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Central Bank of Ireland response to BCBS-CPMI-IOSCO consultative report on transparency and responsiveness of initial margin in centrally cleared markets

DISCLAIMER

The views contained in this response while endorsed within the organisation do not represent the official policy position of the Central Bank of Ireland and should only be construed as a technical contribution to the policy discussion[1].

This response is for public disclosure.

The Central Bank of Ireland (the Bank) welcomes the chance to advance the policy debate on transparency and responsiveness of initial margin in centrally cleared markets. This opportunity is particularly relevant for us, as we were unable to contribute to the development of the consultative report and to share our views and insights with the experts in the drafting phase.

The Bank is both central bank and markets supervisory authority in the jurisdiction, and the National Competent Authority under EMIR, which in Europe is the regulatory framework governing CCPs, clearing and derivatives in general. This gives us unconstrained visibility on all aspects of the financial system as far as clearing and derivatives are concerned, both in terms of direct activity and indirect effects on the wider financial system, *in primis* liquidity needs and procyclical effects from margin practices. Furthermore, Ireland is a very open economy with a comparatively large financial sector, dominated by non-banking financial institutions like funds and insurances, an above-average component of wholesale banking activity, and a strong presence of multinational groups with their treasury operations. Most of this financial activity is cross-border, and the use of derivatives, both cleared and bilateral, is widespread in terms of number of users, and asset classes/products. Counterparties observed also display overall a high degree of sophistication.

Ireland does not have domestic post-trade financial market infrastructure. Our domestic equities and bonds while traded locally rely on CCPs and CSDs located outside of the jurisdiction. This naturally focusses our attention on the problems and needs of the users of market infrastructure services, as opposed to the ones of the CCPs.

Our experience – no doubt shared by others around the policy table – is that the overwhelming majority of derivative users that engage in clearing do so as clients to clearing members. Clearing

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is essentially client clearing, not direct clearing. At least for all but a handful of direct members, who tend to be very large, sophisticated, and in many cases credit institutions, at least as far as derivative clearing is concerned[2]. Therefore, the angle from which we have chosen to approach the policies put forth in the consultative paper is the one relevant to our direct experience of supervisors and regulators of a financial system that is predominantly constituted of highly cross-border, interconnected, sophisticated and sectorial-diversified clients of clearing members.

In doing so we focus primarily on the problem of procyclicality. We believe that it is impossible to talk about margin procyclicality without also talking about limitations to the CCP instinct to collect margins during stressed events. Therefore, while we are commenting on policies relating to the former, we are necessarily talking also about the latter. If this is not a topic of conversation, if we collectively hold that the resilience of CCPs must trump all other considerations at all times and under all circumstances, then we should revisit our expectations in addressing procyclicality. Our assumption is that there is room for an improved compromise between the two policy objectives.

Background

The purpose of this section is to provide the reader with a short description of the theoretical framework behind our comments to the policies under consultation. Without this, the answers would be unclear and the risk for misinterpretation high. We apologise in advance with the reader, but we really believe this to be necessary to ensure our comments are fully understood.

As mentioned above, the angle in approaching the consultation is the one of the "derivative user". It tries to convey what our experience suggests to be the impact of margins and related policies on those that are neither CCPs nor clearing members, which constitute 99% of the derivative users' population by number and are the most vulnerable to procyclicality. These include commercial banks, funds, insurance companies, and a vast number of non-financial companies that engage in clearing to hedge commercial risks of a non-financial nature.

Furthermore, our primary focus is the tail end of the distribution, when shocks exceed the tolerances of the established models and pre-emptive stress tests; i.e. where procyclicality manifests and when the policies put forth in the consultative report are most needed.

The exchange of collateral to offset counterparty credit risk is a very effective component of the risk management toolbox. However, the implementation of this tool in the context of derivatives, and specifically cleared derivatives, implies daily exchange of cash margins as the primary line of defence (variation margins) and very frequent adjustments on the exchange of contingent margins, to be drawn upon in the event of default (initial margins).

Variation margins (VM) are mechanically linked to the price change of the underlying from one day to the next (in the context of daily margins), and represent by far the largest component of margin flows. Initial margins (IM) can be simplistically described as "the worst X days of variation margins on record", where the X is an estimate of the days needed to liquidate/re-hedge the position. While not mechanistic and reliant on estimates and assumptions, the link between IM

[2] Cash equity clearing looks rather different, but it also relies far less on initial margins. Our understanding is that the policies are designed for and aiming at margins in the context of derivative clearing, which display the greatest potential for procyclicality and are least transparent.

and volatility through experienced VM is strong and direct, especially in situations where there is a new VM record being set, i.e. during stress events.

The first comment we wish to make is that a system that only contemplates VM is highly procyclical, and disruptively so. While the exchange of cash margins may seem like a zero-sum game – the liquidity is drawn from and re-deposited back into the banking system, in a circular synchronous flow – from the agents' perspective the liquidity planning to manage the VM cash calls is not. For treasurers, the contingent liquidity requirements of VM exchange determine a crowding out of investments towards cash, to cover "the worst X days of variation margins on record", just in case. As large VM calls materialise, both inflows and outflows, there is an instinctive behavioural shift towards more cash reserves, or more spare liquidity capacity, to meet them. This phenomenon works very much like an implicit IM, is driven by the same logic (volatility, margin period of risk), and is – in our educated guess – the single largest contributor to episodes of dash-for-cash and perceived procyclicality of margin calls which have consistently manifested in the recent stress episodes. In the immediate aftermath of a volatility spike, agents will liquidate assets, earmark credit lines, and not reinvest liquidity. Just in case. We shall call this effect treasury margin (TM).

TM is not constrained by regulatory requirements. Its main drivers are volatility of the (recent) VM calls, when the calls are due and netting effects; and only to a minor extent, the time required to close out positions. The first component is straightforward, but not linear. Because TM can be modelled as the sum of "the worst X days of variation margins on record" only very large margins, i.e. margins that make it to the category of "worst margins on record[3]" will affect the calculation. The implication is that TM is reactive only on the tail end of the VM distribution, and then it is very reactive.

The second driver of TM is how quickly the VM calls need to be met. Simplifying somewhat, the more time one has to prepare and make provisions, the less reactive the TM will be. From this follows that the most disruptive form of VM – from a procyclicality perspective – is the intraday call. A treasurer faced with the risk of margin calls within the hour will have no available option but to either have cash in hand or room in on-demand credit lines. Everything else is beyond the technical reach for most agents who are not credit institutions and availing of central bank liquidity. Furthermore, considering the fact that intraday calls are typically associated with large price movements, the possibility of intraday margin calls and then their occurrence determine a very rapid procyclical response of TM provisions, as treasurers will expect them in the following days as well, rapidly shifting the liquidity profile and driving a dash for cash.

The counterintuitive implication is that banning intraday margin calls delivers significant positive returns in curbing procyclicality, and therefore reduces systemic risk, by mitigating the TM cash dislocation in response to price spikes.

The third driver of TM are (abrupt) changes in the correlation within netting sets, underpinning the netting of daily VM. As daily VM is a single, net cash payment, across all portfolios and all asset classes (and all CCPs), from a treasurer's perspective predictable, stable correlations reduce margin calls. When these break up, the net margin calls balloon; and with them the TM provisions. It is worth mentioning that intraday margin calls are also one source of this correlation break-up,

[3] One should probably substitute here "on record" for "on memory", which is a better fit for the behavioural patterns and would explain how protracted episodes of low volatility foster a sense of security and determine a compression of TM provisions, which quickly snap back as soon as high volatility is experienced (and remembered) again.

at least at a technical level. This occurs when they manifest in one portfolio/asset class/product/CCP but not the others, decoupling the liquidity netting of the daily VM provisions. Therefore, from a TM perspective, reducing the asymmetry of intraday calls by paying them out as well as cashing them in is of limited value in curbing procyclicality, as it does not extend to the entirety of the positions or other CCPs. Predicable synchronicity of VM payments maintains the correlation, provided it applies to all VM sources. Otherwise, it backfires.

Netting is less pronounced in directional portfolios, and grows with the complexity typical of intermediation activity. Simplifying somewhat: clients are directional, clearing members are neutral and therefore experiencing highly netted VM calls. Breakup of correlation will likely impact primarily clearing members. As VM netting is across all asset classes, netting sets and clients, and TM provisions unregulated, small changes in correlation can drive very large changes in aggregated VM, and therefore TM[4].

The main concern with correlation-driven VM volatility is where it manifests: the clearing members. While these are typically large credit institutions, well equipped to handle liquidity stress and with access to interbank markets and lender of last resort backstop, they are also counterparties, clearing members, and lenders to the (directional) clients. A shock in the clearing members' TM provisions will influence the availability of credit to these clients, and may – in our experience does – drive higher IM calls to fund the shortfall (more of this below).

Summarising so far, the **daily exchange of cash VM results in a system that displays highly procyclical features**, like dash-for-cash and portfolio dislocation, **even with the complete absence of IM requirements**. These features manifest in a non-linear pattern, which becomes abruptly more pronounced in the event of exceptionally high volatility or break down of well-established correlations.

This long digression is to define what we shall call "natural procyclicality", which is solely dependent on the mechanical process of exchanging cash VM, and the behavioural response it triggers in treasurers' liquidity planning. In short, it is the price we must collectively pay to reduce the build-up of counterparty credit risk by exchanging cash-VM. It is inherent to the risk transformation (from credit to liquidity risk). **This effect is beyond the reach of regulation**.

Framing the problem in terms of TM and natural procyclicality delivers two useful insights: the first is that natural procyclicality is the lower limit of policy action on IM. We cannot, and we will not, be able to devise solutions that reduce the contribution of procyclicality from IM below the level of natural procyclicality from VM-TM. Therefore, when thinking of policies for IM, what we can aim for is at best to deliver a system that displays only natural procyclicality. The second, is that policies addressing IM have an impact on the level of natural procyclicality, and therefore that we should consider if improvements on one side are not offset by deterioration on the other.

An interesting theoretical question is whether we are comfortable with the social cost of the natural procyclicality, or if we should explore revisiting the VM protocols to try to reduce it[5]. Regardless,

[4] To have a sense of scale, consider the Aas default in NASDAQ OMX, where the break-up of correlation in a large, perfectly matched position between two very closely related products generated margin calls well in excess of the IM provisions.

[5] As mentioned above, one suggestion to reduce natural procyclicality levels is to ban intraday margin calls. This is also because intraday calls are typically absorbed by clearing members (as clients do not have the operational capacity to meet them), therefore driving the behaviour of the node in the clearing chain which is most sensitive to TM adjustments, correlation volatility and has the pricing power to transfer this to the clients' system, even across uncorrelated asset classes.

we should bear in mind that whatever the benefits of the policies on IM, these materialise over a bedrock of natural procyclicality dynamics, which can be much bigger, and in turn is influenced by policies on IM. This awareness should help us not to lose the perspective and maintain a sense of proportion.

Turning to IM, this is a highly regulated, mandatory, risk mitigation tool, and therefore much more homogenous in behaviour than the TM. Regulation notwithstanding, at the tail of the volatility distribution, both display very similar patterns.

IM computation is designed to ensure that counterparts do set aside "the worst X days of variation margins on record" for the purpose of covering losses during close-out or replacement of defaulted positions. Admittedly, the regulation acknowledges the implicitly procyclical nature of the calculation methodology, and strives to address it by deploying two main features. Firstly, it requires some criteria of selection of what constitutes the "worst days" data sample, to ensure that IM does not fluctuate too much across volatility cycles and therefore remains somewhat stable in the face of price spikes. The second is to add some form of buffer over this core or base calculation. This methodology is very pragmatic and delivers IM that is (should be) stable and slow moving most of the time, except in the event of very large price movements. Which is unfortunate because it is precisely in this context that anti-procyclical policies should be most effective.

Some of the reasons for this failure are a result of rational agents engaging with the some unintended incentives of the current regulatory framework.

The first trade off, well understood in and frequently debated, is striking a balance between ensuring the financial soundness of CCPs and procyclicality of margin practices. CCPs are very thinly capitalised principals, relying predominantly on IM as a loss-absorption mechanism. In calibrating margins, the CCP must strike a balance between too much margin most of the time, and too little a few, but very risky times. To ensure they strike a prudent balance, CCPs are expected to take the first loss should the IM collected from a defaulting clearing member be insufficient; the so-called skin in the game requirement. The objective of the provision is to deter CCPs from relaxing standards in the good times to promote business; or to phrase it differently, that they retain a long memory of stress events. However, too much prudence can be paralysing, and to foster a workable alternative to socially unacceptably high immobilisation of resources for the purpose of reducing occasional risks in clearing, flexibility of margins has been allowed; at the cost of procyclicality.

While not disputing the success of the policy, we wish to point out that in the face of exceptional price surges, CCPs will do whatever they can to replenish IM and avoid losses to their own capital. This translates into two very recognisable behaviours: a) rapid increase of IM, both through

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There could be others. A very promising one is a "speed limit" to VM calls. A hard, ex-ante limit to the price variation that can be recovered through VM exchange the next day (with any excess to be added to/netted from the following VM call, and so forth) would significantly reduce the VM spikes. This in turn reduces the TM requirements, lowering considerably/capping the level of the natural procyclicality (but carrying still some side-effects for the break-up of correlation sets). From a risk perspective, it would not be disproportionately distortive, provided the speed limit effect was incorporated in IM calculations, which would need to be strengthened to absorb the multiple-day smoothing.
Another promising solution is to replace cash as the sole form of VM payments with quasi-cash HQLA. We will not digress here, but there are viable solutions to design a countercyclical "margin-asset" that would remove the dash-for-cash and fire-sale features of the current cash-based margin system. Our suggestion would be to explore these further.

recalibration of the core component with new available data and of other add-on components, which are typically discretional and not covered by the prescriptive regulatory framework[6]; and b) preservation of anti-procyclicality buffers, just at the time when they should be drawn down.

In other words, at the tail end of the volatility distribution, core IM will increase, the discretional component will increase, and the antiprocyclicality buffer will not be depleted. Evidence of the latest price volatility events corroborates this pattern.

This reaction is not only admissible under current rules, it is also rational, incentivised by the same rules through the penalty of the skin in the game, and positively encouraged by CCP supervisors, who – understandably – have the resilience of the CCP as their top priority.

Against this background, trying to design effective antiprocyclicality policies becomes very challenging. It requires addressing head on the trade-off, at a point where procyclicality is clearly damaging, but CCPs are most at risk. If we should conclude that the policy objective of safeguarding the CCP always trumps any other consideration, then we should also resign ourselves to the notion that procyclicality from IM is unavoidable (on top of the natural procyclicality). Worse, it is not to be avoided. If we are serious about procyclicality, we must start by contemplating a situation in which the CCPs should hold less margins that they would otherwise be comfortable with, for the benefit of others.

We believe that the regulation – at least in Europe – allows for safely pushing the boundaries at the point of a stress event, through the safety net of the recovery tools. We believe we can contemplate preventing CCPs from collecting all the margins they would be comfortable with, in exchange for lowering the risk of default of the members (which would trigger the use of the margins) and reducing the negative externalities from procyclical margin increases. However, this implies logically contemplating a system where CCPs tip into recovery not infrequently in the event of multiple defaults, and this is not seen as a stigma; at least in principle.

However, one implication of this new approach would need to be to reconsider the role of the skin in the game. Our thinking is that for the skin in the game mechanism to truly work as intended (prudent, stable margins), without the unintended procyclical effects just described, the missing ingredient is some form of cap or speed limit to the capacity of CCPs to recalibrate IM. Not just core IM, but the total IM, inclusive of add-ons and anti-procyclicality buffers; i.e. the IM as perceived by users and that drives their funding requirements. Our suggestion is to explore three synergic policies:

Firstly, a mandatory notice period before any changes can be implemented. This should apply to all legacy trades (at the time of the announcement), and include all aspects of the total IM: core component, add-ons, anti-procyclicality buffers, clearing member specific add-ons and crucially collateral haircuts. New trades can be excluded. The idea is to ensure that users can plan well in advance the stability of margins, and of changes in margin requirements; even under extremely stressed conditions. Incidentally, we note that gross margin models are better suited for this policy proposal, and they are less vulnerable to correlation break up risk.

Secondly, some form of mandatory exhaustion of the anti-procyclicality buffers should be implemented. This is a very tricky thing to regulate, but a promising avenue is to look at the

[6] We consider intraday margin calls a form of hidden IM increase, as it tops up the IM available on that day.

solution in the recent EMIR3.0 text, agreed in the EU[7], which in amendments to Article 85 Reports and review introduces a new paragraph 8 as below:

> *8. By [2 years after the entry into force of this Amending Regulation] ESMA, in cooperation with the ESRB, shall submit a report to the Commission. The report shall:*
>
> *(i) define in detail the notion of procyclicality in the context of Article 41 for margins called by a CCP and Article 46 for haircuts applied to collateral held by a CCP;*
>
> *(ii) assess how the anti-procyclicality provisions of Regulation (EU) No 648/2012 and Delegated Regulation 153/2013 have been applied over the years and whether further measures are necessary to improve the use of anti-procyclicality tools;*
>
> *(iii) inform on* ***how anti-procyclicality tools could or could not result in margin increases that would be greater than without the application of said tools, taking into account potential add-ons or offsets a CCP is allowed to apply under this Regulation***.

The intuition behind point (iii) is that at the very least regulation can mandate that tools designed to be anti-procyclical should not backfire, by causing inadvertently procyclicality. Simplifying somewhat, this principle could be phrased as:

> *Counterparties* (CCPs, but this could easily be extended to clearing members*) shall ensure that any absolute margin increase shall not be greater that it would have been without the application of antiprocyclicality tools, add-ons and non-core buffers.*

This operational instruction states that while the size of IM can be increased by buffers, the increases in IM, in absolute terms, during an episode of heightened volatility, cannot be larger than the absolute increase of just the core component, which is the one calibrated at 99% (or 99.5%) of the distribution. Which in turn implies that buffers must be absorbed during a volatility surge and can only be replenished when the surge passes.

This implicitly states that procyclicality from core IM is "socially acceptable", and therefore necessary procyclicality, whereas unexpected increases in margins beyond the core component are "unacceptable" and therefore avoidable procyclicality.

The third component, which is enabled by the first two, is to make the CCP rules and simulations legally binding (until after the notice period for changes enter into play).

Placing a limit to the ability of CCPs – and counterparties in general – to increase margins during a price spike is, in our opinion, the missing ingredient to make any of the relevant policies discussed in the consultation truly effective. Failing to do so, by leaving tail-end discretion to CCPs (and clearing members), will have the counterintuitive effect of making the outcome more procyclical the more margins are transparent and predictable, which is the opposite of what the policies are trying to achieve.

The mechanism is the following. Improved transparency and predictability will foster a sense of security among CCP users. This will reduce TM because it reduces the perceived probability of unexpected calls. However, when the price shock hits, CCPs will deviate from the simulations, which are not legally binding. They will do so to avoid skin in the game losses, and will be supported by their supervisors. When that happens, the unexpected event will catch users unprepared, and possibly underfunded. In turn, and more damagingly, this will shatter the illusion

[7] Compromise EMIR3.0 text available here: https://data.consilium.europa.eu/doc/document/ST-6344-2024-INIT/en/pd

of predictability, instantly affecting TM provisions and triggering a dash-for-cash throughout the system.

Therefore, our recommendation is that unless the increased transparency and simulations are made legally binding, they will be counterproductive at the tail end of the distribution, precisely when they are most needed. And conversely, at the tail end, less is more: uncertainty will drive prudent behaviour.

Of course one cannot expect CCPs to be inflexible, as this would be against sound risk management. There has to be a way of adapting to changing conditions. Hence the pragmatic compromise through notice periods, which would allow making the simulations reliable in the short run, but still flexible.

Introducing legally binding simulations (which is another way of stating stability of margin practices in cash terms) and notice periods for changes is a policy that can be easily extended, and effectively enforced, beyond the very limited space of the CCP and its direct clearing members. This, in turn, would greatly reduce spikes in TM provisions throughout the system, across the client community and even in the bilateral space.

However, for this to be compatible with the skin in the game incentive, there must be some form of discrimination between failure of margin provisions at local level, which can realistically be attributable to poor risk management by the CCP, and a systemic event which is beyond the CCP's control and impacts simultaneously all the ecosystem. This is not the place for this discussion. The point of this digression is to suggest that an analysis of the impact of the skin in the game is perhaps required, as it influences directly the performance of antiprocyclicality policies through the CCP behaviours at the tail end of the distribution.

One final point we wish to discuss is client clearing. The overwhelming majority of entities that clear do so as clients to clearing members. For all intents and purposes, from a purely systemic standpoint, **clearing is client clearing**. What happens between CCPs and their direct members is almost marginal. This has profound implications for policy makers, especially in the context of margin behaviour. It is the clearing members' margin practices that have by far the largest systemic footprint.

The fundamental problem with client clearing – from a procyclicality standpoint – is that it is practically unregulated, as far as the predictability of margin practices is concerned. We refer here to the "principal model" which is prevalent in the EU, where the clearing member interposes itself – and its balance sheet – between the CCP and the client, fully underwriting the client's exposures vis-à-vis the CCP. From the CCP's perspective, client accounts are just another member account, so much so that the number and identity of the clients is irrelevant (and often unknown). In the event of a default (of the client) the clearing member is expected to fulfil all obligations with the CCP, and deal with the client internally. Thus, the client's credit risk is an exclusive problem of the clearing member, and margins are a contractual arrangement between the parts.

While this creates an added layer of protection around the CCP, and shields clients from the rigidities of the CCP risk management, e.g. challenging intraday margin calls, it also determines a number of features that are both relevant and problematic when designing policies around transparency and responsiveness of margins.

Possibly the most challenging feature of client clearing is the lack of legal obligation for the clearing member to replicate the CCP margin policies when interacting with the client. A moment's thinking will reveal why this is not as shocking as it sounds.

Imagine an asset rich but cash poor client, with a consolidated banking relationship with the clearing member, which engages in hedging with cleared derivatives. The clearing member has a large and diversified credit exposure with the client. This may include loans secured against real estate, equipment, future cash flows, inventory, etc. Or it may be financial assets if the client is a fund or an insurance company. It may even include uncollateralised loans and credit lines. These are presumably much larger and riskier that the counterparty credit risk related to the derivative positions. Does it even make sense for clearing members to call for margins? And if they do, most likely for regulatory window-dressing purposes, where will the client source the funds to post collateral? Most likely form the clearing member itself. The result is a margin to protect against the client's default on the derivative portfolio funded by a credit line extended to the client, collateralised by non-CCP-eligible assets. The risk did not change, just the booking.

What we are trying to argue is that in the context of client clearing in the principal model, there is little relationship between CCP margins and the credit risk protection of the clearing member towards the client. It gets lost in a holistic relationship. Margins become meaningless[8].

This has a number of implications for policies on the transparency and responsiveness of margins from the clients' perspective. The main one is that predictability is less relevant, as the clearing member will perform smoothing functions and will typically not pass the margins directly to the clients. The second is that what really matters is the behaviour of the clearing member at the tail end of the distribution, as opposed to the day to day. Which in turn requires understanding how clearing members operate.

Simplifying somewhat, clearing members intermediate risks from their clients and strive to maintain a balanced position. This means that they will try to offset long client positions with short client positions, holding only temporary inventory, and hedging it when it gets too large for comfort. They operate as systematic internalisers. This has two very relevant implications: the first is that margins posted at CCPs, especially for omnibus accounts, which are prevalent, is very small compared to the margins that (should be) collected from clients. Secondly, that the margins collected from clients and not posted to the CCP are not legally segregated[9], and can be used by clearing members for own funding purposes, including own TM provisions.

A final element is the widespread provision in master clearing agreements allowing the clearing member to call multiples of the CCP margins at discretion (up to 4 times from our direct experience).

Considered together, one can see how the likely behaviour of clearing members may unfold in the event of an unexpected large price shock. Clearing members in need of cash, especially in the event of breakdown of the CCP simulation tools predictability OR correlation breakdown, will react by increasing TM provisions. The cheapest and most effective way to do so is to call more margins, and more cash margins, from clients. This will affect very abruptly the TM of the clients (because of the magnitude[10] and surprise), and spread the dash-for-cash across the entire system.

[8] Of course this does not apply if the clearing member has no other business dealing with the client. The reality is somewhere in between, with clearing members having some other business with clients, and clients having other credit providers.
[9] Except in individually segregated accounts, which are not prevalent.
[10] It is our understanding that margin increases during stressed events were in the region of multiples of CCP requirements, not just the IM increases. Furthermore, there have been anecdotal evidence of sharp contraction of collateral eligibility.

The insight is that predictability of CCP margins is largely irrelevant for clients, unless it is coupled with something else: predictability and stability of clearing members' margins. Furthermore, flexibility for CCPs – in the form of deviations form margin simulations and intraday margin calls – is highly procyclical on clients through the (multiplicative) behaviour of the clearing members. Finally, it is in the relationship between clients and clearing members that procyclicality develops and gets out of hand.

To address this problem one would need to somehow disintermediate the clearing member. Possible solutions are transitioning to gross margin instead of net margin protocols at CCPs, which would greatly reduce the correlation breakup risk at the level of the clearing member, banning intraday margin calls, which force clearing members to provide treasury services to the clients, and creating a legally binding relationship between the CCP margins and the margins called to clients. Or one could promote more direct/sponsored membership of clients to the CCPs. While we do understand this is out of scope, we would encourage considering the impact of the specificities of the distribution channels of clearing services in assessing the policies.

Nevertheless, what we want to highlight is the likely behaviour that the policies will have at the tail end of the distribution, and why. This behaviour can be quite counterintuitive and bears very significant unintended consequences.

Answers to the consultation questions

General questions

1. *Collectively, if adopted, would the set of proposals likely result in increased transparency and a mitigation of destabilising changes in margin requirements in centrally cleared markets? Please identify within the set of proposals any which would be particularly beneficial and others which may be less beneficial (eg where the costs may substantially exceed the benefits). Please provide an explanation to your answer.*

While we do see merit in the proposals, we have concerns around the behaviours it could trigger in the event of large price swings, i.e. precisely when these policies are most needed; to the point that they could generate unintended distortive outcomes.

As a general comment, we struggle with the lack of a definition of what is deemed procyclical and should be avoided (measuring it is not the same as defining it). It is our understanding that there is an element of inevitable procyclicality stemming from the adoption of VM protocols, which are mechanically linked to the volatility (what we termed natural procyclicality in the background section of this note). This is unavoidable, unless one entertains the possibility of capping VM calls. We also understand that the IM protocols are linked to the VM, and therefore will necessarily need to increase with VM volatility. Our sense is that the target of the policy is "excessive IM variability", but without a firm quantitative definition. However, the lack of a definition frustrates the design of effective policies, especially at the tail end when the concerns about the CCP resilience are strongest, and therefore anti-procyclicality priorities weakest. We fear that there are imbedded incentives in the proposed rules that will frustrate its effectiveness at the tail end of the distribution.

The first concern regards the (distortive) informational content of simulations in the event of very high volatility episodes. In the absence of a legally binding commitment by the CCP to adhere to

the simulations and/or to restrain from changing ancillary components of the overall margins, like add-ons and haircuts, more information, transparency and simulations will foster a sense of security in the clearing members in the good times. This will incentivise them to reduce contingent provisions in their TM planning (see above for details) to optimise resources. When the CCPs then deviate from these assumptions in a discretional way, precisely at the time when transparency and simulation are most relied upon, the effect will be a loss of confidence in the framework, and a very sharp behavioural reaction triggering a dash-for-cash. In other words, the policy proposals, unless mandatory, become themselves highly procyclical at the far end of the distribution.

Our second concern is that unless there is a legally binding relationship between margins called by the CCP and those called by the clearing members to their clients, the distortive effects of more transparency for clients will be even larger than those described for clearing members. To our best knowledge, margins applied to clients are not currently a linear function of the CCP margins, and typically contain large discretional components; including a non-trivial component of funding of margins. These tend to react very strongly at the tail end of the price distribution, especially when clearing members experience TM shocks and are trying to replenish cash provisions. This may often include reductions of credit lines for margin purposes, the restriction of collateral eligibility (typically to cash only), and additional calls in the order of multiples of the CCP requirements. In other words, our experience is that procyclicality is prevalent in the client clearing space, where these policies are less effective and binding.

Our third concern is that the policies seem to describe directional, non-netted portfolios where the correlation component is relatively low. Our experience is that clearing members have predominantly large, netted portfolios, which are highly sensitive to correlation (as opposed to volatility), while clients with directional portfolios have positions at multiple CCPs, making simulations on a CCP-by-CCP base less informative (there is considerable netting at the clearing member level). In other words, simulations and transparency are most effective if applied to single products, and progressively lose their information content as portfolios become more complex and with larger offsets. Precisely where they are most needed.

Finally, we have concerns as to how intraday margin calls would feature, both in the simulations and as drivers of procyclical behaviours. In particular, we see intraday margin calls as highly disruptive of the TM provisions, because at short notice, and because they break up correlations between expected offsetting of VM flows. In other words, we have concerns that the benefits in reducing IM procyclicality may increase the overall procyclical impact of margin calls.

There are a number of improvements that could be considered in enhancing the proposals:

1. Make the simulations based on the disclosures legally binding, especially at the tail end of the distribution. This would be greatly facilitated if:
    a. intraday margin calls were banned, as highly disruptive and procyclical (at least discretional calls which are not clearly codified in the rulebooks and mechanically executed)
    b. mandatory notice periods were imposed to changes and deviations from the simulations/disclosures, best if on all elements of the margin computation inclusive of add-ons and haircuts. This should apply only to legacy portfolios, allowing immediate increases for new positions; which incidentally would dampen speculative position taking and incentivise controlled de-risking.
    c. gross margin was preferred to net margin as the standard protocol, to mitigate correlation break-up risk and reduce the procyclical behavioural incentives at the level

of clearing members. This would also greatly increase the usefulness of CCP simulations through the clearing chain, down to the clients.

2. Clarify what is the objective of the proposals by defining what is the "socially unacceptable" procyclicality that is being addressed (as opposed to the natural procyclicality described in the background section of this note). Our suggestion is to look at the EMIR3.0 intuition which defines it as margin increases – in absolute terms – in excess of what would have been if only core margins were considered; i.e. that anti-procyclicality tools should not add to the procyclical effect that they are meant to reduce, and that anti-procyclical buffers need to be absorbed during a volatility event. While minimalist, this would still place a quantitative boundary to procyclical effects.
3. Abstain from more information (costs) unless this is informative at the point of need, i.e. at the tail end of the distribution. This is also to avoid false sense of security and the consequent rapid backlash when it is frustrated.
4. Introduce legally binding requirements to link the client margins applied by clearing members to the CCP margins applied to clearing members in a linear, non-discretional way, especially at the tail end of the distribution. This is particularly relevant as 99% of all clearing agents do so as clients. Clearing is for all intents and purposes client clearing. The behaviour of client margins is what ultimately drives procyclicality and the system reaction, and where procyclicality manifests most.

We fully understand that to consider these suggestions one would need to contemplate explicitly the scenario where CCPs have less margins than they would be comfortable with (but still above the legal minimum), just at the time when prices are most volatile. We would argue that, after the adoption of recovery and resolution legislation, this is a conversation that must be had, if we truly want to address the procyclical distortive effects of margin protocols. Especially on the wider user base that does not have access to lenders of last resort and must rely on the availability and resilience of the liquidity markets.

2. *Are there any aspects of margining practices in centrally cleared markets that have not been adequately covered by the set of proposals and which could positively contribute to achieving the Margin Group's objectives?*

A. The (disruptive) impact of intraday margin calls and how to include these into the simulations.
B. The relevance of simulations in the event of discretionary deviations, especially at the tail end of the distribution, and the impact on agents' behaviour. This includes all elements of the margin call (add-ons, haircuts, correlations, eligible collateral pools).
C. The relationship between CCP margins, disclosure and simulations and the client margins, and how they can remain informative at the tail end of the distribution, in the absence of legally binding constraints linking the size of the margins applied to clients to the margins applied to clearing members by the CCP.
D. Definition of what constitutes socially unacceptable procyclicality, which needs to be curbed, as opposed to natural procyclicality, which needs to be preserved for the sake of the resilience of the CCP. The same principle applies to client margins.
E. Interplay between the incentive structure of the skin in the game provisions, the requirements for increased transparency and simulation, and the absence of legally binding constraints to follow these disclosures/simulations at the tail of the distribution; which could likely frustrate the effectiveness of the policy proposed.

F. Impact of the proposals on highly netted portfolios, especially client omnibus accounts, in the event of a break down in correlations driving the margin offsets; and comparative analysis of policy effectiveness in the context of net and gross margin protocols.

3. *Many of the proposals recommend that a market participant group (eg all CCPs, all CMs etc) be required to provide enhanced disclosure or adopt a new practice. Should the principle of proportionality, with requirements dependent on participant size or type, be used in determining how different firms apply the proposals? If so, in what ways? Please specify the proposal(s) in your response.*

Rather than proportionality, we would suggest looking at informational content. If disclosures and simulations are informative at the point of use, then size really does not matter. If they are not, size also does not matter. A client with directional future positions will benefit from having access to CCP simulations, especially in an individually segregated account, because those predictions are accurate. This benefit does not depend on size. A client with multiple accounts and OTC positions across different CCPs or with a high degree of ancillary services by the clearing member in smoothing margins will find the CCP simulations rather uninformative, as the margins called will depend on the clearing member's internalisation of the aggregate exposures across CCPs.

Also, the contractual relationship between the clearing member and the clients influences the information content of the simulations. Agreements with large discretional components get little benefit from these simulations at the tail end of the distribution.

4. *Are there cases in the proposals where there could be an effect on bilateral market margining? If so, what are the factors or instances that should be taken into consideration to ensure that proposals for cleared markets do not negatively affect dynamics within other markets?*

The single largest impact on bilateral markets margins is through the dash-for-cash events at the tail end of the distribution that the proposals implicitly triggers. See background section of this note for detailed explanation.

A definition of what constitutes socially unacceptable procyclicality could be easily extended to the bilateral space, thus extending the scope of the proposals.

Proposal-specific questions

5. *Proposals 1 and 2 recommend that margin simulation tools be made available by all CCPs to all CMs and clients, with enhanced functionality.*

a. *Are there certain modes of access to CCP simulation tools which are less costly or more effective?*

b. *Are there any impediments to making simulators available to clients? To what extent could these impediments be mitigated or resolved, eg by changing the mode of providing access to tools, or how clients request access to tools? Does this depend on the format of CCP tool (eg the use of cloud technology, the use of APIs, etc)?*

c. *Are there any reasons why the proposed historical and hypothetical scenarios to be provided as part of the simulator tool suite should differ from the CCP's current set of extreme but*

plausible stress test scenarios? In addition, would there be additional value in allowing users to customise their own scenarios within the simulator tool? If so, what types of customisation would be of most value?

d. *Are there any elements of the initial margin calculation (eg add-ons) which would be difficult to incorporate into a standardised simulation tool? If so, what are the relevant challenges?*

We have concerns about the informational content delivered. Unless there is a stable, linear relationship between the margins called by the CCP and the margins called by the clearing member, these tools are of limited use. This is particularly the case when clients are in omnibus accounts (the vast majority), have positions across multiple CCPs with the same clearing member (very frequent), and clearing members apply client-specific add-ons or can discretionally call for additional margins (standard market practice). On the other hand, models by clearing members for clients would need to incorporate the (multiple) CCP features, the clearing members' netting features, and the discretional elements (such as funding), making these both very complex (expensive) and not very useful if the discretional element is prevalent in the context of high volatility.

One solution would be to facilitate gross margin models, where there is a direct link between CCP models and client margins, and are less complex in terms of composite portfolio margining.

However, as mentioned in the background section of this note, unless these simulations/tools are legally binding, there is a concrete risk of increased procyclical behaviour when the simulations are not adhered to.

6. *Proposal 5 recommends a set of changes to the PQDs, further detailed in Table 5 of the report.*

a. *With reference to Table 5, would the proposed additional data breakdowns and increased frequency of reporting facilitate market participants' understanding of the margin system?*

b. *Would there be any challenges in providing the additional data breakdowns or higher reporting frequencies? If so, are there alternatives that would be equally effective? For instance, are there alternative modes of more frequent public disclosures that would achieve a similar goal but result in reduced burdens on CCPs?*

c. *Are there any additional amendments to the PQDs, beyond those set out in Table 5, that would help market participants and stakeholders understand or anticipate changes in margin requirements? What would this information be, and how could this information be effectively incorporated into the PQD framework? For instance, would there be value in including additional non-quantitative information in the PQDs related to margin changes?*

d. *Are there any examples of current public disclosures by one or more CCPs which could be used as a guide for improved transparency?*

No comment.

7. *Please review the analytical annex detailing the proposed design of a margin responsiveness metric, as described in Proposal 6.*

a. *Is the proposed method for measuring margin responsiveness (ie a large call metric), alongside the associated change in volatility, an informative way of measuring*

responsiveness? If not, what alternative approach or methodology should be used, and why would that alternate approach better aid market participants in their liquidity planning?

b. *For each parameter input for the responsiveness and volatility risk metrics, please select your preferred choice from the list below or provide an alternative option. Please provide an explanation and any supporting evidence for your choice.*

- *Large call window: five or 20 days.*
- *Observation period: one quarter or one year.*
- *Product vs portfolio reporting: Product, static portfolio or dynamic portfolio. If supporting product-level reporting, please provide information on which products should be reported by the CCPs. If supporting static and/or dynamic portfolio reporting, please provide information on how the portfolios should be determined and an explanation for how that one portfolio would be representative of clearing activity at the CCP.*
- *Volatility risk metric: Standard deviation or VaR (99%).*
- *Volatility risk metric lookback period: 90 days or two years.*

c. *Are there other parameters where calibration decisions are necessary for consistent disclosure of either margin responsiveness or market volatility?*

d. *Do you foresee any challenges in the development and use of the proposed metric? For instance, are there challenges in applying a harmonised choice of parameter inputs across all CCPs and all products?*

Using a metaphor, knowing the exact performance of the air bag, except at the point of impact, is of little consolation. Without some form of legally binding guarantee that the information proposed above will still hold true during a volatility spike the effectiveness of the policies and the business case for the costs of producing the information are greatly reduced. Counterintuitively, these could promote a false sense of security, which will trigger a backlash at the point of crisis.

8. *Proposal 7 recommends that CCPs identify and define an analytical framework for assessing margin responsiveness within the broader context of margin coverage and cost.*

a. *Are there other important balancing factors which should be taken into consideration when evaluating the performance of initial margin models?*

b. *What elements of the "trade-off" framework would most help regulators to better understand how a CCP balances between important risk management factors? In what ways would this framework be useful in identifying cases where a review of the model by the CCP and/or the authority would be beneficial?*

As mentioned above, there is tension between the intended outcome of the proposed policies and the skin in the game requirements. The latter will always drive CCPs to deviate from the framework using discretion to self-protect. The suggestion is to incorporate analysis of the incentive structure of the skin in the game in terms of behaviour of CCPs at the tail end of the volatility distribution.

9. *Proposal 9 recommends a number of enhancements to CM-to-client transparency.*

a. *Are there aspects of the proposal that would be particularly valuable for clients, and are there aspects of the proposal that would be particularly challenging for CMs to meet?*

b. Do CMs currently provide any form of simulation tool, in addition to the tools provided by CCPs? For those who currently do not, what is the feasibility of CMs developing such tools? What functionality would be of most use to clients in CM-designed simulators?
c. On the proposed quantitative disclosure described in 9e), do you have supportive or alternate views on the information that should be provided and the format in which the information should be disclosed?
d. Do you agree that CMs should adopt an analytical framework for measuring the responsiveness of initial margin requirements for their clients, similar in nature to the proposed framework for CCPs described in Proposal 7? If so, in what ways might that framework need to differ from that used by CCPs, and in what ways might this depend on the type of CM covered?
e. Do you foresee any barriers or challenges to CMs implementing the proposed disclosures, such as cost, negative effects on risk management, or any potential overlap with traditionally proprietary information

The main issue is the lack of direct correlation between the margins applied by the CCP to the clearing members, and the margins applied by the clearing members to the clients. This is due to a number of factors:

a) Funding of client margins, especially in the context of intraday margin calls
b) Client specific add-ons
c) Positions spread across multiple CCPs (with different simulations)
d) Widespread discretion in calling additional margins

The last point is particularly problematic. Having access to the CCP model is rather uninformative for the clients if this does not represent what their margin calls will be. Asking the clearing members to develop simulations that aggregate multiple CCPs or clients specific circumstances is very expensive, and of questionable effectiveness if these will not represent the actual margin patterns at the tail end of the distribution due to discretional behaviour of clearing members.

Furthermore, reasonable approximations in the good times which are not adhered to in a volatility event will promote a false sense of security, increasing the risk of finding the clients unprepared, and triggering dash-for-cash responses when the trust in the models evaporates.

10. Please review the list of example CM-to-CCP disclosures provided at the end of Section 4.3.2.
a. Would the information included in the proposed disclosures aid the CCP's own risk management processes? If not, is there alternative information which would be useful for CCPs to receive from members?
b. Is any of the information included in the proposal description either redundant or duplicative of information already available to the CCP, and thus of minimal value? Does any of the information included in the proposed disclosures differ by institution type?
c. Would collection of the information impinge upon current legal disclosure frameworks?
d. Do any of the example disclosures potentially overlap with traditionally proprietary information?

No comment.