should be tailored to specific profiles and practices is in the managing of liquidity and liquidity shortfalls. Concerns about difficulties to transform securities into cash may not apply to CCPs which already maintain most resources in cash.

IV Conclusion

SGX is appreciative of the opportunity to provide our response to the consultative report. If you require any further information or clarification, please do not hesitate to contact the following persons:

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Table 1

Detailed response to the annex of the consult: “Items that an industry group suggested be disclosed for feedback purposes”

A, 1 Scenarios	SGX is of the opinion that CCPs should be able to publish scenarios to their members on a voluntary basis. It should be noted that the stresses in themselves do not tell the complete story as CCPs use a multitude of very different methodologies to convert stresses to a default fund amount.
A, 2 Inputs	It is unclear what disclosure of such data seeks to achieve and this seems to be a “catch all” statement.
A, 3 Guarantee fund size	This information can already be aggregated from information published under the CPMI-IOSCO quantitative disclosure.
B, 1 Stress results	Much of this information overlaps with the information in the CPMI-IOSCO quantitative disclosure. For smaller markets, additional disclosure may be dangerous as attempts may be made to identify participants’ positions.
B, 2 Assessments	This should already be made clear in the CCP rulebooks.
B, 3 Reverse stress-testing results	This information asked is of little relevance and does not necessarily reflect the way many CCP actually conduct reverse stress testing.
B, 4 Validation	SGX is of the view that validations are now a helpful tool for the CCP to solicit “second opinions” from highly qualified experts. If results of validations are to be made available to the broad membership, there will be the unintended consequence of incentivizing CCPs to use validators which produce less relevant, but “better” results. Instead, regulators can ensure the necessary rigour in validation for key areas.