Office of the Comptroller of the Currency
250 E Street, S.W.
Public Information Room, Mailstop 1-5
Washington, D.C. 20219

and

Ms. Jennifer J. Johnson
Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue, N.W.
Washington, D.C. 20551
RE : Docket No. R-1154

and

Mr. Robert E. Feldman
Executive Secretary
ATTN: Comments
Federal Deposit Insurance Corporation
550 17th Street, N.W.
Washington, D.C. 20429

and

Regulation Comments, Chief Counsel's Office
Office of Thrift Supervision
ATTN: No. 2003-27
1700 G Street, N.W.
Washington, D.C. 20552

November 3, 2003

**RE: Comments on the Advance Notice of Proposed Rulemaking Related to the
         Implementation of the New Basel Capital Accord**

Dear Sir or Madam:

The Risk Management Association's Committee on Securities Lending ("RMA") appreciates the
opportunity to comment on the Advance Notice of Proposed Rulemaking ("ANPR") put forth by
the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve
System, the Federal Deposit Insurance Corporation, and the Office of Thrift Supervision (the
"Agencies") in relation to the implementation of the New Basel Capital Accord (the "New Accord")

in the United States. In response to the request for industry comments, the RMA has formulated remarks focusing on the Credit Mitigation aspect of the ANPR (member firms may also comment individually on the ANPR as a whole).

Founded in 1914, The Risk Management Association is an association of 3,000 financial service providers represented by more than 18,000 professionals in United States, Puerto Rico, Canada, Europe, Asia and Latin America. The Risk Management Association specializes in promoting effective and prudent risk management practices for financial institutions and its Committee on Securities Lending (formed in 1983) currently has a membership of 36 U.S.-based firms. Through its activities, which include semi-annual surveys of the securities lending activities of its membership, this group represents the major source of information about securities lending practices in the U.S.

As the New Accord has evolved over the past few years, the RMA has taken advantage of requests for industry commentary and has engaged in extensive dialogue with the Basel Committee's Credit Risk Mitigation Group, both as an individual organization and in conjunction with other industry organizations (i.e., the Bond Market Association, the International Swaps and Derivatives Association, Inc., and the London Investment Banking Association). The Basel Committee has been responsive to our comments and many of our original issues were addressed in the Third Consultative Package of the New Accord and the resultant ANPR. Therefore, the comments contained in this letter focus solely on our remaining key area of concern: value-at-risk ("VaR") model backtesting and VaR model multipliers. These comments reflect the RMA membership's experience and understanding of market practice as well as comments the RMA has previously provided to the Basel Committee.

VaR Backtesting and Multipliers

Backtesting

The RMA supports the recognition given to internal models, such as VaR models, as a means of estimating exposure at default and potential future exposure at the borrower portfolio level. This approach will allow for a more effective demonstration of the dynamics of the relationship between loan and collateral positions in repo-style transactions. In addition, this should provide an incentive for industry participants not already employing such measures to adopt more sophisticated internal measurement systems.

It is also welcome that no particular model is being prescribed for the VaR-based measure, as there are a number of potential approaches to measuring counterparty exposure on a portfolio basis within the securities lending industry. In particular, there are methodology, data access, and data update differences. The key determinant in assessing model appropriateness in each case is how effectively it estimates exposure.

As the true test of a VaR-based measurement is its predictive accuracy, backtesting offers a means of determining model effectiveness; however, validation may also be reasonably achieved through supervisory review. The backtesting methodology put forth in the ANPR is consistent with the approach recommended by the RMA, in conjunction with the BMA, ISDA, and LIBA, in our letter of November 8, 2002 to the Basel Committee's Credit Risk Mitigation Group (see appendix A attached) and has our support. However, it should be noted that from an operational and data management perspective such a process could be costly to establish and potentially onerous to maintain for some firms. To the extent that firms are allowed the flexibility to work with their local supervisor to ensure that backtesting remains reflective of a firm's specific business situation and industry practices they develop over time, a firm will be incented to move toward a VaR approach while providing appropriate evidence of the ability of their VaR model to estimate exposure meaningfully.

Multipliers

The RMA questions the size of the VaR model multipliers set out in the ANPR. The RMA believes that the intent of the multiplier should be to ensure that VaR model results comply with the 99% confidence level set out in the ANPR by scaling outlying results. The basis for the size of the ANPR multipliers is unclear; in applying multipliers ranging between 2 and 3 the ANPR is effectively applying an overly conservative penalty rather than using the multiplier concept to realign VaR results with the stipulated 99% confidence level. Further, to the extent that currently prescribed multipliers have the potential to cause a firm to incur capital charges in excess of levels associated with the 1988 Accord, firms required to or opting to follow the Advanced IRB approach may be put at a competitive disadvantage relative to firms not required to the follow the Advanced IRB approach.

The following summarizes the multiplier recommendation that the RMA has offered to the Credit Risk Mitigation Subgroup of the Basel Committee at various points over the last year. To the extent that a VaR system produces the required level of predictive accuracy no multiplier should be applied. A multiplier would be appropriate only to the extent that exceptions exceed the prescribed error level of 1%. Additionally, rather than relying on a standard, static multiplier, those models producing outliers in excess of those predicted by a 99% confidence level should be subject to a multiplier designed to increase that particular model's "experienced" confidence level to the required 99% level. As such, each institution's multiplier would be specific to its own risk measurement model and would be designed to ensure that each model's maximum predictive error was not greater than 1%. In this way, the accepted level of predictability is obtained, while no institution is disproportionately penalized for model inaccuracies.

$$\text{Multiplier} = \text{SNV for } \alpha = .01 \ / \ \text{SNV for } \alpha = (1 - X/N)$$

Where:
- SNV = standard normal variable (i.e., z-score)
- X = number of outlying observations
- N = number of observations

Given this formula, backtesting results comprised of 5,000 observations and 100 outliers would yield the following multiplier (firms should be given the option of selecting a sample that is larger than required to enhance their testing and refine their computed multiplier):

$$
\begin{aligned}
\text{Multiplier} &= 2.33 \ / \ \text{SNV for } \alpha = (1 - 100/5{,}000) \\
&= 2.33 \ / \ 2.055 \\
&= 1.13
\end{aligned}
$$

If the methodology recommended above were to be accepted, instead of assigning a multiplier to a range of exceptions, a unique multiplier would be calculated for each number of exceptions.

The determination of each institution's appropriate multiplier could be calculated using the above formula at predetermined intervals (quarterly or more frequently if a firm is willing to perform the backtest on a more frequent basis). Alternatively, if a firm can demonstrate that changing the parameters of its model (e.g., more conservative confidence level, volatility estimates, etc.) produces risk estimates that can be proven through backtesting to meet the required level of predictive accuracy, then it should be allowed to evolve its model to improve the model's accuracy rather than relying solely on the recommended parameters and multiplier algorithm.

The RMA appreciates the Agencies' willingness to consider industry feedback and looks forward to working together as the rules for implementing the New Accord in the United States are finalized. We would be pleased to offer any additional information or commentary as you may require. Please feel free to contact Tracy Coleman (1-617-664-2546 or tacoleman@statestreet.com) with any questions.

Sincerely,

Peter Adamczyk
Chairman, RMA Committee on Securities Lending

Tracy A. Coleman
Chairperson, RMA Basel II Sub-Committee on Securities Lending

Cc:
Ms. Norah Barger
Federal Reserve Board of Governors
20th and C Streets, NW
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Mr. Martin Hansen
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APPENDIX A

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Ms. Norah Barger   8 November 2002
Chair, Credit Risk Mitigation Sub-group
Basel Committee on Banking Supervision
Bank for International Settlements
CH-4002 Basel
Switzerland

Dear Norah,

Thank you very much for your letter of 9 July 2002 to ISDA, LIBA and TBMA ("The Associations"), following up on our meetings in London and New York this past summer. As an initial matter, The Associations and the Risk Management Association (RMA) again applaud the Credit Risk Mitigation (CRM) Sub-group's continued willingness to engage in a dialogue with the financial community regarding the impact of the Basel Accord on collateralized transactions. The purpose of the following letter is to continue our dialogue on counterparty risk issues, in the light of the Sub-group's 9 July 2002 letter. The Associations and RMA hope that the information contained below will assist the Basel Committee in finalising its approach to portfolio VaR backtesting.

Two issues were raised in your letter, which we address in turn below.

1. <u>Resolution of differences between The Associations and RMA</u>

The first issue relates to differences of views between The Associations and RMA in each of their responses to the CRM Sub-group's 17 April letter regarding the technical modalities of backtesting. Reviewing the submissions prepared by both groups, we find more similarities than differences between the two sets of comments.

Before addressing the few differences in detail below, and while we agree with the need for appropriate model validation to apply to VaR-based measures of counterparty exposure, both The Associations and RMA wish to reiterate that we do not support the principle of including in the Accord a backtesting regime, whether conducted on a group of sample counterparties or (as described in Section 2 below) whether conducted on a hypothetical portfolio. The creation of a backtesting regime will cause financial institutions to incur significant costs, and (as noted by the CRM Sub-group in its 17 April letter) is not necessarily appropriate in the context of measuring counterparty risk in collateralized transactions.

The Associations furthermore agree that, should backtesting apply, the approach adopted by the Committee should be subject to flexibility based on individual institutions' business situations and subject to ongoing dialogue with their respective supervisors.

Where the submissions differ is on the following items, which RMA and The Associations have reviewed and where we would like to put forward a constructive proposal to the CRM Sub-group :

- The proposed horizon for performing the backtest was one day in the Associations' letter versus 5 days in RMA's. The Associations and RMA have agreed that applying a one day test is preferable, considering the difficulties involved in producing "clean" 5 days P/L data, i.e. P/L excluding any further change in the exposure profile occurring within the 5 day test period. We would emphasize that supervisors currently rely on one day backtests for the purpose of implementing the Market Risk Amendment.

- The only other difference between the two submissions was in the selection of the sample of counterparties to which backtesting would apply. Following further consultation, The Associations and RMA would like to suggest the following sampling process :
  o 20 counterparties are identified on an annual basis, of which 10 are the largest counterparties in the portfolio, and the remaining 10 are randomly selected. Financial institutions should be allowed to use their own measure of counterparty size in order to determine the identity of the 10 largest counterparties. Such measures might encompass Potential Exposure, VaR, or simply the average absolute value of the current mark to market of each portfolio over a given time period.
  o For each day, and for each of the 20 counterparties, the financial institution compares the daily change in the counterparty's exposure (cleaned P/L) with the VaR calculated as of the previous close of business. The backtesting results would be reported on a quarterly basis. The Associations had noted in their letter that testing several counterparties on the same day, or indeed the same counterparty over several consecutive days, could invalidate the binomial significance test underpinning the multiplier. The binomial test assumes independence between the events tested (exception or no exception), and would hence be too harsh if

correlation existed in the sample, resulting in unjustifiably high multipliers. Having reviewed this issue further in co-operation with RMA, The Associations have come to the view that for the purpose of attaining consistency of approach in the industry, our earlier objection could be dropped, although this would create a harsher test for financial institutions.

o An exception occurs where the P/L exceeds VaR.

o Because of the increased number of tests, the multiplier table proposed in The Associations' letter would have to be amended as follows:

Number of Exceptions	Significance	Multiplier
0	91.80	No action necessary
20	71.30	No action necessary
40	45.60	No action necessary
60	24.60	No action necessary
80	10.90	No action necessary
100	4.20	1.13
120	1.40	1.17
140	0.40	1.22
160	0.10	1.25
180	0.03	1.28
200	0.01	1.33

Setting multipliers above the levels indicated in this table is hard to justify technically if the assumptions underpinning Market Risk backtesting also apply for repo backtesting, as implied in the recently issued QIS 3 Technical Guidance. We would hence question how the multipliers mentioned in paragraph 144 of the Guidance were derived and would welcome further dialogue with the CRM Sub-group on this specific point. In particular, multiplying the counterparty risk charge by a factor of two where the green light threshold has been crossed as suggested in the Guidance creates an artificial cliff effect, which may well discourage firms from building the portfolio VaR models that they might otherwise have used. Such disincentive would run counter to the objective of the Accord to encourage and allow firms to align their risk based capital requirements more closely with the actual level of risk present in their portfolios. A more gradual scale of multipliers should therefore be contemplated (as per the table above).

2. Hypothetical portfolio testing

The second issue mentioned in your 9 July letter focused on the potential for use of hypothetical portfolio testing in the framework being prepared by the Basel Committee. Hypothetical portfolio testing represents a possible alternative to backtesting based on firms' actual portfolios. We would not favour including in the revised Accord provisions that would require both actual and hypothetical backtesting, though we recognize that

some national regulators may wish to review the results of hypothetical backtests in the context of assessing model performance. The choice between real time backtesting and hypothetical portfolio testing should be the responsibility of regulated firms, and reflect the structure of their repo portfolio and existing risk management framework.

We provide as an appendix to this letter a description of how such backtesting could be carried out. Generally, we believe that the backtesting of hypothetical portfolios set out in the attached appendix could be performed by financial institutions once or twice a year for such institutions to periodically revalidate their model. In practice, each firm would work with their local supervisors, taking due account of the structure of such firm's repo portfolio and the main risk parameters relevant to it, to determine a suitable methodology to follow.

The Associations and RMA hope that the CRM Sub-group will find the above helpful and stand ready to continue to assist the CRM Sub-group in any way possible. In this regard, we would request a follow up meeting or call between the CRM Sub-group, The Associations and RMA to discuss in more detail the views conveyed in this letter. We will contact you in the near future to determine whether you are available for such meeting; in the meanwhile, please feel free to contact Emmanuelle Sebton (+44-20-7330-3571 or esebton@isda-eur.org), Katharine Seal (+44-20-7796-3606 or Katharine.seal@liba.org.uk), Omer Oztan (+1-212-440-9474 or ooztan@bondmarkets.com), or Tracy Coleman (+1-617-664-2546 or TAColeman@StateStreet.com).

Kind regards,

Emmanuelle Sebton	Katharine Seal	Omer Oztan	Tracy Coleman
ISDA	LIBA	TBMA	RMA
Head of Risk Management	Director	Vice-President	Chair, Basel II
		Assistant General	Sub-Committee
		Counsel	

ANNEX

DEFINITION OF TEST PORTFOLIOS

- A **base case test portfolio** is defined and created:
  - The base case test portfolio should have features that are representative of the typical desk portofilio with regard to the distribution of counterparty features and the features of the transactions of each counterparty.
  - Counterparty features include the risk rating and industry of each counterparty.
  - Each counterparty will have a portfolio of transactions with different characteristics:
    a) One way or two way trading
      - Some counterparties have multiple two-way transactions, such as large interbank market makers.
      - Some counterparties have large one-way positions, such as a hedge funds.
    b) Each counterparty's portfolio of transactions will have a distribution with respect to the industry, credit risk rating and time to maturity of the securities put up as collateral (repos/reverse repos) or borrowed/lent.

- Empirical evidence should be provided that the base case portfolio corresponds to a typical portfolio.

- **Other test portfolios** should be defined with respect to the base case test portfolio. The other test portfolios should have different types and degrees of risk concentration. The risk concentrations should include:
  - Concentration of counterparty risk, by risk rating or industry.
  - Concentration of risk features of underlying transactions, such as risk rating, industry or tenor of underlying securities.
  - Correlation concentration risk between features of counterparties and features of underlying collateral, such as a risk concentration in both the industry of the counterparty and the industry of collateral.

- Empirical evidence should be provided that risk concentrations in the "other test portfolios" represent extreme concentrations of risk, equal or greater than the concentration of risk the desk might occasionally have.

DATA REQUIREMENTS

The following data are needed:
  - Times series of daily market prices for all the securities used as collateral in repo transactions or securities borrowed/lent in security borrowing/lending transactions.
  - Time series of daily repo rates for each security.

TEST

- For each test portfolio compare the ex-ante VAR-like measurement to the ex-post hypothetical P/L. The hypothetical P/L is the daily change in the market value of the test portfolio due only to changes in market rates.

- Keep track of the number of exceptions over the year and, depending on the number of test portfolios created, ensure that the number of exceptions is consistent with a VAR-like measurement at the specified confidence level.