Basel Committee on Banking Supervision Consultative Document

The non-internal model method for capitalizing counterparty credit risk exposures

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The International Swaps and Derivatives Association, Inc.

Global Financial Markets Association

And

The Institute of International Finance, Inc.

Further Industry Response Covering

Notional Definitions

14 November 2013

1. Executive Summary

The Associations[1] welcome the Basel Committee's Paper as a significant step in the right direction and believe that the proposed non-internal model method (NIMM) framework has great potential. As an alternative to the current exposure method (CEM), it is clear that NIMM performs significantly better as a measure of exposure.

However, the industry feels an articulation of supervisory standards for the definition of effective notional that will allow firms to reliably and consistently apply NIMM to the vast majority of derivative structures is important. We urge the Basel Committee to articulate these standards to help ensure global consistency and a level playing field, facilitating an effective application of NIMM. We also note that since the publication of the NIMM paper and our first response, BCBS has now published CP 265, the second consultation on the Fundamental Review of the Trading Book[2]. We urge BCBS to leverage of the work done in that work stream, and incorporate some of the offsetting concepts proposed under the CP 265 standards, which will result in more accurate risk capture. In particular, these standards specify correlations to be used for the computation of net FX exposures across currencies, and also specify correlations for aggregating interest rate risk across tenor buckets. We strongly encourage BCBS to adapt NIMM standards to incorporate these concepts, in order to facilitate a smooth transition to CP 265.

In its desire to help and contribute to the definition of effective notional, the industry proposes this paper in which we set out our thoughts on the topic. We start with an emphasis of the key principles we think should drive the thinking on the topic, and follow with a product specific review of the definition of effective notional.

The industry recognizes the challenge in attempting to define effective notional for more complex derivative transactions. We believe that the two key attributes of the task are on one hand the notional definition, and on the other hand the shock applied. The notional definition framework should aim at achieving the right level of offset potential in a hedged portfolio, facilitating the concept of a hedging set.

The industry also believes that the effective notional and delta concepts are clearly linked in their objective of arriving at a value of exposure to be replaced if the counterparty defaults. The definition of notional was never clearly defined for CEM either and although we understand the desire to limit the divergence between firms we also feel that over-simplification in this area may lead to undesirable outcomes in some cases. In certain instances, e.g. a vanilla swap, notional and delta can be clearly defined, although in the case of a basis swap or floating versus floating swap the sign, or delta, of the exposure may be less clear. In other cases however the notional itself may even be unclear.

Key principles

The industry thinks that the following key principles should be followed when defining effective notional for derivative products:

- For Interest Rate and Credit products, Effective Notional should be based upon a one year equivalent standard instrument defined such that NIMM-calibrated shocks and sensitivities applied to Effective Notional lead to economically sensible replacement cost and potential future exposure ('PFE'). These representations will facilitate the calculation of net positions.

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[1] The International Swaps and Derivatives Association, Inc., Global Financial Markets Association, and The Institute of International Finance, Inc.

[2] http://www.bis.org/publ/bcbs265.htm

- For Commodity, Equity, and Foreign Exchange products, Effective Notional should be based on the reporting currency equivalent of the underlying product market value; we propose that Foreign Exchange is most suitably represented by two Effective Notional amounts (one for each currency), which likewise will facilitate risk aggregation.

- The definition of Notional and Effective Notional in the NIMM context should be based upon information available from existing accounting and risk systems. The definition of Notional should be aligned with the definition of notional required for accounting and reporting purposes.

- Effective Notional for products with similar risks should be defined consistently. A companion indicator of direction (e.g., "Long" or "Short") should be used to facilitate position aggregation, or Effective Notional should be signed accordingly. Calculations should generally be based on net Effective Notional positions, utilizing "long" and "short" for signing.

- Option products should have Effective Notional defined according to the underlying delta equivalent used for risk reporting purposes; delta should reflect a reasonably accurate estimate of risk sensitivity, instead of a simplified discrete set of regulatory factors.

- To the extent that maturity bucketing is used in NIMM calculations, one approach could be for amortizing exposures to reflect at a maturities which correspond to their respective weighted average lives. An alternative would be to decompose the swaps into maturity buckets as outlined in BCBS 265. Although the latter is considerably more complex it would provide consistency with the proposed market risk approach and would leverage infrastructure that will be developed for that purposes.

- Where outstanding notional amounts are subject to behavioural assumptions (e.g., prepayment rates on balance tracking interest swaps), reasonable estimates should be incorporated when CS01 or modified duration[3] position figures are calculated.

- Irrespective of the definition of notional, and for that matter PFE, the total EAD should not be greater than the maximum loss that can be incurred through a position. Hence, where the "maximum loss" concept is appropriate, it should be reflected as a boundary condition for exposure calculations. This maximum loss amount should reflect additional loss that could occur in the future, and thus take due account of losses already realized in firm accounts.

- Where maturity bucketing is applied, it should be done in a way that is consistent with the standard rules approach proposed in BCBS 265. That is similar tenor points should be used, consistent calibration of shocks and consistent correlations used for aggregation. Partial offsetting of Effective Notional amounts should be permitted.

- We continue to support the NIMM approach which allows partial offset between different names or products within Credit, Equity, and Commodity groups. Again, offsets should be consistent with BCBS 265.

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[3] "Modified duration" refers to the value change for a 1 bp parallel movement in the interest rate curve; ""CS01" refers to the value change for a 1 bp parallel movement in the relevant credit curve

2. Recommended Framework for Specific Products

Interest Rate

Vanilla interest rate swaps

Effective Notional should reflect scaling according to the ratio of the modified duration of the position relative to the modified duration of a one year plain vanilla position of the same Notional size. The one year position should be defined as a swap without any floating rates set.

Accreting and amortizing interest rate swaps

The "Vanilla swaps" process described above should be applied, i.e., Effective Notional should reflect scaling according to the ratio of the modified duration of the position relative to the modified duration of a one year plain vanilla position of the same Notional size. In the event shocks are applied according to maturity buckets, these trades should have their maturity adjusted to the weighted average life of the transaction.

Forward rate agreements

The "Vanilla swaps" approach should be applied. Any maturity bucket representation used should reflect these as having maturity of FRA maturity plus underlying index tenor.

Credit

Credit Default Swaps, Bonds, fixed income Total Return Swaps

For credit sensitive products, Effective Notional should follow the same definition, but be based on CS01 rather than modified duration, with the CS01 calculated using the appropriate credit curve for the instrument.

The "maximum loss" principle would apply for exposure calculations related to the credit component of these products. For index tranche products, "CS01" should be based upon a uniform CS01 increase in the underlying portfolio.

Foreign Exchange

For foreign exchange products, two Effective Notional amounts should be calculated, reflecting the reporting currency equivalent of each side of the transaction, with this equivalent determined according to the appropriate forward FX rate against the reporting currency. FX exposure in the bank's reporting currency would be deemed as zero, and carry a zero Effective Notional. This will facilitate accurate calculation of net FX positions. We would suggest that this data feed into a partial offset framework similar to the current recommendation in BCBS 265.

Equity

The Effective Notional should be equal to the number of shares times the current observed price. For equity indices, the Effective Notional should be equal to the Notional times (1+ index appreciation (as decimal)).

Equity options

Effective Notional should be defined as per above, adjusted to reflect the delta-one equivalent position. Current observed underlying prices should be used to determine effective notional in a delta-one equivalent manner, not the strike price.

Commodity Forwards and Swaps

The Effective Notional should be determined as the reporting currency equivalent of the aggregate commodity amount that remains to be delivered. This conversion should use appropriate commodity forward prices for the amounts involved.

All Asset Classes

Structured or exotic transactions

In most cases, structured transactions can have their risk decomposed into simpler products. We would urge this approach where the risks can be materially captured. We likewise would welcome further discussion with the Committee of issues that need to be addressed.

Structures with digital payoffs

Effective Notional should be determined according the general "delta-equivalent" approach used for options if the triggers are sufficiently distant. Otherwise, we would propose that these positions have Effective Notional defined as equal to maximum loss. An indicator could flag which definition is used in each case.