

May 29, 2007

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Regulation Comments  
Chief Counsel's Office  
Office of Thrift Supervision  
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Attention: No. 2007-06  
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**Re: Proposed Supervisory Guidance for Internal Ratings-Based Systems for Credit Risk, Advanced Measurement Approaches for Operational Risk, and the Supervisory Review Process (Pillar 2) Related to Basel II Implementation**

Dear Ladies and Gentlemen:

Bank of America Corporation (Bank of America) appreciates the opportunity to comment on the Proposed Supervisory Guidance related to the implementation of Basel II in the United States. Bank of America, with \$1.5 trillion in total assets, is the sole shareholder of Bank of America, N.A. and provides a diverse range of financial services and products to individuals and businesses across the United States of America and in selected international markets.

The agencies published the US interpretation of the Basel II international framework in their Notice of Proposed Rulemaking (the NPR) in September 2006. We commented on the NPR in a letter dated March 26, 2007. We would like to reiterate our general view of the US implementation now that the NPR and Supervisory Guidance (the Guidance) can be considered in combination. As noted in our comments to the NPR, the agencies' proposals deviate significantly from the international Basel II Accord and could have far-reaching consequences for the US banking industry. We reaffirm our view that these divergences place US banks at a competitive disadvantage relative to foreign banks and domestic investment banks, reduce the risk sensitivity of the capital framework, increase the costs of compliance and limit the comparability of capital ratios across jurisdictions. Our key elements of concern include the competitive impacts of the 10% aggregate floor, the retention of the leverage ratio, the limited range of options for the US banks and the more restrictive transition period in the US implementation. Comments on these issues, as well as other technical matter in the NPR, have not been repeated in this letter. Since many of our comments to the NPR also pertain to the

Guidance, we request the agencies incorporate them by way of reference and consider them alongside this material.

We remain very supportive of efforts to modernize the risk-based capital regime. We strongly support the three-pillar paradigm of minimum capital requirements, supervisory review and market discipline as part of a comprehensive risk-based capital approach. We support the efforts to better align regulatory capital requirements to underlying economic risks, encourage better risk management processes and promote international consistency in regulatory standards.

The consultative dialogue maintained by the agencies with the industry has been mutually beneficial and has improved the transparency of the decision process. The specific requests for comments indicate that the agencies value industry feedback and will provide it due consideration. We hope the agencies will find our response useful to that end. We generally support the approach outlined in the Guidance. Our primary concerns relate to the following aspects:

- Domestic vs. International Definition of Default
- Internal Rating Grades for the IRB Definition of Default
- Practical Approaches for Identifying Historical Defaults
- Rating Impact and RWA Calculations for Guarantees
- Treatment of Tranched Guarantees as Securitizations
- Treatment of Seasoning for Retail Exposures
- Inclusion of Post-Default Balance Increases in EAD
- All or Nothing Downturn LGD Requirement
- Board Oversight of AMA Details

Within each of the following sections, we have replicated the relevant text from the Guidance in italics and followed it with Bank of America's commentary. To be fully comprehensive, we have included additional comments on a variety of technical issues in the Appendices to this letter. Bank of America has participated in the preparation of the comment letter of the Risk Management Association (RMA). With some minor differences, we endorse the RMA comment letter and have therefore limited repetition of many points common to Bank of America and the RMA.

#### **Domestic vs. International Definition of Default**

*S 2-1 Banks must identify obligor defaults in accordance with the IRB definition of default.*

- As noted in our previous comment letters, the NPR and the international framework diverge in their respective definitions of default. The primary differences are that the NPR definition specifies 5% as a threshold for materiality of credit related loss on sale of an exposure, applies non-accrual status as the minimum criterion rather than 90 days past due and makes no exception for immaterial amounts. As a result, internationally active US banks will be faced with greater compliance costs and all US banks will face higher Pillar 1 capital requirements.

- Many US banks have already developed their quantitative models to support Basel II based on the international definitions due to the delay in publishing the NPR. A change in definition from the international standard at this late stage would require a great deal of re-work to implement. More significantly, banks with operations across multiple jurisdictions would have to maintain databases, develop estimation procedures, implement rating systems, and manage validation processes with multiple definitions of default. These dual systems would require significant additional compliance costs and operational burden.
- The more narrow definition of default will also introduce an upward bias in the capital requirements of US banks. For the calculation of expected loss, the effect on PD and LGD is largely offsetting. The calculation of risk weighted assets, however, is distorted. Due to the non-linear nature of the formula, the impact of the LGD increase will more than offset the PD decrease resulting from the US agencies definition. As a result, US banks will have greater capital assignments than their international counterparts.
- We strongly recommend harmonizing the definition of default with the international framework. This could be accomplished by a complete alignment of definitions or by allowing internationally active banks to choose between the international and domestic definitions in order to reduce compliance costs and apply consistent models across international jurisdictions.

#### **Internal Rating Grades for the IRB Definition of Default**

*S 2-9 Banks must have at least seven discrete obligor rating grades and at least one rating grade for defaulted obligors.*

- We agree with the principle that a risk rating system should be sufficiently granular to ensure a meaningful differentiation of risk. However, we do not feel that banks should be required to implement a rating grade explicitly linked to the IRB definition of default. Differences in the definition of default and its interpretation across jurisdictions may lead to a borrower being classified as defaulted in one jurisdiction but not in others and the unintended consequence of a borrower having different rating grades in home and host jurisdictions.
- We believe credit judgment, rather than strict application of prescriptive criteria, should be the driver of assignment of obligors to criticized ratings. As noted earlier, certain elements of the definition of default are inconsistent with internal rating practices. For example, banks may sell exposures at a discount of greater than 5% for portfolio management reasons, in which case the Guidance would require a default classification. We are similarly concerned about any requirement to force all borrower exposure to be assigned to a defaulted obligor rating due to automatic placement on non-accrual by loan servicing systems at 90 days past due. System-generated past due status can frequently be triggered by timing lags in booking renewals or operational errors in applying payments. In many cases, the non-accrual status of these exposures is reversed the following month once the issue is resolved. Assigning these borrowers to a default grade for one month according to prescriptive criteria would introduce significant noise and disruption into the risk management process.

- It should be sufficient to rate defaulted borrowers according to our own criteria as long as we comply with the IRB definition of default for purposes of parameter estimation and calculation of risk weighted assets. We recommend the agencies provide flexibility for banks to identify defaulted borrowers based on examination of each component of the IRB definition rather than by assigning an explicit rating. This flexibility would alleviate the problem of having multiple ratings across jurisdictions, avoid disruption of the risk management process and minimize associated operational costs.

### **Practical Approaches for Identifying Historical Defaults**

#### *S 4-2 Risk parameter estimates must be based on the IRB definition of default.*

- Although the NPR recognizes exceptions to the chargeoff component of the definition of default for operational issues, no exceptions are provided for the non-accrual component. From a practical perspective, we believe all criteria in the definition of default should include exceptions for immaterial amounts and for operational issues which cause obligors to briefly enter default status.
- A bank's reference data will include tens of thousands of defaulted borrowers over the required 5-year period. It is not practical or cost effective for banks to exhaustively research each borrower and examine credit files to determine whether the default was operational or credit related. To minimize costs, we believe that banks should be allowed to apply conservative filtering criteria in their reference data to exclude technical defaults. In particular, banks should be able to establish filtering criteria for non-accrual status based on the dollar amount, fraction of obligor exposure or duration of time in non-accrual. Additionally, banks should be allowed to apply materiality filters to exclude de minimus chargeoff amounts as these are very likely to be operational in nature.
- Although removing false positives from the reference data will have offsetting effects of reduced PDs and increased LGDs, the impact on required capital will be slightly conservative due to the non-linear nature of the risk weighted assets formula. We believe this tradeoff is acceptable since the exclusion of false positives will enhance the accuracy and discriminatory power of bank rating models and produce more sensible and consistent backtesting results.
- On a separate topic, we also recommend broadening the definition of default to include cases where borrowers are known to have defaulted on public debt or exposures to other lenders. We believe this approach is consistent with the default definition in the international Accord, which establishes declaration of bankruptcy as an indicator that the borrower is unlikely to pay. A bank's well secured or highly structured exposures to these obligors may still be carried in performing status due to the expectation of full repayment and would therefore be excluded under the proposed definition of default. A broadened definition will alleviate PD estimation issues for low default portfolios and provide better estimates of LGD for well structured transactions.

### **Rating Impact and RWA Calculations for Guarantees**

*S 4-3 Banks must separately quantify wholesale risk parameter estimates before adjusting for the impact of eligible guarantees and eligible credit derivatives.*

- The Guidance requires banks to maintain separate internal ratings for both the obligor and guarantor. In many cases, bank credit processes do not assign a rating to the obligor when the guarantor is closely related to the borrower or the presence of a guarantee is a standard product feature. This situation often occurs for small ticket equipment leasing programs where there is recourse to the vendor and for loans to small business and middle market firms where personal guarantees are obtained from the owners. We believe there is limited business value to the standalone rating of these obligors without the benefit of the guarantee.
- In order to minimize compliance costs, we believe banks should be able to bypass the obligor rating and only rate the guarantor when applying the substitution approach. Although the obligor rating is not explicitly calculated on a standalone basis, the credit process is de facto substituting the better rating of the guarantor for that of the borrower at the time of origination. In the rare cases where the guarantor rating deteriorates below that of the borrower in the following periods, the process results in a more conservative credit assessment than substituting the better credit rating.
- Additionally, the reporting templates provided in the NPR require banks to report PDs and calculate risk weighted assets before and after the impact of credit enhancing guarantees. We understand the agencies' interest in monitoring the systemic impact of credit derivative hedging. However, we see no justification for the increased compliance costs or business value from reporting the impact of more traditional guarantees. We suggest this exercise be restricted to qualifying credit derivatives.

### **Treatment of Tranched Guarantees as Securitizations**

*S 4-5 Banks may only reflect the risk reducing benefits of tranched guarantees for multiple retail exposures by meeting the definition and operational criteria for synthetic securitizations.*

- The NPR and the Guidance emphasize tranching of credit risk as a defining criterion when determining the applicability of the securitization framework to a given transaction. We believe that exposures where the bank is a beneficiary of a tranched guarantee should have a more cost effective route to calculating capital than the hierarchy of approaches in the securitization framework. In most cases, the guaranteed exposures will not be publicly rated. As a result, the Supervisory Formula Approach (SFA) must be applied or the exposures will be deducted from capital.
- While we agree with the conceptual merits of the SFA, we are concerned about the operational burden and additional complexity associated with application of the approach to tranched guarantees. Since the capital requirement after consideration of the guarantee cannot exceed that of the underlying exposures, we believe the application of the SFA should be optional for exposures with tranched guarantees. Banks should be allowed to disregard the presence of the guarantee and calculate capital within the wholesale or retail framework based on their own assessment of the compliance costs of the securitization approach versus the potential reduction in required capital.

### **Treatment of Seasoning for Retail Exposures**

*S 4-18 Effects of seasoning, when material, must be considered in the PD estimates for retail portfolios.*

- The US implementation departs from the international framework by requiring banks to increase default estimates for seasoning effects and prescribing a specific approach for the adjustment. We believe seasoning effects are more appropriately assessed within the Pillar 2 process. The international framework only requires that banks “anticipate the implications of rapid exposure growth and take steps to ensure that their estimation techniques are accurate, and that their current capital level and earnings and funding prospects are adequate to cover their future capital needs.” While the international framework does encourage banks to adjust their PD estimates upward where seasoning is material, the motivation for the adjustment is to “avoid gyrations in (banks’) required capital positions” rather than a premise that unseasoned exposures should require greater capital. The international Accord does not prescribe or mandate any specific approach.
- The Guidance for determining whether seasoning effects are material is not clearly specified. We believe that in order for seasoning to be material, two conditions should be met. First, the portfolio must have a significant and rapidly growing concentration of newly originated exposures which has impacted the overall age distribution of the portfolio. Second, account age must be a statistically significant driver of default probabilities for the exposures. To determine whether adjustments to PD are required, we believe these conditions should be evaluated for the risk subcategory as a whole rather than for individual segments within each subcategory (i.e., qualifying revolving, mortgage or other retail exposures).
- If PD adjustments are required based on the above criteria, the agencies should provide flexibility in the specific adjustment approach. Such flexibility is available elsewhere in the Guidance for the calculation of PDs and LGDs. We see no reason for this particular component to be more prescriptive than other elements of the calculation.
- The proposed approach will add considerable complexity to the retail quantification process without additional risk management benefit. At this late stage in the US implementation, the agencies should be particularly sensitive to introducing prescriptive new requirements that may cause further delays in execution of the banking industry’s implementation plans. The proposed approach requires two additional parameters to be estimated and will entail significant additional costs. First, banks must estimate the expected remaining life for any unseasoned segment. Second, the bank must estimate the cumulative default probability for the segment based on the remaining life. Calculation of expected remaining life alone will introduce a completely new set of models to incorporate prepayment behavior, line of credit usage, attrition rates, interest rate environment, seasonality and many other factors. Estimation of cumulative default rates for the expected remaining lifetime of each segment creates an implicit requirement for US banks to source and maintain data for much greater than the 5 year minimum under the international rules. Rather than compute one year default probabilities for all exposures, banks will be required to estimate default probabilities over an indeterminate number of horizon assumptions.

- To avoid introducing further delay in the US implementation and minimize operational burden, the agencies should allow alternative approaches that are more straightforward for banks to implement. For example, institutions including age in their default probability models could simply add one or two years to the age of unseasoned exposures and recalculate their default probabilities. This approach would be much more practical and would produce comparable default probability estimates to the agencies' proposal.

#### **All or Nothing Downturn LGD Requirement**

*Chapter 4 Paragraph 113 – If a bank obtains supervisory approval to use its own estimates of LGD for an exposure subcategory, it must use internal estimates of LGD for all exposures within that subcategory.*

- The US agencies have adopted an all-or-nothing approach for US bank implementation of downturn LGDs based on internal estimates. If a bank is not able to estimate reliable downturn LGDs for a subcategory of exposures, it would have to use the supervisory function for all portfolios. We understand the agencies' need to ensure the approach is not subject to "cherry picking". However, we feel the requirement is unnecessarily restrictive. It is significantly more constraining than the international implementation, which would allow conservative adjustments to address the uncertainties in the LGD estimates for specific portfolios. We believe that internal estimates of downturn LGDs should be applied for any portfolios where they can be adequately supported with empirical data or conservative judgment.
- We also believe the calibration of the supervisory mapping function is overly conservative. The functional form of the supervisory function has a greater proportional impact on low-LGD exposures. Yet there is no conclusive evidence to support the presumption that LGD in downturn conditions is greater than expected LGD for highly secured loan exposures.

#### **Inclusion of Post Default Balance Increases in EAD**

*Chapter 4 Paragraph 141 – Estimates of any additional extensions of credit expected by a bank subsequent to realization of a default event should be factored into the quantification of EAD.*

- Since both LGD and EAD enter into the risk weighted asset formula in a linear fashion, we do not believe the additional complexity is warranted and find absolutely no risk management value to the distinction. To be consistent with industry practice and meet the use test under Pillar 2, we believe that LGD should capture all cashflows subsequent to the default event. There is no compelling reason to artificially subdivide additional advances to a borrower and require their inclusion in EAD.
- Often balance increases are related to capitalized recovery expenses that are reimbursable to the bank. These expenses are no different from those recovery expenses that are directly charged through the income statement. We do not believe the accounting treatment of the expenses should influence the calculation of economic loss on the exposure.

- Additionally and perhaps more importantly, defaulted exposures that return to performing status may well have additional draws in their lives. This requirement would force banks to artificially separate cashflows associated with balance increases from those representing repayments on a large number of cured defaults. The concept of EAD under this proposal will become quite nebulous and difficult to backtest as it would no longer have a fixed temporal reference point. We also note that discounting both the positive and negative cashflows would occur under the standard industry LGD approach. To avoid introducing an overstatement of the ultimate economic loss, any increases in post-default balance that are added to the EAD calculation should be discounted to present value.

#### **Board Oversight of AMA Detail**

*S 4 The bank must ensure that an effective framework is in place to identify, measure, monitor, and control operational risk, and to accurately compute the bank's operational risk component of the bank's risk-based capital requirement. The board of directors must at least annually evaluate the effectiveness of, and approve, the bank's AMA System, including the strength of the bank's control infrastructure.*

*S 5 The board of directors and management should ensure that the bank's operational risk management, data and assessment, and quantification processes are appropriately integrated into the bank's existing risk management and decision-making processes and that there are adequate resources to support these processes throughout the bank.*

*S 10 The board of directors and senior management must receive reports on operational risk exposure, operational risk loss events, and other relevant operational risk information. The reports should include information regarding firm-wide and business line risk profiles, loss experience, and relevant business environment and internal control factor assessments. These reports should be received quarterly.*

- We agree that the board of directors should play an important role in the Basel II framework. However, these requirements are excessive, highly prescriptive and extend beyond the oversight requirements in the international framework.
- It is unreasonable to expect the board to be sufficiently versed in the complexities of the AMA system to be held responsible for its ongoing effectiveness. We believe that establishing criteria for effectiveness of the AMA system and ensuring that these criteria are met should be the role of senior executive management as part of ongoing processes, procedures and controls. We strongly encourage the agencies to allow the board to delegate these functions to senior management or its non-board committees and to limit board involvement to review and discussion of their reports on the effectiveness of the AMA system.
- The Guidance also requires the both the board of directors and management to ensure the AMA system is integrated into risk management and decision making processes and to make certain adequate resources are allocated throughout the bank to support the system. The agencies should not mandate board of directors' involvement in business as usual

activities that are more appropriately performed by senior management. We strongly recommend the agencies amend the Guidance to indicate that these functions are the exclusive role of senior management.

- We appreciate the desire to have timely and comprehensive reporting of relevant operational risk data to senior management. However, we do not believe that routine reporting of this information to the board of directors on a quarterly basis is useful. Reporting to the board should be restricted to communication of material changes in operational risk exposure and/or changes in the environment, whether internal or external, that may signal increased risk of material future losses.

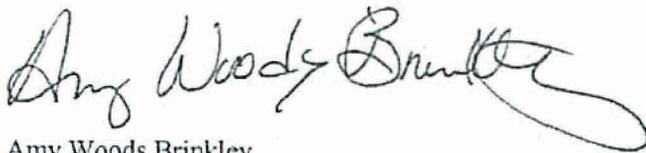
### Summary

We would be happy to discuss our views in greater detail, or to discuss any new ideas that the regulatory authorities wish to pursue. In that regard, please contact John S. Walter, our Senior Vice President for Risk & Capital Analysis at (415) 953-0243, or Randy Shearer, our Senior Vice President and Director of Accounting Policy at (980) 388-8433.

Sincerely,



Joe L. Price  
Chief Financial Officer  
Bank of America Corporation



Amy Woods Brinkley  
Chief Risk Officer  
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**Appendix I**  
**Detailed Comments on Supervisory Guidance on IRB Systems for Credit Risk**

**Chapter 2: Wholesale Rating Systems**

**Discrete Obligor Rating Grades**

*S 2-4 Banks must assign discrete obligor rating grades.*

- The requirement that banks assign a single PD to each rating grade is too restrictive and conflicts with the recognition that banks may have multiple rating systems appearing later in the Guidance. A typical case of multiple rating systems would occur following a merger, where rating systems from each legacy bank would coexist until the underlying credit processes are combined. While the rating scales may appear numerically similar, the agencies should more explicitly recognize that the long run average PDs may differ between rating systems.
- In cases where obligors have exposures in several countries and those exposures are subject to transfer risk, a separate rating for those exposures should be allowed. Generally, transfer risk is incorporated through a substitution approach where the lower credit rating of either the obligor or the sovereign is assigned to the exposures. This implementation properly reflects the principle behind transfer risk where losses occur either through default of the obligor or through sovereign intervention.
- For income-producing real estate loans, the probability that the obligor will default on any one facility is related primarily to the cash flows from the individual property, not to the overall condition of the obligor. When the cash flows cannot service the debt or the collateral value falls below loan value, the obligor will default. As a result, the collateral value at the individual facility level is important in determining default probability. The economic substance of the credit is that the commercial real estate project is the "effective obligor" and multiple loans to the same legal entity will have different default probabilities.

**Prescriptive Guidance for Implied Support**

*S 2-11 Banks may recognize implied support as a rating criterion subject to specific supervisory considerations; however banks should not rely on the possibility of US government financial assistance, except for the financial assistance that the US government has legally committed to provide.*

- We appreciate the inclusion of a supervisory standard to reflect implied guarantees from parent corporations or sovereigns. However, the Guidance establishes 10 criteria that must be met in order to consider implied support as a risk mitigating factor. We believe these criteria are far too prescriptive, overly complex and operationally burdensome.

- The requirement that the support provider is rated investment grade by a Nationally Recognized Statistical Rating Organization (NRSRO) would entirely exclude private and non-investment grade parent companies. We believe this is too conservative. Market practice and rating agency criteria increasingly consider the benefits of support from non-investment grade entities. We also do not believe the criteria requiring ongoing maintenance of a separate standalone rating for a supported obligor is meaningful or relevant for risk management purposes.

#### **Annual Risk Rating Update Requirement**

*S 2-16 Risk ratings must be updated whenever new material information is received, but in no instance less than annually.*

- Certain portfolios or portfolio segments may not be rated on an annual basis if no new information is received. In the private banking business for example, obligor financial statements are received separately from tax returns. Consequently, the time lag between ratings may be up to 18 months and is dependent upon receipt of both financial documents. Additionally, in some commercial real estate portfolios, rating reviews are scheduled annually or may be based upon a significant change in risk profile from continuous monitoring. If there is no change in borrower status or new financial statements, the rating will not be formally updated within a strict 12-month interval. There is no basis for the additional cost of rating the borrower at the 12-month interval based on partial information, simply due to the passage of time, only to repeat the process once financials are received a few months later.
- Given that there may be timing delays with obligor submission of financial and other information required for rating events, the agencies should consider requiring policies which establish frequency and aging tolerances rather than strict adherence to an annual update cycle.

#### **Chapter 4: Quantification**

##### **Protection of Intellectual Property**

*S 4-1 Banks should have a fully specified process covering all aspects of quantification (reference data, estimation, mapping, and application). The quantification process should be fully documented.*

*Chapter 4 Paragraph 13 - Major decisions in the design and implementation of the quantification process should be justified and fully documented. Documentation promotes consistency and allows third parties to review and replicate the entire process.*

- We concur with the importance of justifying and fully documenting major decisions in the design and implementation of the quantification process to allow for review and assessment. We also appreciate the importance of independent model validation. However, we believe that our quantitative models are proprietary and are concerned with the protection of our intellectual property. We do not believe it is appropriate for the

bank to be required to provide source code and other details such that our proprietary modeling techniques could be entirely replicated by external parties. In order to maintain adequate protection of intellectual property, we recommend the agencies change the wording of the standard to replace the word "replicate" with "assess".

### **Estimation of Effective Maturity**

*Chapter 4 Paragraph 154 – For exposures with pre-determined cash flow schedules (fixed rate loans for example), the calculation of weighted average remaining maturity is straightforward, using the scheduled timing and amounts of the individual undiscounted cashflow. Cashflows associated with other types of credit exposures may be less certain...A bank may use its best estimate of future interest rates to compute expected contractual interest payments of a floating-rate exposure, but it may not consider expected but non-contractually required returns of principal when estimating M.*

- We believe that banks should be allowed the option to consider non-contractual prepayments and line of credit usage patterns when estimating M. Banks should be allowed the flexibility to choose between using contractual term, weighted average contractual cashflow or weighted average expected cashflow based on their own assessment of the tradeoff between implementation cost and risk sensitivity. Prepayment and line of credit usage models should be subject to comparable qualification requirements as PDs, LGDs and EADs and reviewed under the Pillar 2 supervisory process.

### **Chapter 9 – Counterparty Credit Risk Exposure**

#### **Level of calculation of EAD**

*Chapter 9 Paragraph 34 - For this reason, a netting set's "effective EPE" will be used as the basis for calculating EAD for counterparty credit risk.*

- This rule requires banks to compute effective EPE at the netting set level. It conflicts with banks' common practice of measuring counterparty exposure, establishing credit limits and managing credit risk at the counterparty level.
- We do not believe there is a strong justification for specifying that effective EPE must be calculated at the netting set level. Effective EPE is generally reported at the counterparty level incorporating both transactions covered and not covered by netting agreements. These calculations fully reflect that only transactions covered by a single or cross-product netting agreement can be netted together. Requiring banks to calculate exposure profiles at the netting set level will materially increase computation and storage costs without adding value for internal risk management.
- Rather than manage their risk at the netting set level, banks hedge their counterparty credit risk at the counterparty level. When a bank buys protection on a counterparty via a credit default swap, it reduces its counterparty level exposure. However, there is no unique rule to allocate this reduction in exposure to the underlying netting sets – any

such rule would be artificial. Banks also typically enter into collateral agreements at the counterparty level. To compute the netting set level collateralized exposure would require an artificial allocation process to spread the collateral over the appropriate netting sets.

- Effective EPE is not additive across netting sets since it includes the non-decreasing constraint to account for the rollover risk. As a result, the requirement to calculate Effective EPE at the netting set level overstates the true exposure to the counterparty. Additionally, banks would have to modify their systems to calculate Effective EPE at the netting set level in order to comply with the requirements. We do not see any justification for this time-consuming and expensive change as rollover is a counterparty-level concept.

### **Conservative Alpha Multiplier**

*Chapter 9 Paragraph 35 - The internal model methodology scales effective EPE using a multiplier, termed "alpha." Alpha is set at 1.4; a bank's primary Federal supervisor has the flexibility to raise this value in appropriate situations. With approval of the primary Federal supervisor, a bank may use its own estimate of alpha as described below, subject to a floor of 1.2.*

- While we support the general permission given to banks to compute own estimates of alpha, we believe that the floor of 1.2 for such estimates is too conservative with respect to calculations on large dealer portfolios. To the extent that banks following the IMA have large, diverse, and granular portfolios, lower default and floor values for alpha are justified based on numerous simulation results. ISDA's studies show that typical values of alpha for a large derivatives dealer portfolio are in the range of 1.0 to 1.25. Four of the banks surveyed by ISDA calculated alpha for their actual portfolios and obtained values in the range of 1.07 to 1.10. In light of these studies, it seems very likely that the floor of 1.2 will replace the internal estimates of alpha for most large banks. We believe that this would defeat the purpose of internal estimates of alpha. We suggest the agencies consider lowering the floor to a value that better reflects the risk of a typical dealer portfolio.

### **Gross and Net EPE Estimates**

*Chapter 9 Paragraph 51 - Banks must measure and manage current exposures gross and net of collateral held, where appropriate. The bank must estimate expected exposure for OTC derivatives contracts both with and without the effects of collateral agreements.*

- We do not believe banks should be required to estimate gross and net EPE on a routine basis. Maintaining two sets of EPE estimates does not produce meaningful information for risk management purposes and represents a significant computational and storage burden. We urge the regulators to modify the operational requirements to only require banks to have the capability of modeling gross and net EPE and demonstrating the impact of collateral to their supervisors on request.

## Chapter 10 – Risk Weighted Assets for Equity Exposures

### **IMA for Investment Funds**

*S 10-1 Banks must apply the same methodology to like instruments.*

*Chapter 10 Paragraph 7 – Equity exposures in investment funds must use one of three look-through approaches (where the fund holdings are treated as if proportionally held directly by the bank) to determine risk-based capital requirements under this framework.*

- As noted in our response to the NPR, we believe banks should have the option to choose either the SRWA or IMA based on their risk management practices and the availability of position data for the fund investments. The IMA, in concert with data that allows the bank to look through the fund and reflect its proportional ownership of individual positions, should satisfy the criteria of assigning capital as though the individual assets are held directly on balance sheet. This method would achieve the agencies' objective to prevent arbitrage and ensure that banks do not receive a punitive treatment for exposures to investment funds that hold low risk assets.

### **Non-Significant Equity Exposures**

*Chapter 10 Paragraph 3 – Under the SRWA, a bank would generally assign a 300 percent risk weight to publicly-traded equity exposures and a 400 percent risk weight to non-publicly traded equity exposures.... Non-significant equity exposures (i.e., exposures that aggregate to an amount that is less than or equal to 10 percent of the bank's Tier 1 plus Tier 2 capital) are also risk weighted at 100 percent.*

- Under the SRWA, there is a materiality exclusion for non-significant equity investments up to 10% of Total Capital. Exposures below this threshold are risk weighted at 100% rather than the 300% and 400% risk weightings for public and private equity investments, respectively. The IMA, on the other hand, does not allow for a similar exclusion of exposures. As a result, the capital assignment for most institutions under the more sophisticated IMA is guaranteed to be higher than capital calculated under the SWRA.
- We believe the omission was an unintended consequence. As noted in the NPR, it creates a significant disincentive for banks to invest in improving risk management for equity instruments and is contrary to the Basel II philosophy of allowing greater capital relief as an institution develops more sophisticated risk measurement approaches. To be consistent across the available approaches and avoid introducing disincentives for sound risk management, we recommend the agencies also add the exclusion for non-significant equity investments to the IMA framework.

### Daily Market Prices

*Chapter 10 Paragraph 12 – Daily market prices must be available for all modeled equity exposures, either direct holdings or proxies.*

- The operational requirements for the IMA require daily market prices for all modeled equity exposures, either direct holdings or proxies. This conflicts with language appearing later in the Guidance that banks should use quarterly data to the extent practical to construct their VaR models.
- Proxies for private equity investments are available on a monthly basis. These proxies represent the unique risks of venture capital and other private investments. They are more relevant than public market proxies, are available for complete equity cycles and include adjustments for survivor bias. We believe these indices, even though they are monthly, should be eligible for use in the IMA.

### Stressed Correlations

*Chapter 10 Paragraph 19 – When calculating correlations, consideration should be given to data consistency, relevant time period and the volatility of correlations under stressed conditions.*

- We agree that model development best practices would include evaluation of consistency of data, the relevant time period and parameter stability over time. However, we are concerned that consideration of the volatility of correlations under stressed conditions might be construed as a requirement to estimate stressed correlations. Within the credit framework, only EAD and LGD are required to be estimated under stressed conditions. Additionally, we note that, under the market risk rules, use of stressed correlations is not required.
- We believe the use of correlations should be consistent throughout the framework and do not see the logic of introducing stressed correlations only for equity investments. We recommend the agencies clarify the Guidance to properly characterize the role of stressed correlations as a sensitivity analysis and informational item rather than a direct input into the Pillar I calculations for equity investments.

### Prescriptive Use Test Requirements

*S 10-4 Internal models used to calculate risk-based capital requirements for equity exposures must be consistent with models used in the bank's risk management processes and management information reporting systems.*

*Paragraph 24 – The internal model should be fully integrated into the bank's risk management infrastructure. It should, when appropriate, be used to establish equity price risk limits, to evaluate alternative investments and to measure and assess equity portfolio performance (including the risk adjusted performance).*

- We agree that systems and processes used by banks for risk-based capital purposes should satisfy the use test of consistency with internal risk management processes and management information systems. We object, however, to the prescriptive language following S 10-4.
- We do not believe the agencies should specifically require the model used for regulatory capital to be directly integrated into our risk management processes. The regulatory capital approach differs from our internal model due to specific criteria for time horizon, confidence interval and reference data. We recommend the agencies soften the language to emphasize that internal capital models for equity investments should be fully integrated into the risk management infrastructure and that the model used for risk-based capital should be generally consistent with the internal models, but is not required to be precisely the same formulation.

## Chapter 11 – Securitization

### **Scope of the Securitization Framework**

*S 11-1 Banks must use the securitization framework for any exposures that involve the tranching of credit risk (with the exception of a tranching guarantee that applies only to an individual retail exposure).*

- We believe that exposures with tranching guarantees should have a more cost effective route to calculating capital than the hierarchy of approaches in the securitization framework. In most cases, the guaranteed exposures will not be rated. As a result, the SFA must be applied or the exposures will be deducted from capital.
- We are concerned about the operational burden, documentation requirements and additional complexity associated with application of the SFA in all cases. We believe the application of the SFA should be optional for exposures with tranching guarantees. Banks should be allowed to disregard the presence of the guarantee, based on their own assessment of the compliance costs and compute capital conservatively according to the retail or wholesale IRB framework. Alternatively, a step in the securitization hierarchy of approaches could be added that allows capital to be assigned conservatively on the basis of the capital requirement for the underlying pool assets without regard to tranche structure. This option could be applied more generally to cases where minimal capital benefits are reflected in the securitization framework.
- We are concerned that exposures to investment funds with material liabilities may be classified within the scope of the securitization framework. Investment funds are neither publicly rated nor able to be modeled under the SFA as it was originally designed for credit exposures. The hierarchy of approaches within the securitization treatment would therefore lead to capital deduction for these investments. We believe this approach would be punitive relative to the risks of these assets and overly conservative. We recommend the agencies consider an alternative treatment which extends the SRWA table of risk weights within the equity investment framework to include the impact of leverage or allow banks to include these funds within their internal models with appropriate adjustments for leverage.

## Risk Parameter Estimation Requirements

*Chapter 11 Paragraph 65 – Since the calculation of Kirb requires detailed knowledge of the underlying exposures, the SFA may be difficult for an investor in an unrated securitization exposure to implement.*

- As noted by the agencies, the underlying data for securitizations of third party originated assets may be difficult to obtain. Banks will not typically be able to source historical data specific to the underlying exposures in these transactions in sufficient detail for standalone estimates of PD, LGD and EAD. As a deduction from capital is overly punitive relative to the risks of these transactions, we request the agencies provide flexibility within the securitization rules regarding use of external data and mapping procedures for quantification of parameters. Specifically, we recommend the agencies clarify that banks may estimate PDs, LGDs and EADs using internal or external reference data for similar exposures together with reasonable and cost effective mapping processes. This could be accomplished in a very straightforward manner by including a standard within the securitization framework to cross reference the retail and wholesale quantification requirements.
- For cases where comparable internal or external data is not available, we recommend the agencies allow banks to apply the top-down approach for the estimation of PD, LGD and EAD based on aggregate pool performance. This will provide a more balanced alternative to deduction from capital. We note that precedent for a top-down estimation approach has been established for the treatment for purchased receivables in the international Accord and NPR. We expect the agencies will wish to apply similar qualifying criteria for application of the top-down approach to securitization exposures. However, we recommend the agencies modify the criteria to include wholesale assets with exposures greater than \$1 million and maturities greater than .1 year. This will allow most of these cases of secured financings to be treated within the SFA, better align their capital with their risks and avoid punitive capital charges.

**Appendix II**  
**Detailed Comments on Supervisory Guidance for Advanced Measurement Approaches for Operational Risk**

**Latitude for Internal Audit to Assign Resources**

*S 3 The bank must maintain effective internal controls supporting its AMA System.*

*...Sound internal controls, assessed annually for effectiveness by internal audit, should also reduce the possibility of significant human errors and irregularities....*

*...The audit function's annual assessment is not required to assess all operational risk controls, but the scope of the assessment should be sufficient to assess the effectiveness of the controls supporting the bank's AMA System.*

- We agree with the need to conduct on-going internal audits and associated reporting to senior management in order to gauge the effectiveness of the control environment for the AMA system. However, the requirement for an annual assessment of the controls supporting the AMA system is overly burdensome. We recommend the agencies consider more flexibility in the Guidance so as to enable the internal audit function the latitude needed to most effectively assign their resources.

**Operational Risk Management Organization Structure**

*S 7 The firm-wide operational risk management function should ensure adequate analysis and reporting of operational risk information. The function should also develop and report on the firm-wide operational risk profile.*

- While Bank of America agrees that the operational risk management function should be independent of business line management, we do not necessarily agree that the operational risk management function should be responsible for the development of all elements of the framework. For example, the risk quantification system is not necessarily properly domiciled within the operational risk management function since the requisite skills may not exist in the group. We believe that the precise organizational structure should be left to the individual bank to handle in a manner that is consistent with its own strategic objectives as long as independence from business management is achieved.

### **Role of Scenario Analysis**

*S 24 The bank's operational risk quantification system must use a combination of internal operational loss event data, relevant external operational loss event data, business environment and internal control factor assessments, and scenario analysis results. The bank should combine these elements in a manner that most effectively enables it to quantify its operational risk exposure. The bank should choose the analytical framework that is most appropriate to its business model.*

*...banks with comprehensive internal data that reflect the full range of their potential loss exposures may choose to place less emphasis on external data or scenario analysis.*

- With fully comprehensive internal and external data, scenarios may be of limited value to the determination of capital requirements due their highly subjective nature. We appreciate the agencies' acknowledgement that scenario analysis may be given less weight in this situation.
- Practices for scenario analysis vary greatly throughout the industry. As such, it may be premature to require scenario analysis to be used directly within the capital model or as benchmark for comparison across all units of measure. Until practices mature and there is a greater degree of consistency across the industry, banks should have the flexibility limit their use of scenario analysis to very high level benchmarking exercises or specific event categories with inadequate internal or external data.

### **Individual Calculations for AMA Components**

*... Banks should be able to demonstrate the effect of each element on the operational risk exposure estimate. In cases where this is not possible, or where an element is not used as a direct input into the quantitative model, the bank should calculate a benchmark estimate using that element individually.*

- The derivation of the operational risk capital requirement from a combination of internal and external data, control assessments and scenarios will not lend itself to this type of effect decomposition. In practice such decomposition can be achieved only by calculating the standalone capital requirement with each element. Estimating standalone capital for each component in a highly granular AMA implementation will be operationally burdensome and significantly increase compliance costs.
- We do not believe results of standalone models for each component will be meaningful or relevant. Generally, external data is used when internal data is not sufficient to support statistical analysis. Additionally, implementing scenario driven capital estimates for every business as a comparison benchmark is not an effective use of resources. We urge the agencies to consider eliminating this requirement.

### Eligible Operational Risk Offsets

*S 26 In calculating the risk-based capital requirement for operational risk, management may deduct certain eligible operational risk offsets from its estimate of operational risk exposure. To the extent that these offsets do not fully cover expected operational loss (EOL), the bank's risk-based capital requirement for operational risk must incorporate the shortfall. Eligible operational risk offsets may only be used to offset EOL, not UOL.*

*...While additional eligible operational risk offsets may be considered in the future, the agencies' review of the implementation of AMA Systems indicates that banks so far have only been able to demonstrate that losses resulting from external credit card fraud or securities processing errors may meet the test of being highly predictable and reasonably stable.*

- We strongly believe it is inappropriate to assign capital for expected loss. Banks consider expected loss to be a cost of doing business and including these in the regulatory capital requirement disregards the most fundamental pricing practices. To this end, the agencies have rightly identified losses relating to securities processing errors and credit card fraud as qualifying for EOL offsets.
- However, the language suggests that these are the only types of losses to be legitimately considered eligible for EOL offset. We believe the correct definition of EOL is much broader and should include other types of losses. Some examples include check fraud, workers compensation claims, robberies, teller balancing errors and employee defalcations. The best approach for regulatory capital would eliminate the expected loss component of the capital charge altogether. As an alternative, we suggest the regulators consider a broader definition of loss to be eligible for the EOL offset.

### Punitive Treatment of Operational Loss Correlation

*S 28 The bank may use internal estimates of dependence among operational losses within and across business lines and operational loss events if the bank can demonstrate to the satisfaction of its primary Federal supervisor that the bank's process for estimating dependence is sound, robust to a variety of scenarios, and implemented with integrity, and allows for uncertainty surrounding the estimates. If the bank has not made such a demonstration, it must sum operational risk exposure estimates across units of measures to calculate its total operational risk exposure.*

- While the Guidance does offer banks the opportunity to substitute line of business expert judgment when empirical support for a dependency assumption is not possible, the Guidance suggests the agencies prefer more quantitative approaches. Given the short historical time frame for which data is available, deriving statistical measures of dependency is very challenging and may not always be feasible, particularly when the measurement framework is highly granular. In light of this, we are concerned that the agencies may be setting a standard of proof that cannot be met in practice. We believe that the requirement to sum capital amounts across all units of measure when the above conditions cannot be fully demonstrated is punitive and equally unsupported by evidence of perfect correlation.

- The punitive treatment will encourage banks to minimize the granularity of their AMA frameworks in order to avoid being penalized by the lack of recognition for diversification benefits. We do not believe that a disincentive to more granular modeling approaches is consistent with the desire to encourage development of best practice for operational risk management.

#### **Remaining Term Adjustment for Insurance**

*S 29 The bank may adjust its operational risk exposure results by no more than 20 percent to reflect the impact of operational risk mitigants. In order to recognize the effects of risk mitigants, management must estimate its operational risk exposure with and without their effects.*

*...Banks must decrease the amount of the adjustment if the remaining term is less than one year.*

- A demonstrable history of insurance contract renewal through industry cycles should provide sufficient evidence of the bank's commitment to maintaining a prudent level of coverage at all times. Therefore, there should be no reason for the bank to adjust the mitigation benefit as the contract nears expiration. Similar to the agencies' requirement that operational risk exposures be adjusted to reflect material changes in the bank's risk profile, the insurance mitigation benefit can simply be reduced or even eliminated if the bank were to change its insurance buying practice. We ask that the agencies to consider dropping this requirement from the Guidance.