COVID-19 and CCP Risk Management Frameworks



For the CFTC Global Markets Advisory Committee meeting 11th March 2021

Clearing has performed well during the COVID crisis

- After the market events in March, the ISDA Clearing Member Committee performed an analysis how CCPs' risk management frameworks have performed during the crisis.
- Analysis based on input of 97% of CCPs (counted by default fund contributions).
- Three member defaults / close-outs, none threatening financial stability.
- No issues reported of clearing participants not meeting margin calls in time, other than a few operational short delays.
- CCPs dealt well with record volume and volatility while working mostly from home.
- Financial institutions are much better capitalized and have higher liquidity reserves.
- Intervention by central banks also helpful.
- All in all, the system held up well.

Recommendations in two areas:

- 1. Procyclicality
- 2. Public Quantitative disclosures



Key findings from CCP feedback

- Most CCPs were happy with their margin framework performance. Some used scheduled or unscheduled reviews
 for parameter or minor model changes. One CCP applied an add-on while their margin model was being
 recalibrated.
- All CCPs observed increased number of backtesting breaches but margin coverage was above their risk appetite or they applied changes.
- Most CCPs did not adjust offsets between products outside their regular reviews.
- Where negative prices are possible, most CCPs had already reviewed their systems.
- Where CCPs use the repo market, they did not encounter problem investing cash.
- Other than the three known defaults, CCPs did not report near misses and only minor operational payment issues (not linked to clearing members).
- A large majority reported that liquidity requirements had not changed during the crisis, or that the increased requirements were still covered by available resources.
- CCPs are either able to manage a default remotely or have sufficient staff levels in the office. All said they could continue these working arrangements indefinitely.
- CCPs have or are working on virtual ways to convene the DMG (if they have one).
- There were some reports of defaults / close-out of clients.



Procyclical margin

- G-20 reforms mitigated counterparty risk at the cost of higher liquidity and funding risk.
- Variation Margin reflects the profits and losses of members and redistributes liquidity, large increase in VM was unavoidable given the extreme market volatility.
- Procyclical IM drains liquidity from the market at greater levels during times of stress. Margin rates increased by more than 300% for some products.
- Nearly all CCPs align their anti procyclicality (APC) tools with EMIR requirements:
 - Margin floor based on 10-year historical lookback period.
 - 25% buffer on top of calculated margin that can be temporarily exhausted in a crisis.
 - 25% stressed scenarios in the lookback period.
- SIMM in contrast does not show procyclicality and has performed well last year.
 - On average, we infer that SIMM provided a buffer on top of the initial margin required by the regulation
- We do not propose for CCP models to be calibrated in a similar way.



Procyclical margin – review of APC tools

10-year floor

- Easy to calculate and to apply.
- 2008 stress period has rolled off the lookback period. Lookback period needs to be extended.
- The floor has no impact anymore once regular margin is above the floor.

• 25% buffer

- A 25% buffer is small compared to the margin increases we have seen. This buffer needs to be calibrated dynamically based on the underlying contracts.
- Insufficient guidance when the buffer can be released.

Stressed scenarios in the lookback period

- CCPs using this seemed to have experienced margin increases not as significant as other CCPs.
- Insufficient guidance how stressed scenarios are chosen and the governance framework.

Recommendations:

- Review and recalibrate APC tools: Similar products should exhibit comparable levels of procyclicality.
- Additional guidance on governance and on measurement of the effectivity of APC tools.
- Transparent measurements of CCPs' APC tools in public quantitative disclosures and CCP disclosure to clearing participants.



Frequency of Public Quantitative Disclosures

- CCPs report Public Quantitative Disclosures (PDQ) every quarter, with a three-month time lag.
- Clearing members received information on backtesting breaches in March only end of June. April backtesting breaches were reported only end of September.
- Reporting of backtesting breaches is not consistent across CCPs:
 - Some CCPs include margin add-ons, other do not.
 - Some report at the member level (aggregating house and client positions), others at the account level (separating house and client activity).

Recommendations:

- Report some data points (e.g. IM, DF and backtesting breaches) monthly with a one-week time lag.
- This should be part of CPMI-IOSCO guidance.
- Standardize reporting of backtesting breaches, with a focus on more granularity.



Appendix: Questionnaire to CCPs

- 1. Are you satisfied with the performance of your margin model over the crisis to date?
- 2. How did your margin models react to increased volatility? What was the maximum one-day change (absolute and relative increase) over the crisis? What has the total increase been over the crisis to date?
- 3. How many margin breaches (at a contract, product and portfolio level) have you experienced? Do you observe a trend in backtesting breaches or near misses?
- 4. On the back of large moves in equity markets, has margin on short deep-out-of-the money equity index options been sufficient?
- 5. Have you applied any expert judgement in adjusting margin? For example, if the model indicates a significant increase in margin is required to maintain the target coverage, would the CCP increase margin once or over a period of time to limit the impact on members?
- 6. With respect to portfolio margining, have you adjusted or do you contemplate adjusting margin offsets?
- 7. Are any floors applied to the margin amount that the CCP charges?
- 8. What APC or EMIR APC measures do you employ? Have they been effective during the crisis? How do you assess their effectiveness?
- 9. How will you deal with negative rates/prices if applicable?
- 10. Have there been issues with investing margin cash in the repo market?
- 11. Have members faced any difficulties in paying margin? Have you extended settlement windows?
- 12. Have there been any defaults or near misses?
- 13. How would default management work without the ability to assemble a default management group (DMG) during times of travel bans and working from home?
- 14. Are you able to manage a default scenario remotely for example, via a web-based default management system?
- 15. Have there been changes in credit quality of collateral (for example, cash replaced by bonds)? Have you made any changes to the list of acceptable collateral or applied haircuts?
- 16. Have liquidity requirements changed based on the recently experienced stress period?
- 17. Has the crisis led you to perform an unscheduled parameter recalibration (margin, concentration charge or haircuts)?
- 18. How long can you continue to perform tasks (both business-as-usual tasks and management of a clearing member default) as part of business continuity plans and/or a work-from-home environment?
- 19. Does the CCP look to monitor the activity and behavior of clients of clearing members (in terms of risk appetite, concentration and timely margin obligations)? If so, would the CCP have observed any issues?



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