

# ISDA

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Mrs Daniele Nouy  
Chairman  
Models Task Force  
Basel Committee of Banking Supervision  
Bank for International Settlements  
Central Bahnhofplatz 2  
CH-4051 Basle  
Switzerland

30 September 1999,

Dear Mrs Nouy,

The International Swaps and Derivatives Association (ISDA) is pleased to enclose brief comments on the document released by the Basel Committee of Banking Supervision on "Credit risk modelling : current practices and applications".

While the report was not as positive as we would have hoped, we are encouraged by the indications that supervisors are taking a genuine interest in credit risk modelling techniques and are considering the possibility of relying on models for setting regulatory capital requirements in future.

Credit risk modelling is an area where financial institutions have invested considerable resources. Understandably, it is important for them to see that this effort, driven by the will to improve the measurement and hedging of credit risk, can also have an impact on how capital requirements are defined.

The current capital adequacy framework shows little sensitivity to credit risk embedded in banks' portfolios. Regulators are well aware of the consequences of the discrepancy between economic and regulatory capital, in terms of regulatory arbitrage. ISDA feels that arbitrage can be contained only if the techniques for calculating the two come closer together and believes that there are strong conceptual grounds for promoting convergence.

Convergence will necessarily entail increased reliance by the regulators on the banks' assessment of their exposures' credit quality. This process can be incremental, with reliance placed on an additive weighting based measure first, and on portfolio loss distributions as a second step. The new capital adequacy framework outlined in the document released in June by the Basel Committee ("A new capital adequacy framework") incorporates this evolutionary dimension and ISDA views the proposed recognition of internal ratings as a crucial step towards increased regulatory confidence in credit risk models.

However, ratings of individual exposures by themselves have been shown to be inadequate gauges of capital adequacy. Losses that threaten capital are highly associated with adverse portfolio concentrations. Failure to recognise diversification differences among bank portfolios will continue to encourage capital arbitrage. Unfortunately, regardless of how imperfect regulators perceive credit risk models to be, they remain the key to assessing portfolio concentration risk as well as determining portfolio loss distributions.

While recognising the limited data availability, ISDA is convinced of the conceptual soundness of models; these offer a suitable framework for assessing the various components of credit risk: default/ rating migration rates, loss given default and default/downgrade correlations. Further, different models, if calibrated in a similar way, produce comparable capital requirements when run on similar portfolios<sup>1</sup>.

Regulators need to set practical standards for validation and not make them so onerous that no credit risk model can pass the hurdle. Default is a rare event. Estimation through the use of historical data of the joint default probability for two borrowers is by its nature infeasible. It is not possible to thoroughly back-test a credit risk model, given that the standard time horizon is of a minimum of one year, which would necessitate an extremely long time series of data.

However, input data to the models, such as internal ratings, default probabilities, loss given default or even loan equivalencies, can be tested. Banks conduct studies of loss given default and are able to test the performance of their internal ratings against external benchmarks. Beyond validation of the input, the key to validation of structural models is to examine their conceptual soundness. This is an area where practitioners can work with the regulators to help them attain a more accurate view of an institution's credit risk, as well as further assess the sensitivity of models to the drivers of risk. This sensitivity is precisely what makes portfolio modelling a reliable tool for ensuring the comparability of capital requirements across banks.

Most of the more sophisticated banks have implemented internal models that are designed to measure economic capital requirements. The models' results are used in the banks' credit portfolio decision-making processes either directly or indirectly (through risk adjusted transfer prices). Models assist bank decision-making and behaviour. Ignoring the context and use of these models in setting regulatory capital standards constrains the objectives of the regulatory process.

Given the above, ISDA would, at a minimum, urge the regulators to include credit risk models within the scope of their supervisory review of banks, i.e. as part of Pillar Two of the proposed review. This would not only ensure cross-fertilisation between the practitioners and the supervisors' modelling expertise, but also set the stage for model recognition in future. While

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<sup>1</sup>From a mathematical standpoint, it is further possible to translate models into each other (studies by Koyluoglu and Hickman, Gordy)

different banks may vary in their use and interpretation of internal or off-the-shelf models, it is important for supervisors to understand how these models are constructed and relied upon. ISDA would suggest that banks with sound credit risk modelling practice receive regulatory capital relief: regulators would in this manner incentivise the use of models<sup>2</sup> and, by ensuring that active credit risk management practices develop, increase the availability of the very data necessary to run and estimate the models.

Finally, ISDA is encouraged that some of the proposals formulated by the Basel Committee in the June paper do represent steps towards the recognition of diversification effects within banks' portfolios, hence lay the ground for more reliance on modelling in the longer run:

- Regulators propose to take default correlation into account in the treatment of guarantees; by applying a haircut on the substitution approach; this marks the beginning of a portfolio modelling approach.
- The proposed treatment of public securitisation transactions (or equivalently CBOs/CLOs) is an implicit recognition of the rating agencies' credit risk models. If both internal ratings and CLO structures are satisfactorily accounted for under the new rules, it should be possible for banks to obtain appropriate treatment for first loss basket structures; this in essence will mimic the effect of portfolio modelling over segments of portfolios.

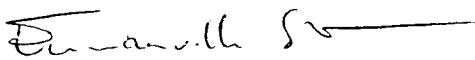
Credit risk models, as noted in the Task Force's report, are perfectible. It is ISDA's intention to devote resources to researching further some of the issues identified by the Task Force, notably data availability and validation.

As you will appreciate, our membership is currently devoting significant resources to responding to the Basel Committee's proposals for a new capital adequacy framework. Our future credit risk modelling research will for this reason most probably start only next year. We will be happy to present our findings to the Models Task Force in due course.

Models are still developing, and as their accuracy and coverage improves, it is hoped that the regulators will reconsider using them as a basis for setting the banks' capital requirements.

I look forward to the meeting planned at the Financial Services Authority on 15 October.

Yours sincerely,



Emmanuelle Seaton

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<sup>2</sup> Regulators should keep in mind that developing (or even implementing vendor) models is expensive, and that some banks might not sustain the required effort if no regulatory benefit is expected.