



Room 525, 5/F., Prince's Building, Central, Hong Kong
Telephone: 2521 1160, 2521 1169 Facsimile: 2868 5035
Email: info@hkab.org.hk Web: www.hkab.org.hk

香港中環太子大廈5樓525室
電話：2521 1160, 2521 1169 圖文傳真：2868 5035
電郵：info@hkab.org.hk 網址：www.hkab.org.hk

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By email: baselcommittee@bis.org

Basel Committee on Banking Supervision
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Dear Sirs

**Consultation on the Non-internal Model Method for Capitalising
Counterparty Credit Risk Exposures**

We refer to the consultative document on the “Non-internal Model Method for Capitalising Counterparty Credit Risk Exposures” published by the Basel Committee on Banking Supervision in June 2013.

On behalf of our members, we write to provide our views on the proposals in the consultative document as set out in the Appendix.

We hope you would find our comments useful. Should you have any questions, please do not hesitate to contact our Assistant Manager, Mr. Timothy Tam, at (852) 2526 6080.

Yours faithfully

Boey Wong
Secretary

Enc.

cc. Ms. Karen Kemp, Executive Director (Banking Policy), Hong Kong
Monetary Authority

Chairman Standard Chartered Bank (Hong Kong) Ltd
Vice Chairmen Bank of China (Hong Kong) Ltd
The Hongkong and Shanghai Banking Corporation Ltd
Secretary Boey Wong

主席 渣打銀行（香港）有限公司
副主席 中國銀行（香港）有限公司
香港上海匯豐銀行有限公司
秘書 黃凱儀

Appendix

Comments on Consultative Document on the Non-Internal Model Method for Capitalising Counterparty Credit Risk Exposures

Q1. Should the Basel Committee replace the CEM and SM with the NIMM in all areas of the capital framework? What are the benefits and drawbacks of using the NIMM in each of these areas?

Application of the Non-Internal Model Method (NIMM) across the whole capital framework could provide a more consistent measure on exposure. It also helps to shorten the implementation process as same set of data could be used by all of the areas. We appreciate that a careful balance has to be struck between the benefit of a consistent measure (simplicity, operational efficiency) versus the tailoring of specific measures for different purposes (e.g. "maximum possible loss" for Large Exposure measurement). The importance of a coordinated and holistic approach to tackle the different components of the framework cannot, however, be over-emphasized.

The recommended approach has better differentiation between margined and un-margined transactions and better risk reflection on certain asset classes. However, it is overtly conservative with regard to capital charges. Below are areas whereby we think the objectives of the NIMM approach are hard to meet, and we also raise some concerns:

- NIMM will make derivatives for corporates expensive. Corporates will be hard hit since their trades are typically un-margined and without netting set arrangement.
- Any rule setting exposure at default (EAD) irrespective of the calibration of risk weight (RW) may lead to penal capital charges. For example, a 2% RW for qualifying central counterparties implies a too high probability of default, despite an improvement over Current Exposure Method (CEM) and standard rules.
- Regulators are still focusing on risk mitigation instead of risks in central counterparties (CCPs). This is why they face a dilemma in creating the right incentives. It is the loss that might be incurred at some probability that needs to be capitalized, not the funds which are put in place to absorb the losses.
- It is unclear how the NIMM can be applied to the proposed revision on Leverage Ratio given the proposed changes in the denominator of the B-III Leverage Ratio regarding:
 - 1) The gross up of current exposure by a) the amount current exposure has been reduced by margin received and b) current assets have been reduced by margin posted,
 - 2) Ignoring legally enforceable netting of securities financing transactions.
- NIMM requires a flat alpha of 1.4 to be applied to (RC+PFE), RC being replacement cost and PFE refers to potential future exposure. The consultative document explains that the alpha is carried over from the multiplier set by the Basel

Committee under the Internal Model Method (IMM). However, we are not sure about the applicability of the multiplier under the NIMM as we are concerned about the multiplier working merely as a way of scaling up the capital charge under NIMM. As it is generally accepted that the CEM rules are overly conservative, we believe the NIMM rules should not systematically increase RWA relative to the CEM rules, as having an even more conservative approach would be counterproductive.

- Further, we understand that this multiplier is a conservative wrong-way risk adjustment and is an integral part of the IMM framework. However, we do not see a natural fit of this multiplier into the add-on based approach. In particular, if the alpha is used for CCPs, it could work against the principle of making central clearing more attractive compared to bilateral trades. Therefore, we propose that the alpha should be removed from the NIMM framework.
- BCBS should consider the implementation difficulties when using the NIMM approach to replace the standardised approach. Flexibility should be provided given the system and resource limitations in small and medium sized banks. We would also suggest that the implementation lead time should be at least 2 years in order to allow the industry to establish proper system for data collection and to align the roadmap of rollout of CCP framework for various countries.

Q2. Is the proposed approach of retaining the general structure of the CEM with respect to replacement cost and the potential future exposure add-on appropriate? Is the division of the broad asset classes appropriate?

We believe that it is appropriate to retain the general structure of the CEM as it helps banks understand the new methodology without much difficulty based on the current rules. It also looks conceptually appropriate to have two components separately to quantify the risks involved – (i) replacement cost, which reflects the net current exposure of all contracts with a counterparty subject to a legally enforceable netting agreement, and (ii) the potential future exposure add-on to account for the potential movement in its value.

We believe that a more granular division of asset classes would better reflect important specificities justifying different applications of NIMM, thereby improving the effectiveness of the NIMM framework. It is appropriate for further guidance to be provided to address the treatment on some specific products. For example, cross-currency swap has both elements of interest rate derivatives and FX derivatives and it is unclear how to calculate NIMM-compliant EAD on this kind of product.

For comment on the replacement cost and the potential future exposure add-on, please refer to our comments for the respective questions.



Q3. Are there specific product types that are not adequately captured in the outlined categories?

There is an industry-wide view that there is a list of products which should be more adequately captured in the outlined categories. A lack of operational definitions provided has caused a variety of approaches taken by different banks. It would improve banks' understanding on the NIMM if more transparent and clear definitions are provided on:

- Notional: the definition of notional for products such as amortising swaps, derivatives with a digital payoff, derivatives with callability features, and options in general;
- Maturity: how the notional is adjusted for FRAs for the fact that the interest period is often 3 months or 6 months;
- Multi-asset products: how the add-on is calculated for the fact that there are multiple assets in a single contract
- Written options: banks would not be subject to any potential future exposure on written options. How would this characteristic be reflected in the add-on for the transactions without netting or hedging set with written option as the only position?

Q4. Does the above approach reflect the replacement cost of margined transactions? Are there any other collateral mechanics that the Basel Committee should consider?

We believe that the un-margined RC tries to capture the current net exposure taking into account net independent collateral position posted/received by the bank. This seems consistent with the intention of the RC as we see it - the net current exposure of all contracts with a counterparty subject to a legally enforceable netting agreement.

However, the RC for margined netting set looks to capture "potentially maximum" exposure by taking into account threshold (TH) and minimum transfer amount (MTA) and we believe this creates inconsistency with what the RC should be calculating (i.e. the net **current** exposure).

We see some issues with the above approach for calculating RC for margined trades:

- The TH and MTA of margined transaction provide a mechanism for banks to collect collateral from counterparties. To a certain extent, it represents the maximum exposures of the bank against the counterparties. However, if they are considered as part of the replacement cost at all time of the contract, such formula would not provide any risk sensitivity to the measures and defeat the purpose to have a well-structured mechanism on margining as it would eventually result in increase in exposure. The PFE add-on already captures the potential change in value of the trades during the closeout period. The inclusion of TH and MTA in the formula, which represents the maximum exposure that a bank would suffer from the loss during closeout, will have double counting effect.
- One-way CSA: if the bank has ISDA and CSA in place with a counterparty whereby the terms of CSA is a one-way in favour of the counterparty, it is unclear how to calculate the RC because TH is mathematically infinite in this case.

- Unintended consequences over margined netting set against un-margined netting set: all else being equal, let's assume two netting sets – an un-margined netting set and a margined netting set with a very high threshold amount. In this case, having an ISDA and CSA works as a disadvantage compared to the absence of such master agreement because the RC for margined netting set will generally be higher than that of un-margined netting set until V-C becomes higher than TH+MTA-NICA.
- Implication of additional capital charge in the absence of actual exposure: for example, if the bank has a counterparty with which ISDA and CSA has been signed with TH = USD1m, MTA = 0, NICA = 0, this means that the minimum RC will always be USD1m irrespective of whether there is a trade executed with the counterparty or not. This may imply significant capital charge over the counterparties even without actual trades executed with the bank.

We believe that RC should not be floored at zero. Over-collateralization and negative net mark-to-market should effectively be fully reflected in RC for deducing the EAD. To some extent, over-collateralization is being reflected through a multiplier when calculating the PFE of different asset classes under a netting set. Such multiplier, however, is floored and conservative with any saving reflected in less than 1:1 dollar term. We would favour a more coherent framework where either RC or the multiplier allows for over collateralization and negative mark-to-market.

Q5. Of the options under consideration for recognising offset across hedging sets, which treatment is preferred? What number of maturity buckets is appropriate to consider?

Proposed methodology for deducing the potential exposure of interest rate derivatives is as follows:

1. Identification of netting set
2. Assignment of each trade under the netting set into individual hedging set by each currency and by 3 pre-defined maturity buckets
3. Calculation of the trade level adjusted notional amount with the remaining maturity
4. Assignment of a supervisory delta to each trade
5. Calculation of the effective notional at time bucket level inside each hedging set
6. Apply nil or partial offsetting across the maturity buckets by currency

The above mechanism requires scaling up notional by the remaining maturity while does not factor in any correlation effect across currencies and maturity buckets. No offsetting across maturity buckets despite same currency seems too conservative and would significantly overstate the risks. On interest rate products, we consider that partial offsetting across maturity buckets is more appropriate and therefore preferred.

We also consider that the division of interest rate derivatives into three maturity buckets (less than 1 year, between one and five years and more than five years) is appropriate. The three time buckets seem broadly aligned to what most banks are currently using and, hence, we do not anticipate much of additional operational burden stemmed out of this treatment.

Q6. Is the proposed approach of using a different methodology for determining the add-on for each asset class appropriate? Is each proposed add-on methodology for each asset class effective at capturing the main risk driver of that asset class?

Other than the comments provided below, we urge BCBS to provide clear examples on how to present and deduce the add-on for products that should be applied to more than one asset class, e.g. cross-currency swaps, FX forwards, etc.

We believe that it is appropriate to use a different methodology for determining the add-on for each asset class as this will allow capturing and assessing different risk elements which are specific to certain types of asset class. However, there are some issues which we would like to highlight in each proposed add-on methodology for each asset class:

Interest Rate Derivatives

We are concerned about scaling notional by maturity for interest rate derivatives because it seems too harsh and overstating the risk, especially for a swap contract – the most common product type in interest rate derivatives with generally longer-term tenor. We note your explanation in the consultative document stating that the linear dependence on maturity is a conservative assumption based on the fact that Effective EPE for interest rate is approximately proportional to duration, which is always less than the remaining maturity. There is an industry-wide proposal being formulated arguing that the maturity adjustment scaling should be based on DV01, which is a significantly more accurate and risk-sensitive measure than the outright maturity. We also support the argument and, therefore, propose that DV01, or other set of adjustment parameters closely calibrated to DV01, be used instead of outright maturity. FX forwards should also be in scope to reflect the forward dates - otherwise a clear arbitrage opportunity will exist between FX forwards and IRS.

In addition, the proposed maturity adjustment will penalize most corporate trades that are long dated and unidirectional (no benefit for offsetting to be expected in these cases). Manual calculations show increases in EAD by a factor of 5 compared to current CEM as well as IMM. This will impact the corporate sector with genuine need to offload or hedge out own risk positions to the financial industry as a result of higher price being charged by banks. Furthermore, there is a significant knock-on effect to the standardized CVA capital if add-on's for interest rate derivatives are conservatively measured. We believe that the supervisory factor of 0.5% remains overly conservative on these trades and that it should be revised to 0.2%.

Market data proves that interest rate for different currencies are closely correlated. As such, we urge the BCBS to factor in the correlation benefits in the calculation of potential exposure of interest rate derivatives. We propose that partial offsetting should be allowed among interest rate derivatives with different currencies.

FX derivatives

The proposed methodology does not allow any offsetting in the notional across currency pairs. This will significantly overstate the capital charge as the FX market is so closely correlated. We suggest that diversification benefit be allowed considering correlations between currency pairs. Firms should be allowed to "triangulate" FX positions and calculate the overall currency exposure rather than by "currency pairs" only. For instance, \$100m equivalent of GBP/EUR and EUR/Yen should simply yield a GBP/Yen exposure.

On this note, we would like to know whether we can treat onshore and offshore currencies in the same netting sets because they are highly correlated (often 100%).

Additionally, short term exposure for FX forwards is not recognised. While there is roll-over risk, the MTM reset of the rollover does lead to reduced exposures that should be recognised. Therefore the add-on for short-term FX transactions should be lower than those of FX transactions with tenors over one year. The above can be achieved most simply by bucketing the FX exposures in time-bands, for instance < 4 months, 4-8 months, > 8 months (three time-bands remain broadly consistent with the three IR time-bands, and in principle, the more granular the better). The add-on in each bucket can then be calculated and the maximum of each taken per hedging set. By taking the maximum, a similar principle is achieved as by using the non-decreasing effective EE. The add-on for the short-term time bands can then be lower than those of the long-term ones, for instance in a square root of time fashion.

Credit Derivatives and Options

Where for most asset classes long and short positions give similar risks, that is certainly not the case for credit derivatives and options, where there is a considerable asymmetry between the risk of a long and a short position. Hence we think that it is more appropriate to differentiate the regulatory add-on factors for long and short positions.

Q7. Are the proposed minimum time risk horizons for each transaction category (unmargined, non-centrally cleared, centrally cleared) appropriate? Should the Basel Committee consider factors other than the IMM for determining the appropriate time risk horizon for the NIMM (eg harmonising with other international or national legislation)?

We believe that the proposed minimum time risk horizons for each transaction category are appropriate. They are consistent with supervisory floors as set out in the Basel III rules regarding the implementation of the increased margin periods of risk (MPOR). We understand that the application of MPOR will help reflect the reduced exposure better in the context of less time risk horizons for margined trades, whereas CEM does not take MPOR into account.

The industry, however, remains concerned with the simplistic aspects of the 3/2 multiplier. We understand that the 3/2 factor converts EPE to EE at 1 year for a square-root-of-time EE profile assumed for a non-margined netting set (zero current MTM, no cash flows between zero and 1 year, normal diffusion for MTM). Then, the square-root-of-time scaling converts EE at 1 year to EE at MPOR used as add-on measure for margined netting sets. The ratio of effective EE to EE could be any number depending on tenor of derivatives, volatility assumptions and mean reversion assumptions.

We would also like to emphasize the fact that in BCBS111 “Consultation on the Application of Basel II to Trading Activities and the Treatment of Double Default Effects”, the alpha of 1.4 is supposed to be applied to effective EPE. Scaling EEPE by 3/2 to get EE and then also multiplying by an alpha factor of 1.4 seems to result in an overly conservative therefore undesirable result. The industry would recommend using either 1.4*EEPE to be consistent with IMM, or EE (not 1.4*EE).

Q8. Do the suggested formula and 5% floor appropriately recognise the benefits of overcollateralisation?

We generally believe that a multiplier which accounts for excess collateral should be less conservative than the one proposed in the Paper. Under the new regulations firms may be required to post initial margin (IM) bilaterally in order to mitigate counterparty credit risk. This should be sufficiently reflected in the reduced exposure: In principle IM should be fully recognized to offset PFE instead of implicitly saying, e.g. that if firms exchange \$100m cash IM, only a fraction of the amount would be accounted for.

We believe no floor should be applied in order to fully recognise either over-collateralisation or deep negative mark-to-market position. We noted from the graph in the consultative document that the multiplier without the floor itself worked conservatively compared to the IMM multiplier. Introduction of the floor to the multiplier adds higher degree of conservatism and the degree gets higher as smaller add-ons benefit from higher over-collateralisation / deeper negative mark-to-market position. This might be received against the direction to which the new regulations are heading whereby higher collateralisation is encouraged in order to mitigate counterparty credit risk.

There is an apparent typo error in the formula of the multiplier:

The formula shows $(1 + \text{Floor}) * \exp [(V-C)/(2 * (1-\text{Floor})*\text{AddOn})]$ on page 17. In the example, the example 2 in Annex II on page 27, it calculates 0.95 by $(1 - \text{Floor})$ instead of $(1 + \text{Floor})$.

Q9. Is the proposed approach to aggregate across asset classes appropriate?

For certain products like a FX forward, where it consists of risk in two asset classes (FX and interest rates in the case of a FX forward), there should be some offset allowable between these asset classes for that specific kind of product.

In addition, NIMM is supposed to be more reflective of legal netting arrangements (para 11 line 5). Yet the current proposed methodology provides no offset across hedging sets and across asset classes. This is a main deviation from CEM / SM / IMM approach - which has to be justified.

Q10. Are there any risk factors that should be included in their own category or accounted for in another manner?

a) Introduction of Alpha

Our concerns on alpha have been highlighted in our answer to Q1. We are of the view that alpha as a conservative wrong way adjustment, unlike a finely calibrated IMM model which attempts to capture all material risk correctly, is at best only spuriously accurate and at worst is just a way of scaling up the capital charge. Supervisors should be allowed to request individual firms to scale this factor for some banks / exposures where relevant.

b) Supervisory Deltas

We believe that the proposed supervisory deltas lack risk sensitivity and are too simplistic to reflect the actual delta positions in many instances.



Deltas of +0.5 or -0.5 could lead to arbitrage opportunities: a very ITM option would still attract a 0.5 delta while a hedge in the underlying would get -1. It appears then it is more attractive to buy ITM options instead of the underlying.

In addition, a straddle structure leads to a zero exposure, while under the proposals both exposures would be added. The lack of recognition of the compensation effect is too significant a cost to be paid for simplicity; we believe a more risk-sensitive approach should be developed.

c) Maturity under NIMM and CVA calculation under standardised approach

Maturity parameter has been duly reflected in the potential add-on deduction for interest rate products under NIMM approach and the CVA calculation under standardised approach. We are of the view that such risk factor is being double counted and BCBS should reassess the overall capital implication with the consideration of the new Basel III elements to avoid from overstatement of capital charge.

d) Supervisory factor and correlation

Volatilities for certain Asian currency pairs, e.g. USD/HKD, would appear to be significantly lower than the supervisory factor. One standard supervisory factor applying to all currencies is overly conservative. More market data could be considered for application of the method in order to enhance the risk sensitivity for different types of currencies.

e) Assessment of parameters

Similar to alpha, any add-on / supervisory factor / supervisory deltas should be calibrated in IMM testing through upcoming QIS exercises so as not to disadvantage banks adopting NIMM.

f) Treatment on repos

We would like to know how the NIMM rules would treat the calculation of counterparty credit risk on repos transactions. It is a distinct asset class that should have similar capital treatment to derivatives. We understand that, at the moment, repos are subject to the Banking book capital rules (applied to their underlying securities). However, under the IMM rules, repos enjoy derivatives-like treatment though no netting is allowed between the GMRA and ISDA trades (unless there is a Global Netting Agreement). We believe that it would make sense for the NIMM rules to clarify whether repos can be subject to the same “replacement cost + add-on” rules as other types of derivatives asset classes.

g) Margined and un-margined trades within a netting / hedging set

Under the NIMM rules, there are calculations applied differently dependent on whether the trades are margined or un-margined – Supervisory Factors, MPOR co-efficient and calculation of RC. The Supervisory Factors are applied to the Effective Notional at each hedging set level. MPOR co-efficient is applied at netting set level to allow scaling down of margined netting sets. RC is calculated at netting set level using different formula to differentiate margined and un-margined netting sets.

Through the applications addressed above, the NIMM rules naturally assume that all trades within a single netting set / hedging set will be uniformly margined or



un-margined. However, there can be a combination of margined and un-margined trades within a single set. This can arise because terms of a CSA agreement allow a user to exempt certain trades from margining at the trade-entry stage despite the trades being still governed by the CSA.

Therefore, in order to deal with the fact that a single netting set / hedging set may have a combination of margined and un-margined transactions, we are of the view that calculation for the three parameters addressed above should be applied at each trade level rather than netting set / hedging set level to differentiate margined and un-margined trades more appropriately.

Q11. Is the proposal to introduce the multiplier in order to allow reduction of the PFE add-on in the IMM shortcut method appropriate?

Similar to Q8, we do not agree to apply any floor to the multiplier.