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Secretariat of the Basel Committee on Banking Supervision
Bank of International Settlements
CH-4002 Basel
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Dear Sirs

CAPITALISATION OF BANK EXPOSURES TO CENTRAL COUNTERPARTIES

Barclays Capital welcomes the Basel Committee's consultation document "Capitalisation of bank exposures to central counterparties" (BCBS206) and we acknowledge the importance of the issues raised therein. In addition to the comments we provide below, we have also contributed to the BBA/FOA/GFMA/IIF/ISDA response and are supportive of the points raised in that document.

We recognise the changes made to the proposal since the initial document (BCBS190) was released in December 2010, and we note that the Committee has heeded some of the concerns raised by the industry and reflected them in this revised draft. In particular we acknowledge the time granted to firms enabling an orderly transfer of business from a central counterparty (CCP) upon losing its qualifying central counterparty (QCCP) status. We also appreciate the Committee waiving the large netting set rule for trades versus the CCP. However our overwhelming concern remains that the changes made to date are not sufficient to resolve the issues we have raised in our earlier comments, and that the framework as proposed could result in material disincentives for banks to act as clearing members. In particular we have concerns that the proposed rules are inconsistent with mandatory clearing as a result of the Dodd-Frank Act in the USA and European Market Infrastructure Regulation (EMIR). In this context we also refer to the Committee on the Global Financial System's (CGFS) paper¹ that also highlights the desirability of a broad base of clearing members (including the banks) recognising that greater access may result in greater challenges for CCP risk management.

We raise general points here and provide more detail in Appendices 1 to 3 to this letter.

¹ CGFS Paper No 46: "The macrofinancial implications of alternative configurations for access to central counterparties in OTC derivatives markets"

Transitional period

We recommend that the framework be subject to a transitional period akin to that used for the Basel 3 leverage ratio, particularly if it is to be implemented as currently drafted. This will enable the Committee to assess the impact on banks as the underlying market shifts from OTC to cleared, and will provide time for recalibration of any charges if deemed necessary. A transitional period would also allow monitoring of developments at an international level, which would ensure consistent treatment, and reduce the risk of creating unfair competitive advantage in certain jurisdictions.

Moreover, we recommend that further QIS exercises are undertaken to allow accurate impact analysis, which is updated to reflect the changes made in this consultation. We suggest that the results of the new QIS are used to validate the current calculation of default fund contribution on capital, its risk sensitivity, and furthermore the impact on the Leverage Ratio and Liquidity requirements of Basel 3.

Additional comments and analysis are provided in Appendices 1 and 2.

Disincentive effects

We continue to be concerned that the proposals in the document reduce incentives for banks to undertake the role of clearing member. The current proposals give rise to increased capital charges for clearing members, which may result in a number of subsequent impacts to the financial and non-financial sectors, such as banks no longer acting as clearing members or clearing activity being undertaken outside the banking industry.

Additional comments and analysis are provided in Appendix 1.

Use of Current Exposure method (CEM) to establish Default Fund Contributions (DFC)

We believe that the CEM methodology is risk insensitive and inappropriate for the purpose of calculating hypothetical capital for the CCP. We also recognise the Risk Management and Modelling Group's (RMMG) reluctance to endorse CCPs' capital requirements based on models approved by the CCPs' own regulator. A compromise solution would be to replace the CEM in the hypothetical capital calculation with the Basel 2 CCR Standardised Method. The CCR Standardised Method is more risk sensitive than the CEM as it is based around the concept of net risk by hedging sets and hence does not penalise large, low risk portfolios in the same way that the CEM does.

Additional comments and analysis are provided in Appendices 1 and 3.

Definition of beta (β)

We further note that the Committee has provided a definition of beta (β), which is used in the calculation of an individual clearing member's capital requirement. We have provided a number of observations and comments in respect of beta in Appendix 1.

Margin period of risk

While not explicitly stated, the implicit understanding is that trade exposures should be calculated as collateralised derivatives, i.e. with a ten day calculation period floor. This is appropriate for exposure between a Clearing Member (CM) and a CCP, but the nature of the exposure and documentation for both CM/client trades and the CCP default fund calculation would indicate that a shorter time period is more appropriate. In both cases we would suggest that the margin period of risk should reflect that set out in the clearing documentation, an indicative reasonable period being between two and five days.

We hope you find our comments useful and we would be happy to participate in any fora (either at a BCBS or FSA level) to discuss the issues presented in this paper in more depth. Please do not hesitate to contact me on the number below if you have any questions or comments on any of the issues raised in this response.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Daniel Hodge', with a long horizontal flourish extending to the right.

Daniel Hodge

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Appendix 1 – Specific comments in addition to those raised above

Transitional period

1. In addition to our comments above, we are concerned about a cliff effect created as a result of the proposed DFC capital requirement due to timing differences in the volume of cleared trades with dealers and clients however a transitional period will allow initial margin (IM) to build up which will mitigate this cliff effect. Please refer to more detailed explanation in Appendix 2.
2. We also note that implementation of the CCP rules on the existing Basel 3 timelines will be challenging for banks. In particular the inclusion of exchange traded derivatives into OTC style calculations is likely to involve both significant IT build in the banks and model validation by regulators, and this will be at the same time that the existing Basel 3 changes are to be implemented and validated. It may be preferable to phase implementation of these requirements with exchange traded contracts coming into scope a year after cleared OTC.

Disincentive effects

3. Paragraph 111 clearly states that a bilateral capital charge is attributable to the client leg of a clearing relationship in the same manner as if the trade were executed as OTC. Consequently charges for exposure to the CCP default fund or for trade exposures will result in incremental capital requirements for the clearing member over and above those that would be seen if the trade had remained OTC.
4. While paragraph 4 of the proposal suggests that the Committee will continue to assess the incentives created by this framework, it is unclear how this would be achieved.

Use of CEM to establish Default Fund Contributions (DFC)

5. We note that the Committee believes that the default fund calculation is risk sensitive (para 3) as it is based on a comparison of hypothetical capital to a CCP's capital resources. We also note para 23- "This [hypothetical capital] measure is not meant to quantify the riskiness of a CCP but to set a comparable capital amount which the risk-sensitive capitalisation approach can build on." We do not believe the default fund contribution calculation to be risk sensitive as the hypothetical capital approach is based on the CEM, which is not considered a risk sensitive approach. Please refer to Appendix 3, which sets out our own analysis on the limitations of CEM.
6. The CEM exposures for relatively balanced portfolios significantly exceeds an equivalent calculation on an IMM basis, however, there is no simple scalar that may be applied to the CEM calculation to try and make this more risk sensitive (in our sample the CEM floored at 30% results in exposure between 7 and 22 times greater than an IMM model). We also refer to the GFMA/ISDA/IIF response to this consultation that includes a quantitative analysis of the relationship between IM, the default fund and the hypothetical capital level. The conclusion of that analysis is that, in spite of significant increases to the IM requirement and default fund size, the hypothetical capital level is insensitive to the amount of a CCP's financial resources and the riskiness of default fund

exposures. This illustrates how CEM, as well as the calculations that build on it, lack sensitivity to risk

7. The Committee has amended the CEM calculation by increasing the level of netting from 0.6 to 0.7, which footnote 11 of BCBS 206 estimates will reduce the capital associated with default fund contributions by 23%. While we are supportive of the slightly improved recognition of the risk benefits of netting, we continue to have significant concerns regarding the use of the CEM to assess hypothetical capital when the clearing houses use more sophisticated methods to set the level of IM. The result is that for balanced portfolios the level of IM will be much lower than for directional portfolios, CEM will overstate the hypothetical capital requirement and hence introduce inappropriately punitive charges for default funds.

Definition of beta (β)

8. We seek clarification that the calculation of Anet for the purposes of beta is from the point of view of the CCP, and not from the point of view of an individual clearing member. Since the individual clearing member's capital requirement is derived from the aggregate capital requirement from all clearing members, it makes sense that Anet should be based on the exposure the CCP has to clearing members, and not the other way round.
9. Further to the point above on risk sensitivity, we also have concerns that beta is not sensitive to the scenario where a CCP's exposure to the two largest clearing members might be entirely covered by margin. Using the current proposal, IM is considered only as part of the CCP's hypothetical capital requirement, but not within the calculation of capital requirements for individual members.
10. Furthermore, we do not believe that beta accounts for a clearing member being one of the two largest clearing members. The current beta calculation requires a clearing member in that scenario to hold capital against the risk of its own default.
11. We ask the Committee to clarify the calculation of Anet for the purposes of Keep and beta. Para 116 states that, for the purposes of calculating Keep, $Anet = 0.3 * Agross + 0.7 * NGR * Agross$. Yet Anet, for the purposes of calculating beta, is referenced to Annex IV paragraph 96(iv) i.e. $0.3 * Agross + 0.6 * NGR * Agross$. It is not clear why the rho value would be reduced for hypothetical capital but not for the concentration factor.

Appendix 2 – Cliff effect of the proposed DFC capital requirement

The proposed rules for capitalisation of DFC will create significantly different results depending on the composition of the cleared volume in terms of dealer vs. client trades. In the current state, we expect to see a significant cliff effect on the capital requirement for DFCs. Over time, as the client derivatives are back-loaded, the IM captured in the system will mitigate this cliff effect. The ultimate impact on capital requirements and liquidity will depend on how fast the dealer-to-client trades will be centrally cleared. In this appendix, we illustrate our points by using examples² in interest rate and credit derivatives markets.

Impact on IM and DFC at implementation

The current central clearing activity is dominated by dealer-to-dealer transactions. For interest rate derivatives, \$300trn of \$460trn in notional amount is centrally cleared. The remaining dealer-to-client derivatives (\$90 trillion in notional) is predominantly bilateral. Although the dealer trades are large in notional amount, they are relatively flat in terms of risk exposure. As a result, despite the large volume of cleared transactions, the IM and DFC supporting this volume are relatively small (\$2.3bn and \$2bn respectively according to LCH).

If the proposed rules were to be implemented in the current market environment the CEM method for LCH would yield an approximate EBRM³ of \$300bn, even if we assume perfect netting (i.e. zero net-to-gross ratio). The hypothetical capital requirement (“Keep”) for LCH’s current volume would be approximately \$4.7billion creating a material shortfall of DFCs based on the proposed rules. As a result, the aggregate capitalisation requirement on the industry could be as high as \$5.25billion of capital.

Impact on IM and DFC post-implementation

Over time the client activity may move to central clearing due to economic disincentives of bilateral format under Basel III and/or other regulatory requirements (such as Dodd-Frank Act in the U.S.) for mandatory clearing. If we recalculate Keep assuming the remaining \$160trn of bilateral dealer and \$90trn of bilateral customer trades are also centrally cleared, the results are significantly different.

We estimate the increase in IM and DFC needed to support the additional clearing activity to be approximately \$700bn and \$25bn respectively. The reason behind the material increase in IM is due to the fact that customer derivatives tend to be directional, which attracts material margin and DFC requirements.

In this environment the CEM method would yield an approximate EBRM of \$710bn. The aggregate amount of IM and DFC (i.e. \$725bn) will be more than sufficient to offset the EBRM amount, which would yield a 1.6% capitalisation ratio. As a result, the aggregate capitalisation requirement if ALL derivatives were to be cleared could be as low as \$450million, which is a material drop from the estimated \$5.25billion.

² All estimates are based on publicly available information using reasonable assumptions. For aggregate derivative volume information, we used BIS’s OTC derivative market activity report for 2011 1H. For cleared rate derivative information, we used LCH annual statements.

³ EBRM refers to the exposure value to clearing members before risk mitigation as per the proposed calculation for a CCP’s hypothetical capital requirement (Keep).

In principle, we agree that the DFC capitalisation requirement could be manageable in the long run when the derivative market is at a fully centrally cleared state, however we are gravely concerned about the cliff effect the proposed rules will create on clearing banks when the rules go into effect before client clearing takes place, and its very discernible impact on liquidity in the market. We fear some of the clearing banks may limit client clearing capacity or withdraw from clearing space to avoid this cliff effect.

Hence we propose two alternatives:

1. Replacement of the CEM method with the Basel II CCR Standardised Method which will largely eliminate this cliff effect, or
2. Introduction of an observation period sufficiently long enough to allow for IM build up from client clearing activity, and scope for recalibration, as we have recommended above.

Appendix 3 - Analyses on the limitations of using CEM

Part 1 – Accounting netting vs. economic risk based netting

The netting aspect of the CEM method is based on accounting netting, whereas the Variation Margin (VM), IM and DFC amounts are determined based on economic risk netting. Using these metrics in the hypothetical capital formula could yield results which would not reflect the underlying risks.

The following case study highlights the discrepancy caused by mixing accounting and economic concepts in this context. For simplicity, the swaps used in this case study are legacy swaps of \$100m in notional amounts and five years left to expiration. All numbers are based on Bloomberg market data as of November 8, 2011. Par swap rate for five years is 1.23%:

Flat Book	Directional Book
Swap Positions: <ul style="list-style-type: none"> • Receive Fix Swap @ 1.45%, Pay Libor flat, 5 years to expiration, \$100m notional • Pay Fix Swap @ 1.00%, Receive Libor flat, 5 years to expiration, \$100m notional 	Swap Positions: <ul style="list-style-type: none"> • Pay Fix Swap @ 1.45%, Receive Libor flat, 5 years to expiration, \$100m notional • Pay Fix Swap @ 1.00%, Receive Libor flat, 5 years to expiration, \$100m notional
Market Values (Par swap rate: 1.23%): <ul style="list-style-type: none"> • Rec Fix @ 1.45%: +\$1,067K • Pay Fix @ 1.00%: +\$1,129K • Net PV: +\$2,196K 	Market Values (Par swap rate: 1.23%): <ul style="list-style-type: none"> • Pay Fix @ 1.45%: -\$1,067K • Pay Fix @ 1.00%: +\$1,129K • Net PV: +\$62K
Netting Consideration: <ul style="list-style-type: none"> • For CEM: NGR = 100% (accounting) • For IM, VM: DV01 = +\$0.6K (risk) 	Netting Consideration: <ul style="list-style-type: none"> • For CEM: NGR = 5.5% (accounting) • For IM, VM: DV01 = -\$97.6K (risk)
VM, IM Calculation: <ul style="list-style-type: none"> • VM = \$2,196K • IM = \$16K (based on CME margins) 	VM, IM Calculation: <ul style="list-style-type: none"> • VM = \$62K • IM = \$2,671K (based on CME margins)
CEM Calculation: <ul style="list-style-type: none"> • Agross = \$200,000K x 1.5% • Anet = (0.3 + 0.7 x NGR) x Agross • Anet = \$3,000K • EBRM = NPV + Anet - VM • EBRM = \$2,196 + 3,000 - 2,196 • EBRM = \$3,000K 	CEM Calculation: <ul style="list-style-type: none"> • Agross = \$200,000K x 1.5% • Anet = (0.3 + 0.7 x NGR) x Agross • Anet = \$1,016K • EBRM = NPV + Anet - VM • EBRM = \$62 + 1,016 - 62 • EBRM = \$1,016K
Keep Calculation: <ul style="list-style-type: none"> • DFC = \$100K (assumption) • Keep = (EBRM-VM-IM-DFC)x20%x8% • Keep = (\$3,000 -0 -16 -100) x 20% x 8% • Keep = \$46K 	Keep Calculation: <ul style="list-style-type: none"> • DFC = \$100K (assumption) • Keep = (EBRM-VM-IM-DFC)x20%x8% • Keep = (\$1,016 -0 -2,671 -100) x 20% x 8% • Keep = \$0K

This case study highlights the shortcomings of the netting concept of the CEM method:

- The “Flat Book” case (left column) represents an environment where swap positions are well hedged in order to maintain a relatively flat market exposure. The two swaps (pay fix and receive fix swaps) in this simplified case study offset each other which yields a very small net DV01 of \$0.6K. However since both swaps are in-the-money, the net-to-gross (NGR) ratio from accounting perspective is 100%. In other words there is no netting benefit for CEM method which is in stark contrast with the economic reality.
- The “Directional Book” case (right column) represents an environment where swap positions have a directional market exposure. Both swaps are pay fix which create a relatively high DV01 of \$97.6K (as opposed to \$0.6K of the Flat Book case). However, since one swap is out-of-the-money (pay fix @ 1.45%) and the other is in-the-money (pay fix @ 1%), the NGR from accounting perspective is 5.5%. In other words, the CEM method considers the overall position relatively flat which is also in stark contrast with the economic risk of two pay fix swaps.

This case study illustrates why the CEM method would be inappropriate to determine the hypothetical capital requirement of centrally cleared environment where the most fundamental risk mitigation tools (i.e. netting and margining) are based on economic risk. The “Directional Book” case represents the riskier end of the spectrum, where the CEM method calculates \$0 (zero) hypothetical capital for the CCP. On the other hand, the “Flat Book” case represents a relatively benign end of the risk spectrum, where the CEM method calculates a \$46K (relatively high given the overall risk) hypothetical capital.

Part 2 – Comparison of EAD arising from dealer portfolios under CEM and IMM approaches

Please note that the illustrative values in part 1 are completely exclusive to those used in part 2.

The table below shows the difference between CEM with add-on netting floored at 40% and 30% and the equivalent exposure calculated on an IMM approach for a representative sample of bank counterparties with large portfolios of OTC derivatives.

CEM		IMM	CEM/IMM	
40%	30%		0.40	0.30
470,199,785	447,643,392	33,756,228	13.93	13.26
1,306,751,537	991,328,632	45,310,576	28.84	21.88
4,560,690,022	3,455,359,442	271,438,743	16.80	12.73
9,124,741,553	6,930,710,045	657,925,504	13.87	10.53
7,023,871,281	5,270,333,211	508,748,748	13.81	10.36
17,457,951,413	13,108,409,938	701,402,103	24.89	18.69
4,892,680,067	3,669,510,050	543,032,557	9.01	6.76
4,650,046,040	3,490,040,090	361,450,703	12.86	9.66
5,530,497,349	4,180,152,606	361,912,043	15.28	11.55
5,497,780,645	4,162,842,006	479,472,875	11.47	8.68