J.P.Morgan

5 June 2015

Office of the General Counsel
ASX Limited
20 Bridge Street
Sydney NSW 2000

Attention: Janine Ryan, General Manager, Legal

By Email: janine.ryan@asx.com.au

Dear Sirs,

Central Counterparty Recovery – Consultation on Exposure draft operating rules to implement loss allocation and replenishment tools for clearing participant default and non-default loss – submission to ASX Limited ("ASX") by J.P. Morgan Markets Australia Pty Limited ("J.P. Morgan")

We refer to the ASX Consultation Paper of April 2015 - "Exposure draft operating rules to implement loss allocation and replenishment tools for clearing participant default and non-default loss" ("**Consultation Paper**") and our meeting on May 27, 2015 at our offices.

J.P. Morgan appreciates the opportunity to provide feedback on the Consultation Paper and provides a summary of its views on the proposed recovery tools below.

1. *Status of Recovery Handbook*

Rule 1.5 of the Recovery Rules provides that the Recovery Handbook does not form part of the Recovery Rules, the ASX Clear Rules or the ASX Clear (Futures) Rules. However, Rule 1.5. also provides that each Participant undertakes to comply with the Recovery Handbook and a failure to do so is a contravention of the Recovery Rules. Given that (a) Participants are effectively bound by the Recovery Handbook and (b) non-compliance with the Recovery Handbook constitutes a breach of the Recovery Rules, it would appear that the Recovery Handbook is in substance, if not technically, part of the Recovery Rules. Accordingly, given the potential consequences to Participants that may result from any variation to or replacement of the Recovery Handbook by ASX, we would suggest that Participants be consulted before any amendments are made to the Recovery Handbook.

2. *Partial Termination*

As per our comment letter of 21 November 2014 we are not in favor of partial tear-up in its current proposed form. We believe that partial tear-up should be an emergency measure only and should therefore only be used for residual trades. We therefore urge ASX, especially for more liquid instruments, to have a limit in place as to the number of trades that can be torn up relative to the overall number of defaulted trades. We acknowledge however that this approach may not be achievable for less liquid instruments that ASX clears (such as energy contracts). In addition, in line with the recommendations made by ISDA[1] when partial termination is applied, Participants should be provided compensation for losses incurred. Losses stem from the difference between close out value as determined by ASX and actual replacement costs of such partially terminated trades.

3. *Resignation*

J.P.Morgan is of the opinion that any resignation should be subject to clear objective criteria and that any Participant meeting these objective criteria should be allowed to resign without any further approval from ASX. In this regard, we note that Recovery Rule 4.3, while specifying the objective criteria upon which ASX's acceptance of a Participant's Resignation Notice is conditional, also gives ASX the ability to "reasonably" refuse to accept a Participant's Resignation Notice even though the Participant may have satisfied the specified objective criteria. ASX's ability to "reasonably" refuse a resignation can undermine the certainty of the resignation process. Therefore we would recommend that any reference to an ASX approval as a condition to an effective resignation be removed.

In addition, with respect to rule 4.4., it would appear that, where ASX accepts a Participant's Resignation Notice before the Default Period, the Participant could nonetheless still be subject to recovery measures implemented during the Default Period. In our view, if a Participant satisfies the resignation conditions before the commencement of the Default Period, the Participant should not be subject to recovery measures implemented during the Default Period, nor be subject to any losses stemming from such Default Period.

4. *Mandatory replenishment*

We note in Schedule 5 that any replenishment of the Default Fund is subject to a cap (subject to further regulatory requirements). While we appreciate a cap on any member replenishment, we encourage ASX to ensure that any such capped Replacement Default Fund size continues to be risk based and meet the regulatory "Cover 2" requirements.

[1] ISDA – Default Management Recovery and Continuity: a Proposed Recovery Framework, January 2015 – page 6

5. ***Allocation of Investment Losses***

ASX proposes that Participants absorb any and all investment losses above A$75 million. However, it does not seem clear from Part 6 of the Recovery Rules as to how this is measured (e.g. whether this is to be determined per event or for any losses incurred over a fixed period of time).

The current scope of any investment losses is limited to 1) the insolvency or default of an issuer or counterparty and 2) a recognized loss or recognized diminution in value of an ASX investment. However ASX may also incur losses from custodial arrangements and/or losses from a failure to follow the investment policy. We would encourage ASX to include these type of losses under the definition of "Investment Default" as well.

In general J.P.Morgan, just like the Futures Industry Association[2], is of the opinion that Participants should not have any responsibility for investment losses as only ASX is able to quantify and manage these risks. As a result ASX should have appropriate and sufficient financial resources to cover all investment losses. In addition, and while not covered by this market consultation, not only investment losses, but any losses not stemming from a member default, should be fully for the account of ASX and its shareholder(s) and should not be allocated to Participants.

Should, due to regulatory constraints, ASX not be in a position to meet the above market recommendation, we have the following observations:

The current first loss share of A$75million on a total invested portfolio of roughly A$3.5billion seems rather low, especially since Participants have limited to no say in the actual investment criteria. As a result we encourage ASX to increase its first loss share on a pro rata basis related to both the total invested funds and the risk profile of the portfolio, while at the same time ensure this minimum first loss is replenished by ASX upon its usage. Moreover this first loss should be subject to a minimum level (expressed in a monetary value) and held completely ring-fenced from any other ASX funds, while a Participant's maximum loss should be capped.

Any loss recoveries should be distributed to the impacted Participants first before ASX. While this may be stated in rule 6.5 already, we would appreciate if the rules could be clearer on the order of distribution of any Recovered Amount (i.e. Participants before ASX).

The current Consultation Paper does not explicitly foresee in the Participants passing on any Investment Loss to their underlying clients. In order to potentially facilitate such a mechanism, we encourage ASX to include a provision which will require ASX to provide a detailed breakdown on how a Participant's Investment Loss is split between, on the one hand its house accounts and its client's accounts and on the other hand, split among the client accounts.

Finally, as mentioned above, the first loss share should also be subject to a certain time period.

[2] FIA Global – CCP Risk Position Paper, April 2015 – page 7

6. ***Payment Reduction***

In case ASX applies payment reduction, Participants should be compensated for any losses or shortfalls incurred as a result of the payment reduction. Such compensation can be in the form of a claim on future ASX earnings or a pro-rata share in ASX's claim against the defaulting Participant(s).

In addition the Payment Reduction should be limited in time and not be able to drag on for an unlimited period of time. The current Reduction Period proposed by ASX is too open ended and therefore provides too much uncertainty for Participants. We strongly encourage ASX to put a stricter time limit in place to ensure the default management process and any auction is managed efficiently and appropriately. These comments are in line with aforementioned paper of the Futures Industry Association[3] and ISDA[4]

7. ***Replenishment***

We note that ASX resizes its Guarantee Fund on a quarterly basis. Especially after a large default, we would encourage ASX to consider resizing this on a monthly basis to ensure it has sufficient financial resources available to it in times of distorted market volatility. Such approach would also reduce pro-cyclicality. Alternatively, insofar not already applied by ASX, backtesting on the sufficiency of the Guarantee Fund, should allow ASX the flexibility to resize this fund where testing results show insufficient levels.

8. Closing statements

We have set out our views on the ASX's proposed recovery tools for the ASX Recovery Rulebook and ASX Recovery Handbook. Whilst we are generally supportive of the proposed amendments and introduction of new tools for CCP recovery, we encourage ASX to consider scenarios where recovery is no longer viable and a CCP resolution framework (with a focus on recapitalisation rather than liquidation) is required.

[3] ibid

[4] See footnote 1

If you would like to discuss our comments and views in more detail, please reach out to:

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Yours sincerely,

Richard Shires
Executive Director and Assistant General Counsel
J.P. Morgan Markets Australia Pty Ltd

APPENDIX

J.P.Morgan Market Australia Pty Limited's comment letter dated 21 November, 2014

J.P.Morgan

ASX Limited
20 Bridge Street
Sydney
NSW 2000

21 November 2014

Attention: Janine Ryan, General Manager, Legal

By Email: janine.ryan@asx.com.au

Dear Madam/Sir,

Central Counterparty Recovery – Uncovered loss allocation and replenishment tools for clearing participant default– submission to ASX Limited ("ASX") by J.P. Morgan Markets Australia Pty Limited ("J.P. Morgan")

We refer to the ASX Consultation Paper of October 2014 - "*Central Counterparty Recovery – Uncovered loss allocation and replenishment tools for clearing participant default*" ("**Consultation Paper**").

J.P. Morgan thanks ASX for the opportunity to provide feedback on the Consultation Paper and provides the following summary of its views on the proposed recovery tools for ASX Clear and ASX Clear Futures below.

1. ***Offsetting transaction arrangements***

ASX Clear

With respect to Offsetting transaction arrangements as currently in place, we submit that these be limited in time for the reason that a non defaulting member should not be held to a securities lending or repo trade until ASX has obtained sufficient liquidity to meet its obligations against the non defaulting member. We would therefore encourage ASX to place an appropriate time limit on the term of these Offsetting transaction arrangements. As a member, from an economic perspective, will not always be in a position to provide liquidity when ASX needs it, we would also encourage ASX to have –committed- bilateral liquidity (repo) lines in place, which will be applied prior to a forced liquidity arrangement with a member who holds a mirroring trade of a defaulted position.

2. ***Emergency assessments***

ASX Clear

We note that the ASX Clear proposes to amend its existing rule on emergency assessments to include a cap at $300 million in total per 'multiple default period' of 30 days post completion of default management process (page 26 of the Consultation Paper).

We submit that emergency assessments should not form part of loss absorbing resources for the reasons set out below.

(i) As we have advocated for in our public paper "What is the resolution plan for CCPs" (as released in September 2014 and discussed with ASX during our meeting in October), J.P. Morgan is of the view that a CCPs total loss absorbing resources should be fully prefunded. Reliance on emergency assessments forming part of loss absorbing resources is likely to work pro-cyclical at times that ASX would need to rely on these emergency assessments. Thus, there would be no assurance that ASX could access such assessments in the event of serious market instability. We therefore submit that emergency assessments should not form part of the ASX's recovery tools, thereby removing the risk of the member base being unable to fund these assessments in time of severe market stress.

ASX Clear Futures

We note that ASX Clear Futures proposes emergency assessments as a new tool, introducing a cap based on the commitment at the time of and over multiple default periods and for emergency assessment liability per clearing participant to be a proportion of total call based on its commitment at time of default (page 29 of the Consultation Paper).

For the same reasons that we have articulated in respect of ASX Clear above, we submit that emergency assessments should not be introduced under the ASX Clear Futures rules.

We submit that ASX consider removing any existing right of ASX Clear Futures under its rules to call for emergency assessments and not proceed with the implementation of an emergency assessment as described on pages 26 and 29 of the Consultation Paper.

3. Partial termination

ASX Clear

We note that the ASX Clear proposes to amend its existing rule on partial termination to allow for the termination of derivatives only to close out positions of default clearing participants, triggered on the basis that there is no 'available market' (page 27 of the Consultation Paper).

We submit that ASX Clear should not implement this proposal for the following reasons.

(i) In our view, partial termination in its current form unfairly affects the subset of members with impacted positions. These members would need to replace their terminated positions and would likely suffer unpredictable and unreasonable replacement costs which could be exacerbated by market awareness of the torn up positions. Moreover, partial tear up could also potentially contradict the "no creditor worse off than in insolvency principle", and therefore potentially result in legal claims.

(ii) We consider that any consideration of partial tear up should be subject to participants' agreement on appropriate compensation for losses (either out of the existing default waterfall or through haircut of future earnings/ senior debt/ equity stake in the CCP) and appropriate regulatory oversight.

(iii) An alternative to the proposal could be to compartmentalize the segments in such a way that CCP can close down a complete subset of its clearing service for those segments that have open positions that remain outstanding after all efforts to re-balance the segment have been made. In this way there is complete tear up, but only for a particular subset of a segment and, as such, does not adversely affect a particular subset of members that happened to have a position mirroring that of the defaulting member. While this would not interfere with a member's netting set, it would potentially lead to increase in costs as it would not allow for offsets between the compartmentalized segments.

(iv) In our view, any form of partial termination should be limited in size (this tool should only be used once a substantial portion of the defaulted portfolio (for example, up to 80-90 %) has been liquidated already) and therefore should be used only to close out a residual small subset of trades and should not be used to close out the majority of a defaulter's portfolio of trades.

<u>ASX Clear Futures</u>

We note that ASX Clear Futures proposes to extend partial termination from futures transactions to OTC derivatives trades as well. In addition ASX proposes to remove a cap currently in place at ASX Clear Futures.

As per our above comments in respect of ASX Clear, we submit that ASX Clear should not implement amendments to its rules that extend the ability for partial tear-up to the OTC segment or abolish the existing cap of tearing up trades. We believe that partial tear up should be an emergency measure only and should therefore only be used for residual trades. Moreover, we submit that where partial tear up is used, it should be carried out under appropriate regulatory oversight and adversely affected members should be provided with appropriate compensation for any losses they incur. We submit that any continuation and expansion of ASX's ability to partially tear up trades should be in a form as suggested in the

abovementioned paragraph relating to ASX Clear (small subset of trades and/or compartmentalization).

Should ASX be of the opinion that it requires partial tear up, we submit that ASX should ensure that the process of identification of the trades should be pro rata with no reference to any original counterparty so as to ensure that concepts of novation and netting are not compromised.

4. Complete termination

ASX Clear

We note that the ASX Clear proposes to introduce a new rule on complete termination to allow for all contracts to be cash settled (including deliverable contracts), triggered when restoration of a matched book within a reasonable time is not possible or where the CCP reasonably considers that its default loss may exceed defaulting clearing participant's initial margin, pre-funded mutualised default resources and emergency assessments (page 28 of the Consultation Paper).

We submit that ASX should not proceed with this proposal for the following reasons.

(i) Instead of complete termination, which will undoubtedly cause significant market disruption given that members and their clients will end up being unhedged and would likely need to revert to the market at the same time to enter into similar types of transactions, we submit that ASX, in consultation with the Australian regulatory authorities should give due consideration to the implantation of a resolution framework (instead of complete termination) that allows a resolution authority to step in (prior to complete tear-up) and enable the CCP to continue to operate its systemically important operations, if certain resolution triggers (e.g. the CCP is no longer considered to be a viable going concern etc) are met.

(ii) In this respect, J.P. Morgan is a strong advocate of the resolution and recapitalization of a CCP rather than its liquidation. In our view, such a resolution framework should ideally be construed by means of a recapitalization fund (as described in the aforementioned J.P. Morgan paper as appended to this letter).

(iii) We believe that provision should be made for a fund (contributed to by members and the CCP) that would be segregated from members and the CCP and would be applied by the Australian regulatory authorities to fully fund a new guarantee fund once such regulator has triggered resolution. The recapitalization fund would be similar in size to the existing guarantee fund and would be used to fund the guarantee fund of a new "bridge" entity into which the CCP assets would be transferred. This would enable all non-defaulting positions to continue to remain open and thereby allowing systemically important operations of the CCP to continue the following business day

without disruption. This solution would serve to avoid any potential considerable market instability in cases where the CCP is allowed to fail and terminate all trades.

(iv) We submit that, although the liquidation and tear up of trades would provide some immediate crystallization of losses to counterparties and potentially allow for return of guarantee funds and initial margin, this would also create asymmetry of risk across market participants. Moreover this could also result in extreme price volatility and unpredictable levels of gain and loss on any individual portfolio.

(v) Also, we are of the view that the time it would take to co-ordinate a full tear up and/or liquidation could leave many counterparties with an extended period of uncertainty where risk is unclear and closed-trades cannot be replaced on the day following a failure.

(vi) We submit that the liquidation of a failed CCP (as opposed to resolution through recapitalization) could also result in immediate collapse in the price of many types of collateral typically used for initial margin in cleared, as well as non-cleared, markets.

ASX Clear Futures

We note that the ASX Clear Futures proposes to introduce a new rule on complete termination to be triggered when restoration of a matched book with a reasonable time is not possible, or where CCP reasonably considers the default loss may be so large that application of VMGH (and/or emergency assessments) may lead to contagion or be insufficient. For the reasons we have submitted in the previous paragraph concerning ASX Clear, we submit that ASX Clear Futures should not proceed with this proposal. Rather, we submit that ASX Clear should give due consideration to a resolution framework that effects an immediate re-start of the systemically important activities of CCP, in a manner and with resources indicated above (page 31 of the Consultation Paper).

5. Mandatory replenishment

ASX Clear and ASX Clear Futures

We note that the ASX Clear and ASX Clear Futures both propose to introduce a new rule on mandatory replenishment that require continuing members to contribute up to $75 million in aggregate to a new default fund immediately at the end of a multiple default period which is available to cover losses in respect of future defaults (not prior losses). Calculation of individual clearing participant replenishment obligations would be based on relative initial margin of continuing participants pre-default (pages 28 and 31 of the Consultation Paper).

While we support mandatory replenishments as a tool to ensure ASX will at all times have sufficient resources available to absorb any losses arising out of extreme losses of member defaults, we submit that ASX should ensure that the rulebooks of ASX Clear and ASX Clear Futures clearly state that any replenishments cannot be used by the CCP for any losses occurred prior to the replenishment.

6. Variation Margin Gains Haircutting (VMGH)

ASX Clear Futures

We note that the ASX Clear Futures proposes to introduce a new rule on VMGH triggered when the CCP reasonably considers default losses may exceed available financial resources excluding 25% of assessments received (page 30 of the Consultation Paper).

While we are supportive of ASX Clear Futures adopting VMGH as a new recovery tool, we submit that this should be used as an interim instrument only (rather than permanent tool), with clear ex ante rules on the termination of its usage. We submit that, while VMGH may be an effective tool to enable daily settlements to continue and incentivizes auction participation by a member with opposite positions, it should not be used indefinitely because it disproportionately impacts one member over another.

In particular, VMGH could have unexpected consequences: End users who expected cash payments would be likely to liquidate assets in order to raise funds-including the same assets that serve as collateral for initial margin. This would depress the value of these assets and weaken the market, creating a pro-cyclical scenario that could further destabilize an already distressed market.

As such, we would also submit that the members who will be subjected to VMGH should be provided with due compensation in the form of an equity stake or senior claim in the books of the CCP. We also note that that VMGH does not immediately provide CCP with the necessary resources to re-capitalize and re-open on next day with a funded guarantee fund and therefore inherently reflects its temporary nature.

7. Other observations

Skin in the game

While we are strongly supportive of ASX continuing to have skin in the game, we submit that ASX should make this amount scalable to the overall guarantee fund size, instead of allocating a fixed amount.

While ASX's skin in the game may seem to be rather large at this moment in time, this number will relatively decrease when the guarantee fund becomes larger over time. Although currently far above these numbers, we encourage ASX to have skin in the game to a level that is the greater of either 10% of the aggregate member contributions to the guarantee fund or an amount at least equal to the contribution of the largest single clearing member.

Non Default losses

Lastly, we note that while ASX drafts a plan for implementing a procedure to allocate losses as a result of a participant's default, this does not address other types of losses. As a result we

respectfully request ASX to confirm that non-default losses will be covered by ASX's capital and will not be allocated to members.

8. Closing statements

Whilst we are supportive of the proposed amendments to existing tools and introduction of new tools for CCP recovery, we submit that the ASX should provide greater consideration to implementing a CCP resolution framework (with a focus on recapitalisation rather than liquidation) for the reasons that we have set out above.

If you would like to discuss our comments and views in more detail, please reach out to:

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Sincerely,

Richard Shires
Executive Director
J.P. Morgan

APPENDIX

What is the Resolution Plan for CCPs? – JP Morgan Chase & Co. (September 2014)

September 2014

Office of Regulatory Affairs

What is the Resolution Plan for CCPs?

In the midst of a dramatic increase in the number of transactions channeled into central counterparties as required by regulation, CCPs have arguably become one of the most systemically important of any systemically important financial institution ("SIFI").

Securities and derivatives clearinghouses ("CCPs") play a crucial role in reducing systemic risk by facilitating the netting of exposure and the mutualization of tail risk among many participants. Following the Dodd-Frank Act, the volume of transactions (as measured by trade count or notional exposure) going through these institutions has increased significantly and will continue to do so. In addition, the use of clearinghouses is no longer optional: In the United States, all derivatives deemed standardized must be cleared on a CCP. The EU and Asia are following this requirement in close succession.[1] The size and required use of CCPs demands careful scrutiny of how those institutions will manage a potential failure, and whether the risk concentrated in CCPs represents a new single point of failure for the entire system.

The issue of resolution is even more important given that many CCPs have migrated from being utilities, owned by members, to private for-profit institutions. This model introduces an inherent tension (and possible conflict) between a CCP's role as a market utility and its commercial objectives to increase revenues and market share.

In order to achieve the objectives of global regulatory reform and manage market and economic risk effectively, two questions must be asked and answered. First, are we confident that CCPs have sufficient financial safeguards to minimize the threat of the new "too big to fail"? Second, if a CCP should fail, how can that failure be managed to limit market contagion, avoid pro-cyclicality and ensure the continuity of critical financial market functions?

[1] Following a global 2008 commitment by the G-20, the central clearing of OTC derivatives transactions is now mandated under the Dodd-Frank Act, European Market Infrastructure Regulation (EMIR) and laws in other jurisdictions.

Recapitalization should be preferred over liquidation.

Maintaining critical operations of the CCP should be the driving principal in default. Existing industry solutions advocate, and CCP frameworks seem to favor, tear-up and/or liquidation as the current solution to resolution. This is largely because neither a clear recapitalization fund nor a practical resolution plan for CCPs has yet been discussed. However, there are several issues with liquidation as a preferred solution.

This paper proposes the steps required to establish a credible CCP resolution framework to manage the unlikely event of a CCP failure. The scope is separate and distinct from the valuable work related to CCP recovery tools (measures to allocate losses) that is ongoing by industry groups and regulators.

Recommended solutions for consideration

- A standard, disclosed stress test framework should be mandated by regulators and used to size "Total Loss Absorbing Resources."
- The CCP's entire Total Loss Absorbing Resources should be fully pre-funded.
- CCPs should be recapitalized rather than liquidated upon failure, to continue systemically important activities.
- CCPs should have "Recapitalization Resources" to allow opening on the business day following failure with a fully funded Guarantee Fund.
- CCPs should contribute to the Guarantee Fund and Recapitalization Resources requirements the greater of 10% of the Guarantee Fund or the largest single clearing member contribution.
- Beyond this minimum, CCPs should retain flexibility as to how such resources are tranched and allocated.

First, liquidation of a failed CCP could result in the immediate collapse in the price of many types of collateral typically used for initial margin in cleared, as well as non-cleared, markets (the so-called "fire-sale problem").

Second, although the liquidation and tear-up of trades would provide some immediate crystallization of losses to counterparties and potentially allow for the return of guarantee funds and initial margins, this would create asymmetry of risk across market participants, resulting in extreme price volatility and unpredictable levels of gain and loss on any individual portfolio. In addition, the time it would take to coordinate a full tear-up (inclusive of agreeing on final settlement prices) and/or liquidation could leave many counterparties with an extended period of uncertainty, where risk is unclear and they are unable to replace closed-out trades on the business day following a failure.

The systemic destabilization caused by CCP liquidation would increase when options for market participants to seek replacement services are limited. For many centrally cleared products, the market is either vertically integrated with execution venues (i.e., in the futures market) or a single CCP is the only clearer for specific OTC derivatives, repo or securities products. In each case, in order to transact in these products, market participants are required to clear their transactions through a single CCP without an option to easily replace the risk in the event of a CCP failure.

Variation Margin Gains Haircutting ("VMGH"), or the reduction of unpaid payment obligations, while well intended by its proponents, is equally flawed as a sole solution to resolution. VMGH could have unexpected consequences: End users who expected cash payments would be likely to liquidate assets in order to raise funds—including the same assets that serve as collateral for initial margin. This would depress the value of these assets and weaken the market, creating a pro-cyclical scenario that could further destabilize a collapsing market.

It is possible that VMGH could be used as an interim resource prior to a proper CCP recapitalization plan being implemented. Use of VMGH as an interim measure presumes the default management process has remained effective but additional resources are required to facilitate the allocation of losses after a failure.

Without a credible recapitalization resolution strategy, policymakers confronting a failed CCP will be presented with the same Hobson's choice faced during the 2008 financial crisis. Given the choice between liquidating a failing CCP (thereby ceasing its critical market functions) and bailing out the CCP with taxpayer funds, policymakers will likely be forced to choose the latter.

Is the current framework sufficient to address a possible CCP failure?

The failure of a CCP would occur at the point where loss absorbing resources are insufficient for the CCP to meet its obligations as a going concern. Currently, upon the failure of a clearing member, loss absorbing resources are allocated as follows:

- **Defaulting member collateral:** A defaulting member's initial margin and guarantee fund contribution are the first source of offsetting funds against losses.
- **CCP contributions:** Some, but not all, CCPs contribute resources as a first tranche of losses after initial margin.
- **Non-defaulting member guarantee fund:** The non-defaulting members' contributions to the guarantee fund serve as the primary defense against losses that exceed the defaulting member's initial margin and guarantee fund contribution.
- **Non-defaulting member assessments:** To mutualize and cover remaining losses, the CCP may assess non-defaulting members for predefined or, in some cases, uncapped amounts. These assessments are often a multiple of a member's original guarantee fund contribution.

There are several issues with this framework. First, CCPs size their loss-absorbency resources via their own proprietary models. While these models may in fact be robust, it remains challenging to understand how resources are sized since CCPs do not share their stress scenarios and associated inputs and methodologies with members or members' clients. Thus, market participants cannot have full confidence in the sufficiency of the resources. Furthermore, as CCPs clearing the same products use different approaches to sizing resources, the ability for a member to compare CCPs from a risk perspective becomes nearly impossible. This opacity stands in stark contrast to banks, whose standardized stress tests are conducted by the Federal Reserve Board (and are underway by the Bank of England) with published results on a regular basis.[2]

[2] *A framework for stress testing the UK Banking System* (October 2013) requested comments on whether CCPs should be held to the same stress testing as U.K. banks.

Second, once the guarantee fund is depleted, the CCP may require additional assessments from clearing members to cover losses, as described above. Meeting these requirements could prove difficult during a market crisis when the ability to provide liquidity and capital may be challenged. Moreover, it is possible, and even likely, that if one CCP is in a stress event other CCPs will be impacted. Should more than one CCP call on members to fund contingent liabilities simultaneously, the consequences would be magnified—placing additional stress on markets at the worst possible time.

Third, the guarantee fund of most CCPs is typically funded almost entirely by clearing member contributions, with the CCP making minimal, often fixed, contributions that don't scale to correspond to risk. The current risk mutualization model means that the CCP often has little, if any, direct financial stake in the funds used to cover losses from default. This can be problematic given their conflicting objectives of market stability versus profit maximization and could allow for growth at the expense of appropriate rigor in risk management.

It's the right time to put in place a resolution framework and properly funded recapitalization resources.

Given the importance of CCPs, recapitalization should be the desired outcome in the event of a failure. Recapitalization would occur only after all losses associated with a failure have been allocated and would allow systemically important activities to continue. Recapitalization also avoids the uncertainty associated with liquidation and/or tear-up of trades, and reduces the likelihood and impact of fire-sale risk on collateral.

Proposed resolution framework and process

- The supervisory authority closes the CCP or its holding company.
- A resolution authority charters and transfers operating subsidiaries to a bridge holding company.
- The CCP or its holding company is recapitalized by transferring liabilities to the bridge company until the balance sheet reaches appropriate levels.
- The escrowed recapitalization resources would be used to create a new guarantee fund without requiring initial contributions from CCP members.

We believe that substantive changes are needed to ensure that CCPs can continue as ongoing concerns and serve as the market-stabilizing force envisaged by regulators. In order to align protections to the current market environment and limit the potential for market disruption and systemic risk, we propose that:

- **Standardized regulatory stress testing and disclosure should be mandatory to determine the size of required loss absorbing resources.** A regulatory driven framework based on sufficiently severe stressed macroeconomic conditions would provide a consistent, initial baseline from which CCPs can start to size their loss absorbing resources. CCPs would need to comply with this baseline set of macro assumptions, which would be part of a broader required framework that includes idiosyncratic stresses on basis/higher order risk exposures embedded within individual CCP portfolios. Regulatory-driven macro scenarios, combined with the specific micro scenarios unique to particular asset classes and portfolios, would be used to determine the financial safeguards needed to cover losses arising from the defaults of the "n" largest net debtors (where "n" represents the number of member defaults in accordance with current regulatory coverage requirements).

  A consistent, disclosed scenario-based framework, along with the disclosure of results, will create CCPs that are more resilient and transparent, fostering confidence in members and their clients, settlement banks, liquidity providers and other market participants.

- **Remove uncertainty by prefunding all loss-absorbency resources to remove reliance on members' unfunded commitments or assessments during market instability.** Forcing the total liability of all market participants to be fully funded will remove the current uncertainty as to whether funds will be available at the time of greatest need. This could also allow regulators to work in close coordination with one another to monitor the total liabilities of all market participants in aggregate across the system. Although the removal of assessments will likely increase the upfront funding obligations of many market participants, the liability of each participant (measured as the current guarantee fund and future assessments) may be unchanged or lower based on a regulatory stress framework.

- **CCPs should have a minimum contribution to the Guarantee Fund.** We recommend that CCPs contribute the greater of 10% of member contributions or the largest single clearing member contribution. Having a minimum level of "skin in the game" would more appropriately align incentives amongst the CCP and its members and ensure proper risk management and governance. Aligning and scaling CCP contributions with those of the largest clearing member will also help to ensure that membership requirements remain strong and will limit the possibility that any single member becomes too large as a proportion of total risk (concentration risk).
- **A disciplined resolution framework, with designated recapitalization resources funded by CCPs and members, should become the market standard.** In the event of a failure, CCPs should have recapitalization resources on hand. Contributions would be in addition to the guarantee fund and would be held in escrow at a central bank or government agency. These resolution resources (the "recap fund") would only be tapped once an existing guarantee fund is fully or nearly depleted, after all losses have been fully allocated (via margin haircutting or other tools), and resolution has been triggered. The recap fund would allow for orderly resolution once a CCP has reached the point of nonviability (the "end of the waterfall").

  Only the appropriate government agency would trigger a CCP resolution, at which time the recap fund would be "bailed in" and exchanged for equity in the recapitalized CCP. The resources would be used to establish a new guarantee fund, which would allow a failed CCP to open on the following business day, limiting the potential for market contagion or further destabilization.

  This is a similar approach to that seen for SIFI banks in the U.S., where the Federal Reserve is expected to require loss absorbing resources of bank holding companies to facilitate resolution without taxpayer assistance. In Europe, under the new Bank Recovery and Resolution Directive, banks and investment firms will also be required to hold a minimum amount of liabilities that would be "bailed in" as part of resolution.

  Similar to our proposal for the guarantee fund, both the CCP and its members should contribute to the recap fund.[3] A recap fund based on contributions from all interested parties will help to align their shared interests.

[3] The CCP would retain flexibility over the form the recapitalization resources would take in its capital structure.

How does this resolution proposal fit in to existing and evolving legal constructs?

U.S.: CCPs facilitate the clearing, settlement and recording of monetary and other financial transactions, such as payments, securities and derivatives contracts (including derivatives contracts for commodities). As such, a CCP would be deemed a "financial company" under the criteria defined in Title II of the Dodd-Frank Act.* In the event of failure, CCPs would be eligible to be resolved by the Federal Deposit Insurance Corporation ("FDIC").

U.K.: The Bank of England's (Bank) Special Resolution Regime (SRR) was extended (via the Financial Services Act of 2012) to CCPs and other non-bank financial entities. Where a CCP is failing (or likely to fail), the Bank could transfer the CCP business to a wholly or partially Bank-owned bridge entity, provided that such a transfer is in the public interest. Her Majesty's Treasury is introducing secondary legislation to enact these new SRR powers following its 2013 consultation on *Secondary legislation for Non-Bank resolution regimes*.

European Commission: The European Commission is expected to introduce draft legislation on CCP recovery and resolution by early 2015 after the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Organizations ("CPSS-IOSCO") and the Financial Stability Board ("FSB") issue final financial market infrastructure ("FMI") resolution and recovery international standards. This follows the 2012 *Consultation on a possible recovery and resolution for financial institutions other than banks*.

*A "financial company" for purposes of Title II includes a company organized under U.S federal or state law that is "predominately engaged" in activities that the Federal Reserve has determined are financial in nature or incidental thereto for purposes of section 4(k) of the Bank Holding Company Act. A company is "predominately engaged" in "financial activities" if it derives a least 85% of its total consolidated revenues from such activities. Absent unusual facts and circumstances, a CCP in the United States is a "financial company" because 85% or more of its revenue is derived from safekeeping, custody, clearance, settlement, extensions of credit and bilateral or multilateral netting services, all of which are not only financial activities but within the business of banking. Indeed, the core function of a CCP is to substitute itself as counterparty on both sides of a trade, which is essentially substituting its credit for the credit of the two counterparties, and reducing the overall credit risk of transactions through the bilateral or multilateral netting of obligations. Making extensions of credit either as a lender or guarantor, or providing bilateral or multilateral netting services, are traditional banking functions.

- **Beyond the minimum CCP contribution, and provided that total loss absorbing resources are properly sized and fully pre-funded, CCPs should retain flexibility as to how total resources are tranched and allocated among the CCP, members and end users.** CCP flexibility on tranching and allocating total loss absorbing resources could help alleviate the funding requirement that will be associated with the elimination of future assessments and the creation of new recapitalization resources by shifting some of the additional burden to end users in the form of higher initial margin. This approach is simply a recalibration of the allocation of total loss absorbing resources and moves the market more towards a defaulter pay model, where initial margin is increased as the first tranche in the waterfall. Raising initial margin levels could be achieved in a number of ways, including—but not limited to—applying a higher confidence interval or longer liquidation period assumption beyond regulatory minimums.

  CCP flexibility on tranching and allocating total loss absorbing resources presumes a competitive landscape for clearing services.

The case for change

We believe this is an opportune time to establish safeguards for the future; namely, a framework that will allow for CCP resolution and recapitalization to protect market participants in the event of a CCP failure or crisis scenario. As described above, recapitalization of a failed CCP is always preferable to liquidation: it preserves the operation of the CCP's systemically important functions and its value as a going concern, while significantly reducing the probability that the failure of a CCP and associated risk asymmetry or fire-sales could destabilize the broader market.

To ensure a CCP has appropriate available resources, the default funding waterfall should eliminate unfunded assessments on non-defaulting clearing members, but be extended to include dedicated recapitalization resources. These resources should be funded from the contributions of CCPs as well as their clearing members. The size of the funding resources—including the recap fund—will be defined by regulatory-driven, transparent and rigorous stress tests, with scenarios and results that are fully disclosed to participants. This proposed approach will promote greater market confidence in CCPs, providing the last step to achieving the promise of the new centrally-cleared market paradigm driven by global legislation and regulations.

The opinions expressed herein are as of September 2014 and may change as subsequent conditions vary.

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