

ESMA Consultation Paper

Draft Guidelines on Anti-Procyclicality Margin

Measures for Central Counterparties – LCH Response.

LCH The Markets'
Partner



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Introduction

The LCH Group (“LCH”) operates 3 CCPs in Europe and the US; one in London (LCH Ltd) one in Paris (LCH SA) and one in New York (LCH LLC). It is involved in the global OTC Swaps, interest rate swaps, credit default swaps and Non Deliverable FX markets, the European Equity and Repo markets and the European Listed Derivatives markets.

LCH considers Procyclicality to be a very important issue for a CCP and indeed has implemented a rigorous standard in this regard several years ago. Consequently, LCH welcomes the opportunity to comment on the recent consultation from ESMA concerning draft guidelines on Anti-Procyclicality Margin Measures for Central Counterparties.

Please find below LCH’s response to the questions posed in the consultation [ESMA70-151-1013] 8 January 2018*.

General comment

LCH supports the need to have clear guidelines that limit the procyclicality of margining requirements and ESMA’s work in this area.

LCH understands that the ESMA guidelines are limited to margining requirements to limit procyclicality as they relate to Article 28 of Commission delegated regulation No 153/2013 of 19 December 2012 (the ‘RTS’). However, LCH would like to point out that this focus of the scope and content of the guidelines does not allow addressing the various sources of procyclicality that LCH has observed and identified. In particular, LCH has observed and identified several sources of procyclicality beyond those described in Article 28 and there is a risk that the guidance limited to margining requirements does not address several important sources of procyclicality.

Specifically, LCH has identified the following key sources of procyclicality within a CCP that do not seem to be addressed in the guidance:

01. Margin models
02. Default Fund contributions
03. Collateral eligibility
04. So-called “Credit multipliers” which are applied in the event of a slippage in a member credit quality

* https://www.esma.europa.eu/sites/default/files/library/esma70-151-1013_consultation_paper_for_guidelines_on_apc_margin_measures.pdf

05. Unfunded assessments, which may be called in the event that the funded resources do not prove sufficient to cover a clearing member default.

There are also considerations coming from product specific characteristics. For example, repo contracts can involve physical settlement risk and this is not present for financially settled products such as interest rate derivatives.

Consequently, CCPs might develop metrics and thresholds that cover a wider scope than those proposed in this consultation and these would likely differ between CCPs due to the potential sources of procyclicality contributing different degrees of procyclical risk.

LCH Response to the Consultation Questions

Q1 Do you agree that CCPs should develop and maintain a policy for regular assessments of procyclicality of margin?

At the heart of any procyclicality standard is a trade off, where the desire of the CCP to avoid any procyclical actions is balanced against the CCP Board's very real concern of being under margined. If CCPs can describe their standards for addressing this trade-off then this would bring further clarity to stakeholders about the expectations of margin model performance (in particular step changes in margin) during periods of changing volatility.

LCH supports the obligation proposed by ESMA as it has in fact implemented a specific Risk Policy addressing this trade-off, nearly 3 years ago in 2015. This Policy describes the potential sources of procyclicality and states a number of standards and implementation considerations that all business lines must adhere to ensure an appropriate balance is maintained in line with Board's Risk Appetite.

The standards and governance arrangements can indeed be described in the CCP's Policies and Procedures (such is the case for LCH). However the description of the quantitative metrics, test outputs, and specific reporting requirements seem better suited to a Procedures document rather than the Policy.

The choice of metrics will need to correlate with the choice of procyclicality standard; hence the metrics will likely vary between CCPs. As such CCPs should not be forced into a single set of metrics. The metrics described in this paper are certainly useful as a guide for CCPs, but no more than that.

Q2 Do you find the examples of quantitative metrics for monitoring the efficiency of APC margin measures appropriate? Are there any additional metrics that could be mentioned in the guidelines?

The metrics are helpful as a guide, but the choice of metric needs to correlate with each CCP's standards that address the trade off between avoiding overly procyclical margins and maintaining adequate margin coverage.

- 01. Margin changes over a defined period – agree this is appropriate to measure maximum step changes.
- 02. Peak to trough – seems less helpful during short periods, but can be useful when comparing different model settings.
- 03. Maximum or expected shortfall – seems less helpful unless comparing different model settings.

Other measures that LCH have used include:

- 04. Standard deviation of IM – helpful when comparing stability
- 05. Standard coefficient of variation – helpful when comparing stability
- 06. IM cost ratio – helpful when comparing the cost impact between different model settings

Q3 Do you think that CCPs should apply the APC margin measures under Article 28 of the RTS to incorporate all risk factors? If appropriate and as necessary, please provide quantitative analysis to support your response.

LCH recommends that the APC margin measure should only apply to those risk factors whose changes in value give the first order or greatest contribution to the change in margin. For example the margin for a listed option will be primarily driven by change in the underlying asset value, rather than the implied volatility. The marginal benefit of adding the measures to all the risk factors is very limited, because changes in the second order risk factors contribute second order changes in margin.

This is observable in the regular CCP sensitivity testing. Table 1 shows the sensitivity of the initial margin to changes in the underlying scanning range (UPSR) and the volatility scanning range (VSR) for a Listed Equity Futures and Options market. The margins are much more sensitive (at least 2.5X more sensitive) to changes in the underlying (UPSR) than the implied volatility (VSR).

Table 1: Sensitivity of initial margin to changes in underlying and implied volatility for an Equity Futures and Option market.

Change in Margin	UPSR +10%	UPSR -10%	VSR +10%	VSR -10%	VSR +25%	VSR -25%
90th Percentile	10%	-4.52%	3.99%	0.00%	9.76%	0.00%
10th Percentile	4.25%	-10%	0.00%	-4.03%	0.00%	-11.94%
Median Change	9.04%	-8.80%	1.20%	-1.23%	2.79%	-3.16%
Average Change	8.02%	-7.94%	1.61%	-1.60%	4.02%	-7.51%

Each CCP should decide which factors the measures will be most applicable to, and justify their choice using the regular sensitivity testing.

For example, if upon testing a CCP identifies second order factors that contribute to first order effects (such as the implied volatility of a delta neutral portfolio) then this would be evidence to justify the 25% buffer to additional factors.

Q4 Do you agree that CCPs that adopt Article 28(1)(a) should establish documented policies and procedures on the exhaustion of the margin buffers and the minimum level of details which should be included in such policies and procedures?

LCH agrees that the conditions necessary to exhaust the buffer and when to replenish the buffer should be described in a procedures document alongside the margin model documentation.

Q5 Do you agree that CCPs that adopt Article 28(1)(b) should adopt a consistent definition and identification of stress scenarios in line with Article 30 of the RTS? If appropriate and as necessary, please provide quantitative analysis to support your response.

LCH agrees in general that if 28(1)(b) is relied upon then the definition and identification of stress scenarios should be under extreme but plausible market conditions.

LCH observes that Art 30 prescribes both historical and forward looking stress scenarios which needs to align to an initial margin model which likely utilises either the former or the latter but not both. For example a CCP relying on a historical simulation margin model with an n-days sample period can append an additional sample period of stressed historical returns, a common period chosen is the Lehman's default 2008/09. The

appendage remains consistent with the assumptions underpinning the historical simulation model (in short, history is a good predictor of the future). However if the CCP needs to add theoretical (forward looking) scenarios, then the model assumptions have changed from strictly historical to something else. This may cause issues in justifying the model assumptions and conceptual soundness when different scenario generation methods are mixed together.

LCH recommends amending the guidance to: CCPs relying on Art 28(1)(b) should adopt a consistent definition and identification of stress scenarios under extreme but plausible market conditions.

Q6 Do you agree that CCPs that adopt Article 28(1)(c) should not use modelling procedures to alter the weights of the observations when computing the margin floor using the 10-year volatility estimate?

LCH has reservations about the guidance because the guidance appears contrary to the ambition of APC margins. Smoothed or weighted volatility measures have favourable APC properties such as improving the stationarity of a time series; this is why many CCPs use them. Unweighted or unadjusted returns can accentuate the unfavourable APC properties such as the ghosting effect in VaR models when volatility eventually exits a time series, e.g. Lehman Brothers 2008.

Enforcing equal weighting appears a step backwards and in turn disregards favourable APC innovation from many CCPs since 2008.

Finally LCH notes that using different weights for volatility estimation is not the same as using different weights for each PnL vector. LCH would expect that most CCPs continue to equally weight the PnL vectors when determining the VaR or Expected Shortfall risk measure. The guidance does not mention this, but LCH believes this is an important distinction when discussing weighting of returns versus weighting of PnL.

Q7 Do you agree that CCPs should calibrate the margin floor using the margin parameters used in the regular computation of margins and at the same frequency as regular margin computation?

LCH agrees that any floor should at least meet the regulatory standards set out in Art 24, 26 and 27. Setting the floor to a higher standard should be a decision of the CCP in accordance to its risk appetite. LCH recommends amending the guidance to meet exclusively the conditions in Art 24, 26, and 27 and remove the reference to the margin parameters used in the regular computation.

The frequency of (floor) computation should be amended to at least daily, and capability to perform at least once intraday.

Q8 Do you consider it appropriate for CCPs to disclose information on the margin models and the parameters used therein to facilitate the replication of margin calculations and improve the predictability of margins for clearing participants?

LCH agrees subject to when information may put at risk business secrets or the safety and soundness of the CCP, in line with Art 10.

LCH notes that disclosure of the margin model information and model parameters does not always mean participants can replicate the margin because participants may have different market data. Most CCPs have margin simulators that allow participants to replicate margins for different positions / portfolios. The provision of margin simulators (as well as the key model information) should be recognised in fulfilling the guidance. These clarifications would be useful in the final draft.

Q9 Do you agree with the contents of the disclosures proposed by the draft guidelines?

LCH has no objection, subject to when information may put at risk business secrets or the safety and soundness of the CCP, in line with Art 10.

See comments in Q8.

Finally, LCH thanks ESMA for holding a consultation on this very important topic and looks forward to answering any questions or providing further clarity on the LCH response if required.

Sincerely,

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