



**EACH response to the ESMA consultation
paper 'Draft Guidelines on Anti-
Procyclicality Margins Measures for Central
Counterparties'**

February 2018

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1. Introduction

The European Association of CCP Clearing Houses (EACH) represents the interests of Central Counterparties Clearing Houses (CCPs) in Europe since 1992. EACH currently has 20 members from 15 different European countries and is registered in the European Union Transparency Register with number 36897011311-96.

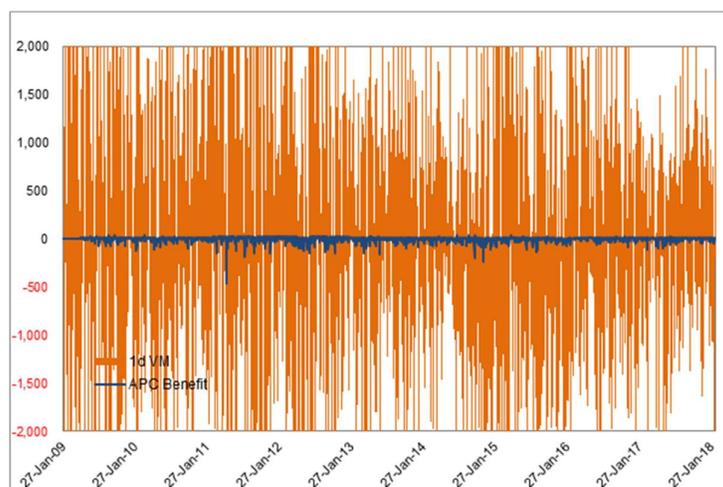
EACH welcomes the possibility to respond to this consultation paper and the effort of ESMA to set guidelines on anti-procyclicality (APC) margins measures for CCPs.

Introductory comments on APC measures

In line with Article 41 of EMIR, CCPs should monitor margin levels and account for procyclical effects of margin revisions. We understand and welcome that regulators take a conservative approach to address potential liquidity issues in order to enhance financial safety and stability. EACH Members however have some reservations with regard to the application of the existing APC measures:

- **Objective** - APC measures were primarily designed to mitigate liquidity risk. In a volatile market, most of the liquidity risk will be a result from variation margin rather than the increase in initial margin, therefore we have some doubts on the real benefits of these measures. As exemplified in Chart 1 below showing the variation margin in Brent versus the APC liquidity benefit (ICE Clear Europe eroding its APC buffer), variation margin dwarfs the APC benefit in term of liquidity.

Chart 1 - Daily Variation Margin in Brent versus the APC liquidity benefit
(Source: ICE Clear Europe)



The first objective of the CCP is to collect sufficient financial resources. Insufficient margin collection would mean that the risks are mutualised through the financial resources, therefore limiting procyclicality in the margin requirement to the point of making the margin collection inflexible, could lead to procyclical contribution requests to the default fund. A careful balance is therefore required.

- **Consequence** - As a result of APC measures, around **EUR 60bn¹ of high quality collateral is locked-up** in the markets. This negatively affects the ones that benefit from using CCPs (i.e. clearing members and end clients). The competitiveness of EU CCPs is also affected, as we understand that no other large jurisdictions effectively apply similar rules.

According to principle 21 of the Principles for Financial Market Infrastructures (PFMIs)², a CCP must be efficient. This could also be interpreted as not asking margin above a level that is reasonable (e.g. if a CCP wants to eliminate procyclicality, it could request margins at extreme but plausible levels. It would then be unlikely for the CCP to have to change its margins with big steps, assuming it calibrates the extreme but plausible levels correctly, and the CCP will be applauded for limiting procyclicality). On the other hand, we believe that the CCP would charge margin way above the normal confidence levels and the amount of collateral locked up at the CCP would be deemed as too high and the CCP to be inefficient.

- **Need for similar measures beyond CCPs**
 - **Cleared market** - As long as Anti-Procyclicality measures are only implemented on a CCP level, there will be little to no benefit to the market place or to the end users. Clearing Members, FCM's and Prime Brokers have no Anti-Procyclicality frameworks or APC buffers and usually increase their margins immediately if markets become volatile. So as long as that part of the value chain is not subject to a similar APC framework, the overall effectiveness of APC as a mitigant for liquidity risk, will be very limited
 - **Bilateral market** - While we understand that the bilateral regulations have some provisions with a similar objective of the EMIR CCP APC measures³, to ensure that the CCP market is not unduly disadvantaged compared to the bilateral market, we **request that any additional guidelines on APC be also applied to the bilateral markets..**

EACH fully supports the need for regulators to ensure safe and sound financial markets in order to guarantee the right balance between safety and efficiency. We would also **suggest an in-depth quantitative cost/benefit analysis** of the use of APC measures in the EU, which

¹ Estimate based on the total IM held at CCPs as taken from the ESMA Stress Test report 2017. 250 bn times 25% of APC buffer is around 60 bn euro <http://firds.esma.europa.eu/webst/ESMA70-151-1154%20EU-wide%20CCP%20Stress%20Test%202017%20Report.pdf>

² <https://www.bis.org/cpmi/publ/d101a.pdf>

³ Articles 16 (2) and (3) of Regulation 216/2251

takes into account its impact on the safety and attractiveness of CCP clearing, similar measures in the uncleared market as well as in non-EU jurisdictions and any potential alternatives to APC measures that meet the same goal in a more efficient manner.

In addition, EACH proposes that **ESMA assess whether guidelines on APC measures should be:**

- **Outcomes based approach:** this approach underpinned with transparency would provide important insights (e.g. on the level of global consistency of APC outcomes, that may inform further policy decisions). Specifically, transparency can be achieved if CCPs start publishing the APC metrics such as 'peak to trough measure'.
OR
- **Prescriptive approach:** in contrast, if the prescriptive approach is taken, we would welcome some further level of clarifications as outlined in our comments throughout this document. We would also request that ESMA clarifies how the adverse effects of 'herd thinking' and 'moral hazard' can be avoided with such approach.

EACH also proposes that ESMA assess and take into consideration the extent to which the stress period already included in the initial margin model, which is considered anti pro-cyclical as it complements the observations over the lookback period with observations over a period of stress, is consistent with the definition of a minimum buffer, i.e. currently 25%. According to art. 25 (1) of RTS a CCP shall ensure that the data used for calculating historical volatility capture a full range of market conditions, including periods of stress. The anti-pro-cyclical nature of the stress component incorporated into the initial margin model may reduce the necessity to have a minimum percentage (%) level (assuming that the stress component is calibrated so as to limit efficiently procyclicality).

Finally, to ensure a global approach towards APC, we would support that any additional guidelines on APC align with the international work of CPMI-IOSCO on this matter.

EACH Members stand ready to contribute to the above analysis as needed.

2. Regular Assessment of Procyclicality

Q1: Do you agree that CCPs should develop and maintain a policy for regular assessments of procyclicality of margin based on quantitative metrics?

EACH **agrees** that CCPs should develop and maintain a policy for regular assessments of procyclicality of margin based on quantitative metrics.

EACH understands the intention of ESMA to draft guidelines on how CCPs should develop and maintain an internal policy to assess procyclicality of margins using quantitative metrics. From our point of view, there is **very limited value to complete this assessment based on**

individually determined and calculated quantitative metrics. The margining methodology in place at CCPs is already subject to regular back tests and sensitivity analysis. The application of the metrics as proposed by ESMA will not provide the guide to handle the APC issue in a harmonised way.

European CCPs generally have such policies already in place. EACH therefore believes that **it is crucial that no one-size-fits-all approach is taken here**, and that, as long as CCPs can provide an adequate justification to authorities, **CCPs should be able to adapt their own policies and quantitative metrics to what they are measuring, depending on the different products and markets they serve.**

A validation of the efficiency of the APC component at instrument level is conducted by the CCP during the annual validation.

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?

In line with our response to Question 1 above, EACH strongly believes that the choice of metrics should be commensurate to the APC policy applied by each CCP depending on the markets and products they serve. We therefore **encourage ESMA to ensure that the guidelines reflect that they are meant to be examples rather than strictly followed in all markets notwithstanding the product and markets cleared.**

With regard to the concrete proposals made by ESMA, EACH believes that the examples of quantitative metrics proposed are **appropriate** for **price based** or **absolute margin** parameters. **'Peak to trough measure' is preferable to 'n-day move'** types of measures, as it gives a more adequate indication of through-the-cycle behaviour of margins even if the metric ratio during a period is not informative when looked at it in isolation. Only when taking into account the volatility in the market for the specific product in that period, the metrics become **informative.**

We believe that the metric **'maximum or expected shortfall of margin requirements over a defined period' is not a measure for APC.** The (initial) margin for a product could be constant but a change in the market prices might lead to a large variation margin and if the margin is not called in time, to a shortfall (it could also be that the member doubles its position and thereby its margin, assuming a simple long only futures position). If the margin is not collected in time, there could be a shortfall. As such the maximum or expected shortfall metric informs the CCP about the efficiency of the margin collection process and not about the efficiency of APC measures (e.g. if the CCP doubles the margin requirement per product intraday and collects the additional margin during the day, the metric results in a zero expected shortfall but the measure to double the margin requirement would be widely seen as procyclical).

With regard to the **relative** or **percentage-based margin** parameters, CCP could ensure the relative margin parameter to be fairly stable in response to changes in market volatilities using the three EMIR APC options. However, the actual final margin figure could still shift as the market price moves up and down. EACH would request **further clarification on these quantitative metrics** (i.e. whether these measures should be based on absolute or relative measures of the margin parameters). We would **consider that these quantitative metrics are a comparative measure** between different methodologies rather than a tool to definitively define whether an approach is procyclical or not.

We think that it is not clear what is the link between these metrics and the various APC measures that a CCP could take under article 28 of the RTS. We believe that the metrics should have such a link to be useful and more helpful metrics in this respect would be the number of times that the CCP breaches its tolerance threshold with respect to big-stepped margin increases, assuming that a big-step margin increase can be defined with the right level of granularity. As a general rule, EACH would suggest examining whether during the transition from a low volatility to a high volatility market environment the change in IM requirement is considerably less (relatively) than it would be without applying any APC measure and vice-versa (margin changes over a defined period).

3. Application of APC margin measures to All Risk Factors

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.

EACH believes that managing procyclicality for **all** risk factors would likely be irrelevant and would potentially result in an **extraordinary resource consuming exercise** which would ultimately be a burden to the market.

As an **alternative**, we would suggest an application to **all relevant** risk factors, regardless of the chosen APC margin measure from Article 28(1)⁴. In order **to implement this suggestion, we propose deleting the second paragraph of Guideline 2 of the DRAFT ESMA Guideline as well as using the ESMA stress test scenarios of 2017**⁵ as a fair benchmark, in order to decide which risk factors have to be considered within the APC component. CCPs should be able to **justify the choice** to its authorities.

⁴ The Article 28(1)(a) APC margin measure does not need to be singled out in Guideline 2 if an outcomes-based approach is achieved.

⁵ See Scenarios for the ESMA EU-wide central counterparty stress test in 2017; Annex B: Financial scenarios for individual risk factors).

The application of APC margin measures at **risk factor level** needs to be **further defined and analysed** as a blanket implementation may result in unintended consequences. At the moment, it is still unclear how such measures should be implemented for different APC approaches (e.g. we can assume that certain APC measures are easier to implement at risk factor level than others) and that the application of buffers or floors on different risk factors can alter the interdependencies within the portfolio. This can create situations that would result in under-margining in certain circumstances, especially for inter or intra commodity spread.

4. Exhaustion of Margin Buffer under Article 28(1)(a)

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?

EACH **agrees** that if a CCP chooses to apply a margin buffer at least equal to 25% of the calculated margin, the CCP should document the circumstances under which the buffer could be temporarily exhausted. This documentation should be part of the overall APC policy and procedures of the CCPs and be embedded in the methodology within the model. We would therefore **suggest replacing the wording 'policies and procedures' under the draft ESMA guidelines with 'methodology within the model'.**

The CCP's methodology may define some ranges for market indicators of each relevant market that signal the need to consider taking action on the applied buffer. In this context, it is important that the methodology does not introduce a thoughtless number of arbitrary parameters, but rather a set warning thresholds or ranges. Excessive standardization and 'automatic triggers' could increase systemic risk due to the same simultaneous response of all European CCPs when a market shock occurs.

We believe that the quality of a CCP's risk management should not be measured in the quantity of the documentation provided to justify it. It shall be handled within a reasonable way and not result in an unnecessary extra burden on CCPs.

5. Selection of Stressed Observations under Article 28(1)(b)

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

EACH **disagrees** with the proposal 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.

We note a potential inconsistency between the number of stress scenarios used for daily cover 1 and cover 2 checks (historical and hypothetical), and the uniqueness of the initial margin model because of it being limited to one scenario. The limitation of defining stress scenarios as currently proposed, and without greater clarification, may result in insufficient application of the Option B. In addition, the margin outcomes depend not only on the stress scenarios used, but also on how these combine with 'normal' scenarios. The example currently given in the footnote gives the impression that the combination of equal weighted returns is suggested. We think that **this is not the only way to combine and this must be specified more clearly in the guidelines**. Moreover, the stress scenario identified under Article 30 of RTS is a period of on one (1) n-day return (e.g. a four days risk horizon). In the view of EACH, the problem is that volatility (standard deviation) cannot be calculated from one observation and therefore more elaboration on that proposal is needed.

EACH believes that the quantitative metrics (Q1, Q2) defined in the policies and procedures of the CCP should justify the validity and appropriateness of the APC component.

We also believe this may represent a **cumbersome methodology** to apply in margin methodologies which typically sit independently of stress scenarios. Aligning to Art 30 implies mixing scenario generation between historical and theoretical (forward looking) stress scenarios, which may cause issues with the existing model assumptions and conceptual soundness (e.g. if the margin model is exclusively historical simulation adding a theoretical scenario generator means the model assumptions have now changed).

Therefore, we would **suggest aligning in the guidance to stress scenarios and CCPs should decide the scenario generation methods to use**. In addition to methodological and system considerations, creating dependencies to Art. 30 does not seem reasonable also due to different purposes behind initial margins models and stress testing models.

6. Margin Floor under Article 28(1)(c)

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?

EACH **disagrees** with the suggestion 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.

While we understand the logic developed by ESMA in its draft guidelines, **we suggest ESMA to also consider the favourable APC properties that that smoothed or weighted volatility measures have, such as improving a non-stationary time series**. Although when it comes to exponentially weighted moving average (EWMA) models, where recent observations contribute much more to the applied volatility and hence the IM, the 10 Years look-back period

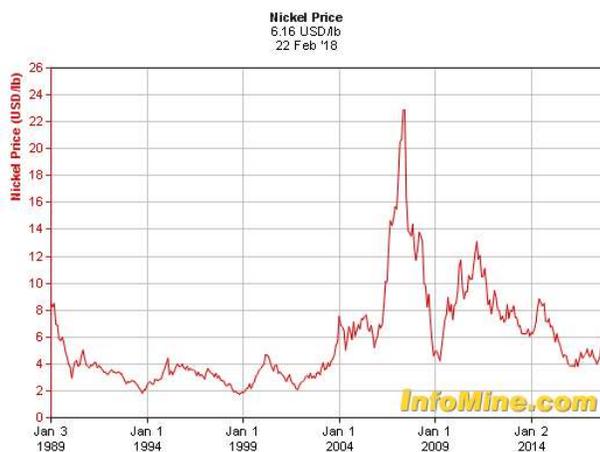
will not deliver remarkably different results compared to a 1-year look-back period. One has to consider that the outcome depends on the weighting factor (λ) used within the EWMA model and the timing of the stress periods within the 10 years look-back period (recent events or not). Moreover, consider in this context the fact that the number of stress events occurred in the past 10 years will determine the efficiency of the APC component of equal weighted models as well. HVaR models with a large look-back period (10 years as proposed) tend to smooth-out risks. For example, by using a 10 years HVaR 99% confidence level, the 25 worst n-day returns will be excluded from the history.

We would like to illustrate this with two examples:

- **Lehman collapse** - Prohibiting smoothed or weighted volatility measures seems contrary to the aims of APC and in some cases make margins more cliff edged, for example when Lehman drops out of many CCP models.
- **Nickel prices** – Nickel prices vary greatly over time (see chart 2 below). Prohibiting smoothed or weighted volatility measures would not allow CCPs to correctly assess the level of APC resources needed at any given time.

Chart 2 – Historical prices of nickel

Source: InfoMine.com



In our view, whereas a 10-year lookback period is used, margin calculation should be fed with at least a 99% confidence level and 2 days holding period. Scaling must be allowed using the 10-year volatility estimate, provided that the input parameters do not fall under the minimum required by EMIR. Any restriction on scaling would weaken CCPs' incentives to establish more conservative policies than the minimum regulatory requirements.

Another critical issue to be considered is that according to art. 25 (1) of RTS a CCP shall ensure that the data used for calculating historical volatility capture a full range of market conditions,

including periods of stress. This requirement is like double-counting the stress period: first, by assigning a stress period within your model (satisfying art. 25 (1)) which is already counter pro-cyclical and second by applying an APC buffer to be again counter pro-cyclical.

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?

EACH **disagrees with the calibration of margin floors with the same frequency as conducting regular margin calculation** because of the completely different nature of both tasks. The nature of margin floors is their stability over time, whereas the nature of margins is their timeliness and ability to reflect even intraday portfolio changes.

We would recommend that **margin floors should meet exclusively the conditions in Art 24, 26, and 27** and we would suggest **deleting the reference to the margin parameters used in the regular computation**. The **frequency of margin floor computation** should be adapted to its nature and amended at a frequency somewhere **between daily and monthly**.

We illustrate the case against daily frequency with one example: if you have 10 years data (so $10 \times 250 = 2500$ data points) and equally weight them: does one new observation really matter to the extent that the updates need to be done daily? The weight of the observation is $1/2500$ (0.0004) which is not really that much, even if the value is drastically different.

7. Disclosure of Margin Parameters

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?

EACH believes that it is **appropriate** for CCPs to disclose information on the margin models and the parameters used therein to facilitate the replication of margin calculations. This would help clearing members to anticipate potential margin calls and facilitate their daily management of liquidity needs.

CCPs already publish a great detail of qualitative and quantitative information in compliance with the CPMI-IOSCO Public Quantitative and Qualitative Disclosure requirements⁶. EACH believes this disclosure is sufficient for market participants to understand and evaluate CCPs' risk framework, including margin models.

Article 10(1)(b)(vi) of EMIR RTS 153/2013 already includes a requirement for CCPs to provide to the public free of charge information about the models used in margin calculations. This

⁶ <http://www.eachccp.eu/cpmi-iosco-public-quantitative-disclosure/>

requirement should be strengthened with additional measures included in the EMIR Refit legislative proposal⁷.

To ensure regulatory convergence and certainty, we would however **request that these disclosure provisions are incorporated in EMIR, rather than in the ESMA guidelines**, so that CCPs and their customers have a central point of reference, rather than having requirements scattered around in different locations.

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

See response to question 8.

- END -

⁷ '(...) A CCP shall provide its clearing members with a simulation tool allowing them to determine the amount, on a gross basis, of additional initial margin that the CCP may require upon the clearing of a new transaction. (...)'

'(...) A CCP shall provide its clearing members with information on the initial margin models it uses (...)'.

Source: http://eur-lex.europa.eu/resource.html?uri=cellar:b12bb02d-30ba-11e7-9412-01aa75ed71a1.0001.02/DOC_1&format=PDF