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

Dear Members of the Basel Committee:

RMA — The Risk Management Association welcomes the opportunity to respond to the Third Consultative Paper released by the Committee in April 2003.

The RMA Capital Working Group has presented the Committee with a number of papers outlining how institutions in North America assign Economic Capital internally. The Group strongly supports the Committee's goal of aligning regulatory capital more closely with underlying risk. All of the Group's work to date can be found on our web site at www.rmahg.org/Basel2/Basel_intro.htm.

We appreciate greatly the work the Committee has undertaken to move reform of the 1988 Accord forward and hope that the comments in this paper will be of assistance. Indeed, we believe that the reform process has served to further industry development of more advanced risk management practices within the financial services industry.

RMA is hopeful that a regulatory capital framework can be structured in such a fashion so that it allows for continued industry innovation in best practice risk management procedures. Moreover, the regulatory capital standard should represent a true minimum, a capital floor that is below an institutions' own internal Economic Capital requirement.

Again, we appreciate the work the Committee has undertaken to reform the 1988 Accord and look forward to continuing to work with the Committee to align regulatory capital requirements with underlying risk.

Sincerely,

Maurice H. Hartigan, II President and CEO

Enclosure Attached

Response to Basel's Third Consultative Paper On the New Capital Accord

RMA - The Risk Management Association

July 2003

I. Executive Summary.

The RMA Capital Working Group¹ is supportive of the New Accord and believes that regulatory capital reform is desirable and necessary. Most members of the Group will be subject to the Advanced Internal Ratings-Based approach, and therefore the Group's criticisms of CP3 focus on the AIRB approach. In brief, we have the following concerns, listed roughly in order of importance.

- Required capital should be measured as unexpected losses specifically excluding expected losses (EL) because all advanced banks price their loans so that expected margins, net of expenses, equal *at least* EL plus a return to economic capital. CP3 contains a "back door" method (in Paragraphs 347 and 348) for using the ALLL to eliminate this inappropriate EL charge a method that can lead to significant cross-country inequities because of the manner in which the ALLL is accounted for in various Basel countries. Indeed, in the U.S. it is unlikely that the ALLL could be used for this purpose. Eliminating the EL capital charge for all credits in all Basel countries is the correct thing to do from an analytical perspective. It is also the only fair thing to do.
- The Pillar 1 requirements in CP3 are, simultaneously, too prescriptive and much too conservative. Many of the rules regarding the estimation of parameter "inputs" into the Basel AIRB models do not permit an appropriate degree of diversity of practice or, worse, are arbitrarily chosen to be conservative. Any one of these prescriptions some of which had not appeared within the QIS3 exercise may not be too much of a departure from best-practices. Cumulatively, however, the prescriptions are too conservative to represent a true *minimum* regulatory requirement, are likely to result in aggregate regulatory capital charges that are significantly higher than suggested by the results of the QIS3 exercise, and perhaps are even above conservative market requirements for bank capital.

¹ The Capital Working Group of RMA — The Risk Management Association consists of senior risk management officers at large banking organizations responsible for the measurement of risk and the determination of Economic Capital. The names of the institutions represented on the Capital Working group, along with staff members contributing to the preparation of this paper, are shown in Appendix 1. Individual banking organizations that are members of the Group may be responding separately to CP3 and may hold opinions regarding Basel II that differ from those expressed in this paper.

- LGD and EAD estimates are to be based on recessionary experience, rather than through-the-cycle, default-weighted methods. This requirement could result in parametric inputs that are quite significantly higher than those used in QIS3, with correspondingly higher capital calculations. There also would be significant implementation difficulties associated with using recession-only LGD estimates.
- Asset-value-correlations used in Basel's *retail* credit risk models are uniformly above those estimated by the industry. For example, the singlefamily residential mortgage AVC chosen by Basel (15%) is some 50% higher than the AVCs used by mortgage lenders.
- Credit risk mitigation techniques at advanced banks are severely penalized by CP3's failure to recognize the benefits of "double-default" or "doublerecovery" associated with guaranteed credits.
- 4. Very short-term loan facilities are severely disadvantaged by CP3's choice of treatment of short-dated loans. The analytical treatment of short-dated loans is faulty, and the capital result is far too conservative, thereby reducing the effectiveness of such facilities in managing portfolio credit risk.
- 5. CP3 contains significant new language regarding the use of "stress tests." Such tests are a common tool of internal economic capital estimation. However, CP3 appears to suggest that stress tests should be the basis for arbitrary Pillar 2 "add-ons" to the Pillar 1 requirements, or worse, that such supervisory tests should replace Pillar 1 requirements. We are hopeful that this interpretation was not intended and that stress tests will continue to be simply tools for assessing the appropriateness of internal economic capital calculations.
- 6. The treatment of securitizations within CP3 represents significant progress from earlier versions. Nevertheless, there are certain shortcomings. For example, rated tranches are subjected to a fairly arbitrary set of capital allocations, rather than permitting the advanced bank to use the Supervisory Formula Approach. This ratings-based treatment does not

adequately incorporate the historical evidence on performance of rated tranches, and ignores the analytical framework of the Basel models used to allocate capital to on-balance-sheet assets (and to support the Supervisory Formula). Also, certain securitization transactions that generate residual assets are not treated in a neutral fashion vis a vis simply holding the assets on the balance sheet.

An analysis of the cumulative conservatism of these prescriptions leads to the conclusion that Basel has in mind an exceedingly stringent view of the degree of "soundness" to which the AIRB bank should adhere. In effect, CP3 is saying that there should be only a 1 in 1000 chance that an AIRB bank should fail, even during a recession, and even utilizing conservative views of the loss probability distributions associated with the portfolio of the bank. Clearly, this has gone too far, and at least some of these conservative prescriptions should be reined in.

II. Introduction and Overview.

This paper represents the response of the RMA Capital Working Group to Consultative Paper no. 3 ("CP3") published by the Basel Committee in April 2003. The majority view of the Group continues to be that Basel II represents a significant step forward in improving upon the risk sensitivity of the old Accord and more closely aligning regulatory capital requirements with best risk measurement practices. The authors of CP3 are to be congratulated on specific changes in the Basel II proposals relative to QIS 3 that have improved risk sensitivity, including the introduction of an Advanced Internal Ratings Based regulatory model approach ("AIRB model") for High Volatility Commercial Real Estate ("HVCRE") exposures.

Nevertheless, the major concern of the Group is that CP3 contains requirements, including certain requirements that have been added since QIS3, that do not reflect best risk measurement practices and that result in a "cumulative conservatism" regarding the level of Pillar 1 regulatory capital. The impact of this conservatism, moreover, may not be fully quantifiable until the details of Pillar 2 supervisory implementation are worked out in each of the Basel countries. In many of the specific cases to be discussed below,

the conservatism is coupled with a degree of prescriptiveness that neither reflects best practice nor is appropriate within Pillar 1 standards. The word "must" appears entirely too often in the CP3 document, as opposed to a set of principles that provides a foundation for a range of practices in which PD, LGD, and EAD inputs *may* be appropriately estimated. The overall concern of the Group, therefore, is that implementation of CP3 will result in regulatory capital requirements that are not minimums, but rather are binding, less-than-best-practice prescriptions for capital levels at large, complex banking institutions – prescriptions that may exceed the level of capital measured within the QIS exercises and, indeed, may exceed market requirements for capital at these institutions.

The discussion below begins with our continuing concerns over the definitional issues that have plagued the Basel II process since its inception. We then move to the specifics of the CP3 cumulatively conservative prescriptions. At each point in our discussion, we try to present the analytics of the issue in a manner that addresses the real concerns of the supervisors from the point of view of the risk practitioner. We are interested, as a Group, in capital estimation that is analytically correct yet practical, and we have sympathies neither for the supervisor who may believe that more capital is always better nor the manager who may believe that more leverage is always better. Our response focuses on the Advanced IRB approach to regulatory capital, because the members of the RMA Capital Working Group consist mainly of the large, complex banking organizations in North America to which the AIRB approach is likely to apply.

III. The Treatment of Expected Losses and the Allowance for Loan and Lease Losses.

As do many observers, we believe that Basel II should be an ongoing process of searching for practical, meaningful regulatory approaches to minimum capital. Basel II, as it will be completed at the end of 2003, will likely be followed every so often with adjustments to better improve the risk sensitivity of the Accord – this was indeed the process followed by the old Accord. Our belief is that future improvements to the Accord will become increasingly more difficult to implement so long as there continue to be significant differences between the way in which, on the one hand, Basel measures

required versus *actual* capital and, on the other hand, the way in which the market measures required versus actual capital.

Basel has decided to retain the "old" view of capital as being Total Capital, defined to include the Allowance for Loan and Lease Losses (ALLL), up to a limit, and including certain balance sheet items such as subordinated debt that are not viewed as "capital" by the market. Because of this first, *definitional* decision, Basel believes that *required* capital should be measured as the loss at a specified confidence interval (99.9%) on the cumulative loss distribution generated by the Basel AIRB model (an Asymptotic Single Risk Factor, or ASRF, model). This regulatory measurement of loss does <u>not</u> subtract Expected Loss ("EL") from Loss at the Confidence Interval ("LCI"), as is the practice within the industry. Basel staff apparently believes that, since Total Capital is defined to include the ALLL, and since some supervisors and some bankers have stated that "the ALLL covers EL", *required* Total Capital should therefore be measured as LCI inclusive of EL, not net of EL.

This supervisory view is in sharp contrast to the view of the risk practitioner. In our view, the ALLL is an accounting item that *has nothing to do with* "covering EL" and, in fact, has nothing to do with measuring *required* risk-adjusted or economic capital. There is a quite separate question, of course, as to whether the ALLL should be among those balance sheet items that constitute *actual* capital for purposes of deciding whether such balance sheet capital is at least as high as measured Economic Capital ("EC"). If such a balance sheet test is not met – that is, if the bank's balance sheet analogue to mark-to-market capital (mark to market net asset value) is not at least equal to EC – then the bank is undercapitalized by its own standards. The bank cannot be meeting its particular debt-rating target (soundness target) unless it has real capital at least equal to measured EC. Until Basel's authors separate these two issues – a) how to measure required capital (EC) versus b) how to define the balance sheet items that should be included within a measurement of <u>actual</u> capital – it will continue to have difficulty aligning the Pillar 1 requirements with best-practice economic capital procedures.

In the market's view, capital is not needed to "cover" EL because the essential risk pricing and shareholder value-added relationships require that EL be *at least* covered by expected future margins. Note that we do not say that EL is covered by actual future

margins, only that <u>expected</u> losses are at least covered by <u>expected</u> margins. Business practice has always required that prices cover expected losses, other expenses, *and* a return to capital – even before the advent of Economic Capital. This requirement is also demonstrated, in the context of EC, by looking at the Shareholder-Value-Added ("SVA") relationship, which states that SVA is positive only if risky assets generate margins, net of non-interest expenses that not only "cover" EL but also produce a necessary minimum return to Economic Capital.

All of our Group's banks pay attention to SVA, and the banks' credit products generally have been estimated to produce positive SVA. In other words, basic banking practice results in expected future margins that "cover" not only EL but also a market-required return to Economic Capital. Indeed, CP3 contains "use tests" that essentially guarantee that this internal use of Economic Capital and EL measurements will continue. Thus, as indicated above, required capital measurement has nothing to do with the ALLL, and no matter how the bank accounts for the ALLL, *required* capital is needed to cover only *unexpected* losses, not expected losses. Therefore, *required* regulatory capital should be set equal to the loss-at-the-confidence interval *minus* EL, for all credit products.²

The second question bears repeating – what balance sheet items should be defined as *actual* capital for purposes of testing whether such capital equals or exceeds measured *required* economic capital? Market analysts tend to use a limited set of balance sheet items to approximate "true" capital on the balance sheet – and these balance sheet items do not include subordinated debt. The ratings on such debt may be useful as a market indicator of bank risk, and such debt may be useful to reduce the loss to the insurance agency in the event of bank failure. But a dollar of subordinated debt substituting for a dollar of deposits does not in any fashion reduce the <u>probability of insolvency</u> – the basic definition of "soundness" implicitly utilized by Basel and by market analysts as well. Rather, analysts tend to use a definition of balance sheet capital that approximates true "mark-to-market" equity. An often-used approximation for MTM equity is tangible

² Some banks note that, at the 99.9% confidence level, realized (not expected) margins on good assets will more than cover the expected loss of principle on defaulted assets (and may even cover realized losses). Therefore, subtracting EL from Loss at the Confidence Interval is somewhat conservative compared with subtracting future margin income.

equity plus that portion of the ALLL that constitutes "general reserves" on performing assets. That is, practitioners assume that performing assets can be sold at prices close to their carrying values <u>before</u> such general reserves are subtracted. Troubled assets, on the other hand, have a market worth closer to their carrying values net of specific reserves. Thus, the balance sheet definition of capital used by many of our Group members consists of tangible equity plus "general" reserves – a concept very close to the "primary capital" definition used in the U.S. prior to the 1988 Basel Accord.

The issue of the definition of actual balance sheet capital is complicated by crossborder diversity in practices regarding the accounting for the ALLL. Thus, paragraphs 347 and 348 in CP3 may lead some supervisors to permit banks in specific countries to use the ALLL to effectively subtract EL from Loss at the Confidence Interval, when measuring required regulatory capital. In the U.S., on the other hand, accounting standards and supervisory beliefs are less likely to permit this "back door" approach to eliminating the capital charge for EL. Therefore, a level playing field would not result from Basel II unless EL is subtracted from LCI for all credit products for all countries when measuring required capital – something that the risk practitioner views as "the right thing to do" regardless of differences in accounting standards. Both from an analytical perspective and from a competitive equity standpoint, capital should always be measured as loss-at-the-confidence-interval minus expected losses.

Not only should <u>required</u> capital be measured net of EL, but also, as indicated above, <u>actual</u> mark-to-market capital is best approximated by including the ALLL in Tier 1 capital. It is Tier 1 capital that is the true, "expensive" form of capital, and including the ALLL in Tier 1 would reduce, if not eliminate, inequitable capital treatment across nations associated with differences in the accounting treatment of the ALLL. That is, abstracting from tax and dividend effects, any mandated high levels of ALLL (in a "conservative" ALLL country) would correspondingly reduce retained earnings, while any leniency in accounting for ALLL (in "liberal" ALLL countries) would result in increased retained earnings.³

³ If Tier 1 capital were redefined to include the ALLL, it would then be consistent with best practice to no longer set Tier 1 capital to be arbitrarily equal to one-half of Total Capital (measured as loss-at-the-confidence interval less EL). That is, one-half of the loss measured at the 99.9% confidence interval may result in true equity being too low (and a minimum "investment grade" soundness standard not being met).

IV. Cumulative Conservatism and Prescriptiveness.

Paragraph 351 of CP3 lays out a guiding set of principles for the minimum internal risk measurement requirements that are necessary for a bank to use the AIRB approach to Basel II. We believe that this paragraph is so essential to the new Accord that it bears repeating in full (with emphasis added on two critical sentences with which we totally agree):

351. The overarching principle behind these requirements is that rating and risk estimation systems and processes provide for a meaningful assessment of borrower and transaction characteristics; a meaningful differentiation of risk; and reasonably accurate and consistent quantitative estimates of risk. Furthermore, the systems and processes must be consistent with internal use of these estimates. The Committee recognises that differences in markets, rating methodologies, banking products, and practices require banks and supervisors to customise their operational procedures. It is not the <u>Committee's intention to dictate the form or operational detail of banks' risk management policies and practices. Each supervisor will develop detailed review procedures to ensure that banks' systems and controls are adequate to serve as the basis for the IRB approach.</u>

Risk practitioners, when reading this paragraph in isolation, see a clear intent to provide for "meaningful differentiation of risk" without limiting the diversity of acceptable best-practices and without leading to too much wasteful duplication (for Basel versus for internal/market purposes) regarding the full array of risk estimation procedures. Unfortunately, this expectation is not met when reading the next 20 pages of CP3, which go into prescriptive detail on acceptable practices in risk parameter estimation, data base requirements, stress testing, and much more. Not only are the guiding principles of Paragraph 351 replaced with prescriptions – prescriptions that often differ from best-practices – but these prescriptions are, at every turn, conservative in nature. Any one of these requirements might not be unreasonable in isolation, but taken together they represent a "cumulative conservatism" that, depending on the specifics of implementation, may result in minimum capital requirements that are significantly above internal EC estimates, possibly above the estimates in the previous QIS exercises

Instead, the RMA Capital Working Group has long advocated that the Tier 1 ratio, properly defined, be set at, say, the LCI net of EL using a 99.5% confidence interval (compared with a 99.9% confidence interval for *well-capitalized* Total Capital).

(including above the old Accord), and perhaps even above any reasonable market requirements for bank capital.

To be sure, implementation of the AIRB approach within Basel II cannot be accomplished unless there exist reasonable, minimum risk measurement and management standards. Not every bank that wishes to become an AIRB bank should be permitted to do so - at least not until most of its internal practices fall within the range of "bestpractices". Furthermore, continuing dialogue between supervisors and risk practitioners will be needed to ensure that the industry and its supervisors fully understand where the boundaries of best-practices lie at each point in the future. Toward this end, the industry has put forth and will continue to put forth significant effort to move forward the frontiers of risk measurement knowledge. Some risk procedures that are now common practice among larger institutions – such as the use of sophisticated internal rating systems for commercial real estate loans -- were not so common prior to the early 1990's, when concerns over the efficacy of the old Accord first emerged. Indeed, one can reasonably give credit to the Basel II process itself for helping to focus a spotlight on the need for improved risk measurement and management. Nevertheless, we believe that CP3 has "gone too far", and the sum of its prescriptions would no longer result in a reasonable, minimum regulatory capital requirement for AIRB banks. Moreover, those prescriptions would best be replaced by a set of general principles in Pillar 1 – implemented by Pillar 2 supervision – that assured Basel and other stakeholders that the AIRB bank was appropriately estimating the key parameters (PDs, LGDs, and EADs) that determine regulatory capital. These assurances can be achieved within the context of significant diversity of practice – diversity that appears to be stifled by the prescriptions within CP3.

Below, we address several of the more onerous requirements of CP3, arrayed roughly in order of their importance to the members of our Group. Clearly, differences across banks in portfolio construction and business line make-up will affect each bank's view of the CP3 requirements that are most in need of changing. The list below is not exhaustive; many "minor" issues (that may be quite major for some institutions) need to be addressed. Nor does the list address important implementation issues, including the exceedingly close timing of Basel II. CP3, as it is currently written, requires an effective lead time of 3 years – that is, the end of 2003 -- to set up properly the required databases

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and to pass the "use-tests". Yet, the U.S. banking agencies have only this month published Pillar 2 supervisory guidance regarding commercial lending. Supervisory procedures with regard to retail lending – an arena we believe requires greater dialogue between practitioners and supervisors – will not be released in the U.S. before the end of the year. It is our understanding that other countries face similar timing crises. Two obvious solutions to the timing problem faced by the agencies, as well as the banks that must plan for the AIRB process, are to a) move back the start date, or b) reduce the leadtime by liberalizing the data requirements and use-tests.

V. Specific Requirements of Pillar 1 that are Less than Best-Practice.

A. Risk parameter estimation. In Basel II's AIRB credit risk model, regulatory minimum capital requirements are determined by 4 kinds of input: PDs, LGDs, and EADs, measured by the AIRB bank, and the Asset-Value-Correlations ("AVCs") determined by the regulators. Because these four parametric inputs are so important to determining actual capital requirements, we cannot treat them separately – the model builder can "make up" for a perceived deficiency in the estimation of any one of these parameters, or a perceived deficiency in the construction of the model itself, by being "conservative" in the choice of any of the other parameters. While such choices are commonplace in the art of risk measurement, the Basel Committee has chosen to be more conservative than typical industry practice with respective to <u>each</u> of the parametric inputs (see discussion below). Additionally, Basel has chosen to use a confidence interval (99.9%) that is similar to that used internally by most advanced-practice banks. These internal confidence intervals represent *target* soundness levels for the bank, not minimum soundness levels as should be the case for regulatory requirements. The combination of the high confidence interval and the high parameter input levels essentially guarantees that Total Capital requirements will be well above internal Economic Capital estimates.

Most advanced banks currently hold capital in excess of internal EC estimates, since a reasonable "cushion" for contingencies is necessary in order to maintain a market view of the bank as appropriately capitalized. But Basel Total Capital requirements, as a result of CP3's conservative parameter choices, may be above these cushioned capital

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levels. Further, individual countries will likely apply "well-capitalized" standards over and above the Basel minimums. In the U.S., for example, there are no plans to remove so-called Prompt Corrective Action standards that call for an additional 50% and 25% more capital for Tier 1 and Total Capital requirements, respectively. In the face of these arbitrarily chosen layers of conservatism, we conclude that the Basel standard itself must be reined in. The place to begin is with the specific instances of conservatism in the risk parameter estimation process of CP3.

CP3 calls for <u>loss-given-default</u> (LGD) and <u>exposure-at-default</u> (EAD) to be estimated more conservatively than the through-the-cycle method currently in use at most advanced banks (paragraphs 430 and 437). Typically, an advanced bank estimates LGDs and EADs, on a product basis, as the "default-weighted" average over the cycle. This means that the number of empirical observations of LGDs and EADs are heavily weighted toward recessions when a) greater numbers of defaults are observed, and b) LGD ratios and EAD ratios are higher for each default than during booms. In this sense, best-practice LGD and EAD estimation processes already are conservatively tilted toward recessions. CP3 would go even further by requiring banks to use LGDs and EADs that are "appropriate for an economic downturn, if those are more conservative than the long run average."

This conservatism is understandable in direction, although not in extent. To a significant degree, the authors of CP3 are concerned that the credit risk model underlying the Pillar 1 standards is itself not perfect. The Asymptotic Single Risk Factor (ASRF) model being used requires assumptions of high granularity in the portfolio (not unreasonable for the large, diversified portfolios of banks subject to the AIRB approach) and independence in the distribution of possible losses-given-default. This last assumption means that the Basel ASRF model does not account for the likelihood that LGDs and PDs are correlated – both parameters being adversely affected by bad "draws" of the macroeconomic risk factor. Credit risk models exist that account for such correlation, but we would agree that such additional complexity is unwarranted at this

moment in Basel II's evolution – and, in any event, practitioners have not yet empirically estimated the degree of correlation, if any, between PDs and LGDs.⁴

The problem with CP3's conservatism is that has clearly gone too far. In effect, Basel wants the bank to hold enough capital to account for 99.9% of all possible loss outcomes *even during a recession*.⁵ This standard is a much higher standard than a 99.9% confidence interval over the course of the cycle – higher than even a triple-A debt rating standard. Actual implementation of such a standard could represent capital levels that are significantly higher than shown in previous QIS exercises – because the implied LGDs and EADs would be proportionally higher than the through-cycle, defaultweighted parameter estimates used by banks participating in those exercises.

To provide an example, note that corporate *bond* LGDs are on the order of 45% higher during recessions than during non-recession years.⁶ Most of our best-practice banks use through-the-cycle LGDs that represent neither of these two extremes – neither recessionary nor non-recessionary LGDs. Rather the banks use through-the-cycle *defaulted-weighted* LGDs that are influenced heavily by the recessionary years (when greater numbers of defaults with correspondingly higher LGDs are observed). This is a conservative approach, but not so draconian as using the recession-only LGDs. The banks' through-the-cycle, default-weighted LGDs were the parameters used in the QIS3 exercise. If banks were required to use stressed LGDs equal to the recessionary experience, minimum capital requirements would be driven up proportionately (because Basel capital requirements are linearly related to the LGD input). Thus, regulatory capital for credit risk for commercial loan products could rise on the order of 45% higher

⁴ As for EADs, there is little analytical reason for thinking that recession EADs are substantially higher than non-recession EADs. When an obligor is near default, for that obligor the "recession" has already occurred, and the obligor is likely to draw down a significant portion of the remaining line.

⁵ In the language of risk modeling, the implied soundness standard is a 0.1% *conditional* probability of insolvency, given a bad outcome of the macro risk factor.

⁶ Jon Frye, "Depressing Recoveries," Risk Magazine, November 2000, Table B. Frye also estimated recession versus non-recession LGDs for commercial loans, assuming that the estimating equation would have the same coefficients as estimated using historical bond performance data. Under this assumption, recession LGDs for loans are even higher, compared with non-recessions, than for bonds.

than shown in the QIS3 exercise.⁷ There may also be significant increases in retail credit risk capital allocations relative to the results of QIS3.

Besides the fact that this recession-only standard represents too high a true soundness level, there are significant implementation difficulties. First, agreement would have to be reached as to which years constitute a "recession" with regard to each type of loan product. Second, for many credit products, banks may possess individual loan performance data going back only a number of years that do not incorporate, by any definition, a recession. Even when industry-level data exist, such as for large, shared commercial loans, loss rates on defaulted credits may be subject to interpretation. For example, in the study cited above, losses on bonds were measured as the decline in traded values of the bonds at a given horizon (several weeks) after the default event. Such losses may differ substantially from those measured as the balance of the loan minus the present value of all future recoveries after a full work-out takes place.

Moreover, Basel has already taken other parametric steps to add conservatism to the mix of prescriptions. In particular, the AVCs used with the Basel credit risk models for retail products represent levels that are significantly above those used within bestpractice banks. The RMA Capital Working Group has published several papers documenting these differences.⁸ In the case of residential mortgages, for example, the AVC parameters used by Basel is 15% compared with an industry median of 10% -- and documented industry research suggests that this median is somewhat conservative⁹ -representing a significant difference in Basel versus best-practice capital estimation even when the LGDs being plugged into the model are through-the-cycle LGDs.¹⁰

⁷ Another example of the conservative prescriptiveness of CP3 is the lower bound of 10% for residential mortgage LGDs – which is clearly too high for low LTV loans. Also, placing an arbitrary lower bound on LGDs creates disincentives to use mortgage insurance.

 ⁸ In particular, see "Retail Credit Economic Capital Estimation – Best Practices," RMA, March 2003.
⁹ See "Best Practices in Mortgage Default Risk Measurement and Economic Capital," The RMA Journal, June 2002.

¹⁰ Not only does CP3 call for EADs and LGDs to be more stressed than through-the-cycle, but also some through-the-cycle estimates of PDs, for some products, may themselves be too conservative. For example, underwriting standards have dramatically changed in the commercial real estate market since the last major downturn. Requiring PDs for CRE to be estimated using default data from the late 1980's/early 1990's will likely overstate true, through-the-cycle PDs for this type of credit product.

In effect, through its choice of high asset-value-correlations, its choice of a high confidence interval, and its choice of recessionary LGDs and EADs¹¹, CP3 is stating an extremely high soundness standard: There should be only a one-in-a-thousand chance for the AIRB bank to fail, even during a recession, and even when the loss distribution measuring the probabilities of bad outcomes during that recession is itself conservatively estimated. Again, this does not represent a reasonable minimum to us or to many other observers.

B. <u>Treatment of Credit Risk Mitigation</u>. The use of credit risk mitigation techniques has become widespread among commercial loan portfolio managers, both within the regulated banking industry and in the non-regulated sector. The essential idea behind such risk mitigation is that the managed reduction of portfolio risk is often preferable to (generates higher risk-adjusted returns than) the holding of larger amounts of capital to cover the risk of unhedged positions. Bank supervisors have applauded generally the use of these techniques, and markets have responded favorably to the financial companies perceived as being very good at risk mitigation.

Of course, there is a natural concern over the degree to which risk mitigation actually achieves its goal of portfolio risk reduction; and there have been cases in which attempts at risk mitigation were notably unsuccessful or produced less than the desired result (such as with so-called "wrong-way" risk). These issues are the proper subjects of the supervision (Pillar 2) process, and this Group stands ready to assist supervisors and the market in understanding and implementing best-practices in risk mitigation. CP3, however, contains requirements that, if implemented, would systematically compromise the usefulness of credit risk mitigation, possibly leading to the demise of certain wellestablished risk mitigation techniques. Below we identify some of these CP3 requirements that we find to be antithetical to best-practice risk mitigation.

<u>Non-recognition of the double-default and double-recovery benefits of</u> <u>guarantees</u>. Within the banking book, guarantees can be used to reduce the regulatory capital charge only to the level associated with the guarantor, giving no benefit to either the double-default or double-recovery effect of guarantees. That is, in order for a loss to

¹¹ Paragraph 413 also states that best-practice estimates of through-the-cycle PDs should be increased by adding "a margin of conservatism", driving these estimates closer to recessionary PDs.

occur on a guaranteed credit, both the underlying obligor and the guarantor would have to fail. This probability is likely to be significantly lower than the probability of either one failing, therefore the economic capital allocation for the guaranteed credit should be considerably lower than for either a direct obligation of the guarantor or the actual underlying credit. Moreover, some credit guarantees are written in such a manner that the bank, in the unlikely event of double default, can seek recoveries from both the underlying obligor and the guarantor. CP3 recognizes neither of these two risk reduction benefits.

An excellent treatment of this subject can be found in a recent paper produced by staff at the Federal Reserve Board.¹² The paper describes an appropriate analytical approach to the issue (in the context of the ASRF model currently being used by Basel for AIRB banks) and lays out the important supervisory concerns over the use of guaranteed credits or credit derivatives that function as guarantees. We believe that these supervisory concerns can be appropriately treated within the Pillar 2 process, while the analytical framework can be implemented relatively quickly within Pillar 1.

The analytical framework in the FRB paper points out that the final capital allocation would depend not only on the PDs of both the obligor and the guarantor but also on three types of asset-value-correlation – the AVC of the obligor (given by the Basel AVC equation as a function of the obligor's PD), the AVC of the guarantor (given by the Basel AVC equation as a function of the guarantor's PD), and a "new" AVC consisting of the degree to which the asset values of the guarantor and obligor are correlated (respond to some risk factor separate from the macro risk factor driving the other AVCs). Presumably, Basel would set the level of this guarantor/obligor AVC – which is really a representation of the degree of "wrong-way" risk – at a reasonably conservative level until empirical research could be brought to bear on the issue. We should like to point out that the "wrong-way" risk correlation parameter should not be very high in the case of a highly-rated guarantor. That is, in order for the large, diversified protection seller to have received its own debt rating of, say, A or better, it must have demonstrated to the market that it does not have a significant section of its

portfolio consisting of guarantees on obligor paper which are sensitive to the same risk factor driving the performance of the guarantor's own assets (e.g., it does not issue large amounts of guarantees on oil company paper relative to its portfolio, or does not issue large amounts of oil paper guarantees coupled with large amounts of oil company loans as assets).¹³ That is, asset-value-correlations between guarantors and obligors are not likely to be different than general commercial AVCs as found within the Basel AVC functions.

The Federal Reserve paper shows that, even when one assumes fairly high "wrong-way" risk between obligor and guarantor (e.g., an obligor/guarantor AVC of 75%), there can be a substantial economic capital benefit associated with the doubledefault aspect of guarantees (resulting in EC that is significantly less than under the "substitution" treatment of CP3).¹⁴ For example, for a loan with a one-year maturity, assume that both the guarantor and the obligor have a PD of 1.00%, a systemic risk AVC (given by the Basel AVC equation) of 19.3%, and that the LGD on the underlying facility is 45%. Assume further that there is no double-recovery benefit. In this case, the unhedged loan would attract a capital charge of 6.3%. Under CP3's "substitution" treatment, since the two PDs are the same, there would be *no* capital savings -- the capital charge would remain at 6.3%. Under the ASRF model discussed in the Federal Reserve paper, the capital charge would be 3.2%, assuming the high "wrong-way" risk factor and assuming *no* double-recovery benefit.

<u>Other credit risk mitigation prescriptions in CP3</u>. As a generality, we believe that many of the other Pillar 1 prescriptions in CP3, as they pertain to credit risk mitigation, should be replaced with a statement of broad principles and followed by examiner guidance in the form of national Pillar 2 treatment. For example, CP3 appears to require the bank to associate a particular piece of collateral with a specific facility of an obligor

¹² See the White Paper, "Treatment of Double-Default and Double-Recovery Effects for Hedged Exposures under Pillar 1 of the Proposed New Capital Accord," Erik Heitfield and Norah Barger, Board of Governors, Federal Reserve System, June 2003.

¹³ Guarantees issued by Russian banks against Russian commercial loans are often cited as an example of such "wrong-way" risk. However, in retrospect, one can argue that the Russian banks, if rated, would not have been highly rated, and that one reason for this low rating should have been their lack of diversification (i.e., their portfolios consisted mainly of loans to government-backed industries).

¹⁴ The paper also indicates that EC might be higher than the "substitution" treatment of CP3 in the case of an obligor with a very high PD and LGD, coupled with a guarantor that has a very high sensitivity to the systemic risk factor (higher than that implied by the Basel AVC equation).

(e.g., paragraph 265) – rather than manage collateral on the basis of the overall relationship with the obligor. In some instances, however, the obligor may have several facilities with the bank in which each facility allows for the bank to dispose of any portion of the collective collateral in order to pay off a defaulted facility. Similarly, under the Foundation approach, when a facility is covered by several different types of collateral (financial, CRE, residential property), CP3 requires the bank to subdivide the facility into several parts associated with each type of collateral – attributing an LGD to each "part" of the facility in relation to the rules for that type of collateral. This prescription is appropriate neither for Foundation nor AIRB banks in instances where collateral for one or more facilities consists of a pool of assets. The basic principle should be that estimates of LGD for each facility should be appropriate to the language of the loan contract. For example, when the contract allows the bank to seize and dispose of any portion of the pool of collateral backing a series of facilities, the bank could reasonably estimate the current value of the pool, and then assign the same recovery rate (1-LGD) to each facility, based on the current value of the pool of collateral. The prescription of CP3 results in an inefficiency, without improving at all the measurement of risk (i.e., without improving the estimation of the facility's LGD).

Still another example of inappropriate prescriptiveness is the requirement (Paragraphs 360-361) that AIRB banks assign ratings to facilities (as opposed to obligors) based *solely* on LGDs, not ELs (as is permitted for Foundation banks). This requirement for AIRB banks serves no purpose. The intent of the ratings system, in the context of regulatory capital requirements, is to provide the basis for reasonable estimates of PDs and LGDs to be "plugged into" the Basel capital model. If a bank historically has set its obligor ratings to reflect PDs, while setting its facility ratings to reflect ELs, such a bank has, for each facility, a good estimate of LGD (i.e., the EL of the facility divided by the PD of the obligor). For a reasonably fine-grained facility rating system, this LGD estimate should be no different than if the bank had based its facility-grading system directly on LGDs. Thus, the requirement that the bank change over its facility-rating system to reflect LGDs, rather than ELs, would involve significant added expense (including the expense of changing business procedures), without changing the bank's LGD estimates (or its regulatory capital requirements). A final example of risk mitigation treatment is CP3's stance on maturity mismatches on hedged instruments (i.e., cases where the maturity of the hedge is shorter than the maturity of the underlying asset). The simplest and most analytically correct treatment would be to treat the hedge/asset combination as a forward credit exposure under the AIRB approach. That is, the capital allocation on the underlying (calculated using its actual remaining term) would be offset by negative capital on the hedge (again calculated using the AIRB approach with the actual remaining term of the hedge). Then, counterparty risk on the hedge can be assessed using the double-default (and doublerecovery) logic discussed above with regard to guarantees.

C. <u>Treatment of Very Short-Term Maturities</u>. Under CP3, the M (maturity) adjustment for commercial loans has a lower bound of 1 year, *except* (as defined on a national basis) for facilities that:

- Are not part of the bank's ongoing financing of the obligor; and
- Have an original maturity of less than 3 months.

For these credits, the M factor can be as little as 1 day but can be no greater than 89 days. No adjustment to the one-year-horizon PD is contemplated by this CP3 treatment of short-dated facilities. For all other facilities, including those with original maturities in excess of 89 days, the minimum M factor remains 1 year.

This treatment of short-dated facilities differs substantially from internal bestpractices. Although there is some diversity of practice, for internal risk measurement purposes the majority of our Group members adjust the PD downward from its 1 year level in the case of facilities with short remaining maturities (regardless of original maturity), but the banks do <u>not</u> adjust downward the maturity factor below 1 year.

There are two broad analytical issues associated with short-dated facilities. First, if an obligor has a given probability of default over, say, the next quarter, the cumulative probability of default over 4 quarters, even assuming no credit quality deterioration, must be higher than the one-quarter probability of default. Unexpected loss (capital) therefore must be less for the short-dated facility. Implicit in this conclusion, of course, is the requirement that the bank have the unquestioned right not to renew the facility at the end of the current term. Also implicit in this conclusion is that a real credit review takes place on or before the time of deciding whether to renew the facility. If such a right

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exists, and if the credit review suggests that a deterioration in credit quality has taken place, then the bank can simply close out the facility and reinvest the proceeds in, say, another short-dated facility with the same credit quality as was originally the case.

Second, economic loss in a short-dated facility is associated generally with default, not with credit migration. That is, if the rating on a short facility declines, the bank clearly can wait a few days or weeks to close out the facility at par, rather than sell the loan at a discount, as would be the case with a longer maturity. Economic Capital refers to a loss distribution over a specific, chosen horizon. Therefore, so long as the bank can close out the facility without default <u>before</u> the horizon, no economic loss occurs if the credit's rating falls significantly. The M factor in the Basel II commercial loan equation exists largely to accommodate the possibility of mark-to-market (MTM) losses that occur at the chosen horizon. If the remaining maturity exceeds the horizon of one year, default might be avoided at the horizon, but credit risk migration might have taken place and the MTM value of the credit may have declined at the horizon.

The majority of our banks believes that, for these two reasons, the proper treatment of all short-dated facilities – including short facilities with original maturities of any length – is to reduce the effective PD from the one-year PD, down to very near zero for one-day facilities. These reduced PDs would be measured relative to the estimated one-year PD – but the M factor in the capital equation should remain at unity. That is, the capital equation itself would have no maturity adjustment, just a downward adjustment for the lower effective default probability. We believe that a downward (below a year) maturity adjustment would be "double-counting" in that there should be no greater "mark-to-market" benefit than elimination of the maturity effect. Put another way, facilities less than a year, when coupled with a one-year horizon, can suffer only default-related losses but do not somehow gain additional "benefit" from not being exposed to MTM losses.

The consensus view is that an appropriate correction for the PD of short-dated facilities is the log-linear correction used within KMV's Portfolio Manager[™]. This correction can be expressed as

(a)
$$PD_t = 1 - exp(ln[1-PD_1]t),$$

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Where t = maturity of the short-dated facility expressed in years, and PD₁ is the one-year horizon PD estimated by the bank for the obligor. This equation can be thought of as symbolizing the case in which the one-year interval is divided into equal length periods and the probability of the obligor defaulting during any period, conditioned on the obligor having survived up until the beginning of the period, is the same for each period. While this equation has a straight-forward meaning, a straight-line interpolation of PD would be less complex and would produce similar results. Either such approach should be used for the "adjusted" PD, within a Basel capital function that retains the assumption of a 1-year maturity.¹⁵

D. <u>The Use of Stress Tests</u>. Paragraphs 396-397 require an AIRB bank to utilize so-called "stress tests" in an assessment of capital adequacy. Especially confusing is language that the "stress test may indicate no difference in the capital calculated under the IRB rules described in this section of the New Accord if the bank already uses such an approach for its internal rating purposes." These paragraphs seem to suggest either that stress tests should be used in a manner a) that results in higher supervisory (Pillar 2) capital than internal models would otherwise suggest, or b) that increases Pillar 1 capital over and above the results of the Basel model(s) found in the AIRB approach. We find this language to be extremely disturbing.

Stress tests typically are used by practitioners in the context of internal capital adequacy calculations. Of course, the internal risk models are themselves "stressed" in that a high confidence interval is applied to an empirically estimated loss distribution. Further stressing is often initiated via the stressing of model inputs (higher than expected PDs, LGDs, and EADS) or the use of specific historical bad loss events or periods. These stress tests are viewed as sanity checks on the outcome of the internal EC calculations. For example, the analyst might ask "how does the loss at the confidence interval compare with actual losses during the worst loss period in history?" Or, the analyst might measure the increase in internal EC arising from choosing a stressed PD input. This does not mean that the internal EC estimate would be changed, only that its level be subjected to these "smell tests." If one or more of the checks raises suspicions,

¹⁵ Even if Basel retains the effective minimum PD of 0.03% (one-year horizon) for commercial loans, this means that the minimum short-dated PD would still approach zero for one-day facilities.

the process of estimating parameter inputs, or the construction of the risk model itself, might be reexamined.

The language in CP3 seems much less benign than this internal "checking" process. Rather, CP3 seems to be calling for supervisory add-ons to internal capital as the result of stress tests or, even worse, for supervisors to call for Pillar 1 add-ons depending on the supervisors' subjective stress tests. In the first instance, the supervisory process should always be seen as providing a check of internal capital processes. The examination process should focus on the construction of internal risk models, the estimation of risk model inputs, etc., not just on the nature of internal stress tests. Only if examiners believe that the bank's internal risk measurement procedures are less than best-practice should supervisory pressure be brought to bear to improve such practices and "improvements" should not be thought of only as those which *increase* internal EC estimates. That is, less than best-practice internal models that produce too conservative EC estimates are no less onerous than poor practices that underestimate EC. In the latter case, the bank may not be allocating enough capital to meet its own soundness standard; in the former case, the bank may be overestimating the risk of low-risk activities, which also is not optimal from the point of view of maintaining at least a minimum soundness standard. It is not unreasonable for a supervisor to use its own stress test to question the outcome of internal EC models. The stress tests themselves are a tool for the examination process – they should not become the vehicle for arbitrary supervisory capital add-ons.

To suggest that "stress tests" should alter the actual Pillar 1 requirements is quite another story. To do so would open the New Accord to the differing subjective desires of diverse supervisory regimes. Pillar 1 would rapidly become a sham, and the three pillars of Basel would be reduced to the equivalent of a two-legged stool.

E. <u>Calibration of Capital Charges for Securitizations</u>. The proposals in CP3 regarding the treatment of traditional and synthetic securitizations represent, we are quite aware, many years of effort on the part of Basel staff. Moreover, the CP3 treatment represents significant improvement over proposals in early Basel II drafts, notably in the refinement of the Supervisory Formula ("SF") approach, in the changes to the capital charges for certain rated securitization tranches, and in the treatment of revolving retail

credit securitization. Nevertheless, certain very important policy issues remain, which we address below. In addition to these views, the majority of the RMA Capital Working Group supports the comments of the Multi-Seller Conduit Group regarding the treatment of asset-backed commercial paper conduits.

Restricted Use of the Supervisory Formula for Rated Tranches. CP3 requires an originating bank, for securitization tranches beyond KIRB, to use the Ratings Based Approach ("RBA") for any rated tranche or for any unrated tranche for which an "inferred" ratings exists (a tranche that is senior to a reference rated tranche). This requirement bars the originating bank from using the Supervisory Formula ("SF") for such tranches, and in so doing dismisses the usefulness of the PD, LGD, and AVC information on the underlying pool assets available to the originator. In securitizations in which the originator retains a first-dollar position plus mezzanine tranches that sum to less than K_{IRB}, Basel imposes a dollar-for-dollar capital charge, up to the limit of K_{IRB} on pool assets. In these cases, there is a strict correspondence between Basel's capital treatment and the internal best-practices of originating banks. However, in cases in which the originating bank does <u>not</u> hold first-dollar positions, but rather retains relatively senior positions, Basel is saying that, in effect, it trusts the external ratings of the tranches rather than Basel's own credit risk model. For any tranche beyond K_{IRB}, the SF, which is analytically based on the Basel ASRF model for the underlying assets, would employ an approximation of tranche PD based on the prior protection of the tranche and the implied Basel loss distribution for the pool – yet this information is scrapped in favor of the imprecise tranche PD estimate that flows from an external rating of the tranche. Basel's choice in this regard is especially puzzling given that paragraph 600 states that liquidity facility providers *may* rely on the external rating of the facility under the RBA (and must use the SF for an unrated tranche).

Basel's intent in requiring the use of the RBA for rated tranches may be to prevent capital arbitrage between the capital requirements of the SF approach and the RBA. This is understandable. A simple solution is to require an originating bank to use the SF for all rated tranches beyond K_{IRB} for <u>all</u> pools it originates, if it uses the SF for any beyond- K_{IRB} rated tranche of any pool.

Another concern of Basel may be that, somehow, the underlying Basel ASRF model is "wrong" for the pool in question and that, somehow, the tranche PDs implied by the rating of the tranche is "better" than that implied by the Basel model. While this Group generally favors market tests of risk, we have described at length in previous papers how ratings of securitization tranches habitually overstate implied tranche PDs and LGDs.¹⁶ In providing securitization ratings, the rating agencies typically employ very conservative stress rules-of-thumb that have been shown to result in substantially lower PDs and LGDs than similarly rated corporate bonds – perhaps because such conservatism is necessary to bring to market credit-asset-backed securities for which the investor cannot examine the individual assets comprising the underlying pool. For the originating bank employing the AIRB approach, the capital requirement generated by the Supervisory Formula may closely align with best-practice internal capital allocation for securitization tranches. For this reason, originators, who should have significantly greater access to pool individual asset data than investors, and who should in any event have their internal asset risk parameter estimation processes under close supervision, should be permitted to use the Basel ASRF model for all rated or unrated tranches they hold. To the extent that the Basel credit risk model is biased upward by Basel's choices of high AVCs, such bias will be reflected both in the Basel capital charges for the pool assets if held on the books of the bank, as well as for the tranches of a securitization sponsored by the originating bank, so long as it is permitted to use the SF approach. Conversely, requiring the bank to use the RBA in a case in which the Basel capital charge for the rated tranche is higher than implied by best practices (see next section), would create an inappropriate disincentive to securitize.

<u>The Risk Weights for the RBA</u>. Clearly some banks will not have the ability to use the SF approach (for example, investor banks that have incomplete pool information, or banks not qualified for AIRB status). In such cases, a Ratings Based Approach is necessary. Although the AIRB banks in our Group generally would be originators rather than investors, there is the concern that too-high risk-weights for rated tranches will reduce the demand for securitizations by limiting bids from large, but not AIRB-certified,

¹⁶ See Appendix 1 in "Response to Basel's Proposals for Allocating Capital to Securitization," RMA, May 3, 2002.

banks. CP3 has improved upon earlier proposals by reducing the capital charges for highly-rated, thick senior tranches backed by granular underlying asset pools. However, the capital charges for middle and lower rated tranches may still be too high.

We presume that Basel has arrived at the risk weights in paragraph 585 by using some estimated mid-point of PD associated with the rating, in conjunction with assumptions regarding tranche LGD and asset-value-correlations between the rated tranches and the rest of an investing bank's portfolio. We wish simply to reiterate that previous research indicates securitization tranche ratings are so conservative that implied PDs and LGDs are much lower than for comparable rated corporates. For this reason, the risk weights may be too high (if Basel has not made an appropriate adjustment for the overstatement of implied PD). Our view on this subject is supported by recent research by a normally conservative rating agency that also suggests the risk weights are too high for the middle to lower-rated tranches.¹⁷

<u>The Treatment of Residual Interests</u>. Basel II requires that the originating bank take a dollar-for-dollar reduction in capital associated with the booked residual interest in the proceeds of a securitization. In addition, any other securitization tranches or interests held on the books of the originating bank attract regulatory capital, up to K_{IRB}. These residual interests represent the most subordinated interest (the "equity interest"), in which the bank receives whatever proceeds are left over from the winding down of the special purpose vehicle ("SPV"). Supervisors are concerned that not only is the residual interest an asset with a highly uncertain future value, but also the creation of the residual interest asset often represents a sort of "artificial creation" of capital at the point of the securitization transaction.

In a typical securitization, accounting rules require that the value of the securities (including the residual interest held on the books of the originating bank) must not exceed the value of the loans being sold to the special purpose vehicle. For this reason, in a typical transaction in which the originator retains this residual interest but none of the other tranches of the securitization, the residual interest is roughly equal to the accounting gain on sale from the bank selling the assets to the SPV. Thus, at the point of the securitization, the bank "creates" additional capital equal to the amount of this gain – and

¹⁷ See Fitch Ratings, "Basel II Securitization Proposals: Primer and Observations," April 22, 2003

(abstracting from tax effects) this additional capital happens to be equal to, or nearly equal to, the amount of the residual interest. Under Basel II, this "artificial" creation of capital is effectively reversed by requiring a 100% reduction in capital (for regulatory purposes) in the amount of the residual interest. However, since the bank retains no other interest in the sold securities, no other capital charges are assessed. The end result is that the bank has the same capital it had (and essentially the same risk) as if it had kept the pool assets on its books.

A significant problem arises when the originating bank keeps the residual interest and also a major portion of the SPV's issued securities. Such transactions typically are used as funding vehicles – the bank is not trying to sell the "tail risk" of the underlying credits, but rather simply uses the SPV to provide liquidity. In such cases, accounting rules typically calculate a gain on sale of the assets to the SPV that is only a fraction of the residual interest. That is, the substance of the transaction is treated as if only a portion of the assets is sold, and so only a relatively small gain is accrued. Thus, only a relatively small increase in capital occurs. Yet, the dollar amount of the residual interest is the same as if the bank had kept only the residual interest and none of the tranches. In this circumstance, Basel requires that a capital reduction take place in the full amount of the residual interest (effectively reducing absolute bank capital *below* its level prior to the securitization) – and Basel requires capital be allocated to the retained tranches, up to the limit of K_{IRB}. The end result is that, while the bank has essentially the same risk as if the assets were not securitized, it must hold regulatory capital equal to the original amount on the underlying assets and it takes a haircut on it regulatory capital. Clearly this is not a neutral treatment, and if implemented, could cause this type of transaction to disappear. We believe that Basel's treatment of residual interests did not envision the sort of transaction described in this paragraph – which is an important type of transaction for some of our members. A simple solution would be to require, in the case of residual interests, a reduction in capital equal to the original gain on the transaction, then assess a dollar-for-dollar capital charge on the rest of the residual interest that exceeds the original gain, but only up to K_{IRB}. This would leave the bank with the same absolute level of capital as if the securitization were not undertaken, as well as the same capital attribution for the pool assets as if they were not securitized.

VI. Other Issues.

A. <u>Operational Risk Capital</u>. The RMA Capital Working Group supports the views on operational risk capital expressed by the RMA Working Group on the Regulation of Operational Risk (see paper attached as Appendix 2). In general, we welcome the evolution toward a full models-based approach of the Advanced Measurement Approaches ("AMA") found in successive versions of Pillar 1. The principles articulated in CP3 govern qualification for the AMA and its application, and constitute a high-level, rigorous and professional framework. These principles deal with appropriate oversight, data quality, auditable processes, and independent validation, and leave room for specific practices to develop. This is appropriate since significant new research is being undertaken with regard to operational risk capital at individual best-practice banks and it is important that the flexibility implied in the current draft be retained in the final Accord and in subsequent implementation.

As an example of a principles-based rule, we agree with the current draft that relevant external operational risk data should be taken into account in estimating an operational risk charge, and we welcome the absence of any specific guidance on how institutions should do this. It has been suggested by some that only data from large operational loss event databases be used and that a single rule be developed for scaling and incorporating such data into a specific institution's capital charge. Today, there are alternative defensible types of external data and alternative defensible ways of applying these data to internal capital estimation. We believe CP3 is correct to allow experimentation across these approaches so that best-practices can develop as quickly as possible. Furthermore, we welcome the recognition that the quality of *individual banks*' operational risk management, oversight/auditing, and risk measurement systems is a key factor in determining the level of residual risk to which capital should be allocated. While the RMA Working Group on the Regulation of Operational Risk has several substantive concerns with technical aspects of the current Accord draft, it is supportive and appreciative of the proposed flexibility and sophistication of the treatment of operational risk.

B. <u>Pillar 3 – Public Disclosure</u>. Pillar 3, we would agree, is an essential element in prudential oversight of regulated financial institutions. The major issue, however, is the degree to which Pillar 3 should consist of specific prescriptions versus a set of general principles that would be implemented by the supervisory process. As it stands now, the specific prescriptions for Pillar 3 within CP3 consist of significantly more information than could be utilized by even fairly sophisticated investors or other market analysts. The result will be to increase compliance costs for banks and to increase confusion for all but the very most sophisticated market analysts. It would be preferable for the supervisors, industry analysts, and bankers to meet together between now and 2007 to agree on a set of disclosures that market analysts could actually use to assess bank soundness.

C. Pillar 2 should be a Two-Way Street. The Accord has always been a collaborative process in that, as new risk measurement and management techniques have been established, these techniques have been communicated to supervisors. This communication has helped to disseminate best-practices, as supervisors sought to bring all large, complex banks up to the standards of best-practice. The educational process, in turn, has resulted in changes in Pillar 1 and Pillar 2 – witness the advent of market risk capital rules for the trading book under the Accord, or new supervisory letters providing guidance for best-practices in risk measurement. We hope that this historical process will continue under the New Accord and that supervisors will not demonstrate a bias toward implementing only those new risk measurement devices that result in *increases* in capital. It is in the best interests of all stakeholders – including the macro economy – for the Accord to reflect best-practices, especially practices that have stood the tests of validation and market use. Estimates of required capital should be as accurate as possible – any other result will lead to resource misallocation, at best, or systemic upheaval, at worst. As new, validated research is completed, the results should be employed, first through the supervisory process and finally through alterations to Pillar 1.

We appreciate this opportunity to comment, and we stand ready to support the Committee as it goes about the difficult task of finalizing the New Accord and implementing it. With respect to implementation, we recognize that there are additional, significant details that need to be worked out, as well as additional QIS exercises that

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need to be undertaken prior to final implementation. We look forward to continuing with this important dialogue.

Appendix 1

Institutions in the RMA Capital Working Group

Bank of America
Bank of New York
Citicorp
Discover Financial Services
JPMorganChase & Co
PNC Financial Services Group
Royal Bank of Canada
Wachovia
Wells Fargo

Bank of Montreal Bank One Comerica FleetBoston Financial KeyCorp Providian Financial Union Bank of California Washington Mutual Bank

Staff participating in drafting or reviewing this response

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Communications; Charles Taylor, Director of Operational Risk

Mingo & Co.: John Mingo, Managing Director

Appendix 2

<u>The RMA Working Group on Operational Risk Regulation</u> <u>Comment Letter</u>

Introduction

In June 2003, RMA¹⁸ formed a Working Group for its members and the attendees of the Operational Risk Management Discussion Group¹⁹ to examine and contribute to the development of bank regulations that deal with operational risk. As its first task, the RMA Working Group on Operational Risk Regulation hereby submits to the Basel Committee on Bank Supervision and to the U.S. Bank Regulators this comment letter on the Third Consultative Document (CP3) of the New Basel Capital Accord.²⁰

Background

The Working Group welcomes how the treatment of operational risk has evolved through successive comment documents released by the Basel Committee. In the Advanced Measurement Approach (AMA), that treatment has progressed toward a full principles-based, risk-sensitive, models-based approach. This approach provides criteria and guidance for data, analytical methodologies and management processes but leaves considerable discretion to individual institutions about implementation. The Working Group endorses the resultant flexibility and the room it leaves to accommodate improvements in best practices going forward.

¹⁸ RMA – The Risk Management Association is a member-driven professional association whose sole purpose is to advance the use of sound risk principles in the financial services industry.

RMA also sponsors and supports two other Groups that are commenting on CP3: The Basel Securities Lending Sub-Committee, which is focusing on securities lending issues and credit mitigation and the RMA Capital Working Group, which is focusing on all other aspects of the credit risk capital charge under the A-IRB Approach.

¹⁹ The Operation Risk Management Discussion Group is an informal group of US banking industry professionals formed in the 2002 to work together to strengthen the effectiveness of operational risk management through the exchange of ideas, approaches, and techniques in the financial services industry.

²⁰ The RMA Working Group on Operational Risk Regulation consists of senior operational risk management professionals working at banking organizations throughout the United States. The names of individuals who have participated in the Working Group and agree with the letter's content are shown in Appendix 1. Their institutions are listed for identification purposes. This Working Group does not necessarily speak for RMA's institutional membership, which is diverse and includes institutions with different views on regulatory matters. Individual banking organizations whose staff have participated in the Group may be responding separately to CP3 and may hold opinions regarding Basel II that differ from those expressed in this paper.

Nevertheless, Group has remaining concerns about certain issues and their treatment under the AMA:

- estimation of the capital charges risk mitigation, diversification effects and expected losses;
- clarification validation, external data and home/host rules; and
- transitional arrangements partial opt-ins and other aspects of implementation.

Estimation Issues

Risk Mitigation Any offset for insurance should be related to a reasoned assessment of its <u>quality</u>. The 20% ceiling under the AMA proposed in the CP3 is arbitrary (paragraphs 637 - 639). Given the standards that banks and insurance companies have to meet for the banks to qualify for this offset, the 20% ceiling is too restrictive and will inhibit the development of this important risk mitigation tool. At best, the 20% limit should be eliminated and the issues of the extent and certainty of coverage and insurer solvency should be addressed head on. At least, the Committee should be clear in the final version of the New Accord that it expects to work with the industry in the years ahead to refine the AMA approach to insurance as a matter of priority.²¹

Diversification Effects <u>A standard of reasonableness should replace the proposed standard of proof for diversification.</u> Although an allowance for diversification effects amongst different operational risks is permitted, the level of proof required to qualify is unreasonable (paragraph 629.d). For many operational risks -- such as execution risks in different businesses, processes and locations, supported by different people and systems - there is no a priori reason to think they would be correlated at all. In such instances, the need for a "high degree of confidence … [in some specific] correlations" is unnecessary before a quite sizeable allowance for diversification should be permitted.

Even in less clear-cut instances of independence of risks, the subsequent layering of requirements in CP3 -- calling for not only a "high degree of confidence" but the "tak[ing] into account [of] the uncertainty surrounding any such correlation estimates (particularly in periods of stress)" -- seems excessively conservative in pursuit of <u>minimum</u> capital standards. Indeed, this last reference to "periods of stress" is not only conservative, but also obscure. Whereas it is relatively clear what might be meant by "periods of stress" in a market or credit risk context – periods of unusually adverse economic and market conditions – it is not clear why correlations among operational risks would generally increase at such times. If this idea has a place in the final version of the New Accord, it would be helpful to explain the sorts of period that are deemed stressful and at the same time likely to impact operational risk correlations.

²¹ The Basel Committee recognized the length of the minimum notice period for cancellation and nonrenewal presents challenges (Footnote 94). The Working Group understands that the Committee is attempting to ensure that, at the margin, insurance is a buffer against losses equivalent to Tier I capital and, to the extent it isn't, to haircut it. It would be helpful, therefore, to have a fuller discussion of the Committee's views of the time horizon and the certainty of Tier I capital and of their views regarding the diversification advantages of having two pools of capital – the bank's and the third-party insurance provider's – behind the solvency of a bank, as opposed to the one that is present when a bank has no independent insurance coverage for operational risk.

Expected Losses The exclusion of EL from the operational risk charge should be promoted as best practice by the Accord. CP3 requires banks to demonstrate that EL is accounted for in operational costs before they can be excluded from the operational risk capital charge (paragraph 629.b). It would be better to require banks to recognize EL as an operating cost wherever accounting rules permit.

Clarification Issues

Validation <u>The requirement for validation should be clarified.</u> Currently, no one can say when, if ever, it will be possible to validate operational risk measures statistically against loss experience (paragraphs 629.d, 635 and 636). The underlying operational loss distributions from different periods may always be too different, if technology and other business factors change quickly. In that case, the Working Group expects that the processes used to estimate operational loss distributions (rather than the results) should instead be validated or audited and we would appreciate clarification about what might then be required.</u>

External Data The requirement to use external data needs clarification. Although the CP3 provides examples of the kind of external data a bank might use, it does not explicitly say what standards of quality or relevance regulators will apply. It can be read to imply that banks will be given a good deal of flexibility on the data they use and how they use it (paragraph 634). The Working Group welcomes this implication but would appreciate wording that was a clearer, unambiguous commitment to be flexible. It would be counterproductive, for example, if a particular type or source of external data was favored at this stage or if a particular methodology for scaling, for example, was proposed. It is important for banks to continue to explore actively competing data and methods and thereby to drive best practice forward expeditiously.

Home/Host Rules The interaction of home and host country rules needs clarification. The resources required to support calculations of capital in many jurisdictions according to different rules may be large for internationally active banks. To the extent that it is possible under national laws and policies, distinct, specific and different calculations should be minimized.²²

²² Several members of the Working Group considered this important. Due to the relatively small sample sizes of available data, the issue may not just be cost: it may in fact be impossible to apply the AMA rigorously to all legal entities and within every jurisdiction. One alternative might be to apply the principle of home country passports used today within the European Community for many kinds of economic regulation whereby the host country accepts the determination on regulatory compliance made in the home country. A second alternative would be to permit allocation methodologies applied to consolidated operational risk capital to derive estimates for component legal entities and at the regional level. So, for example, consolidated operational risk capital by major line of business and risk category might be allocated based on gross income attributed to entities/regions within each line of business.

Implementation and Transitional Issues

Partial Opt-ins Partial opt-ins should be accommodated. CP3 would allow banks to opt into the AMA for most of their businesses and to opt out for the remaining ones during a transitional period. In most countries, for banks that chose this option, the Basic Indicator or Standardized Approach would cover that second group of businesses temporarily. The Working Group supports this accommodation. We think the Basic Indicator or the Standardized Approach should be made available in the United States too for this particular circumstance even though, as we understand it, they will not be generally available options here.

The Working Group would also like a second kind of partial option for the Opt-In (as opposed to the mandated) banks. A bank should be permitted to opt into the AMA only; that is, to keep to Basel I for credit risk. A bank that was seeking market recognition for investments it had made in operational risk management improvements might find this attractive. This might be so for a transition period, while it brought its credit risk management up to the A-IRB standards, or for the longer term, if it was a bank that set its economic capital conservatively anyway -- or if an offset was made to the Basel I credit risk capital requirement.

Partial options should increase the number of Op-In banks in the United States and encourage more improvements in operational risk management sooner than otherwise, thereby contributing to the overall safety and soundness of the banking system.

Continued Implementation <u>The New Accord must provide for the continued evolution</u> of industry practices. We expect loss distribution estimation approaches, loss event databases, scenario analysis and other elements of operational risk management practices to continue to evolve. Hence, we expect the dialogue between the industry and the regulators to continue after the New Accord is implemented. It is important that the final version of the New Accord is sufficiently flexible to allow capital standards to evolve too, as operational risk management practices improve.

Conclusion

The Working Group hopes that these comments will be useful to the Basel Committee and to the participating U.S. bank regulators as they finalize the New Accord.

Signed:

Tim allit

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(Attachment 1 is a list of participants.)

Attachment 1

The RMA Working Group on Operational Risk Regulation

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