

Bank of America



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November 3, 2003

Ms. Jennifer J. Johnston
Docket No. R-1154
Secretary, Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue, NW
Washington, DC 20551

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Office of the Comptroller of the Currency
Docket No. 03-14
Public Information Room, Mail Stop 1-5
250 E Street, SW
Washington, DC 20219

Robert E. Feldman
Attention: Comments
Executive Secretary, Federal Deposit Insurance Corporation
550 17th Street, NW
Washington, DC 20429

Regulation Comments
Docket 2003-27
Chief Counsel's Office, Office of Thrift Supervision
1700 G Street, NW
Washington, DC 20552

Re: Risk-Based Capital Guidelines; Implementation of New Basel Capital Accord

Dear Ladies and Gentlemen:

Bank of America Corporation (Bank of America) appreciates the opportunity to comment on the Advance Notice of Proposed Rulemaking entitled "Risk-Based Capital Guidelines; Implementation of New Basel Capital Accord" (the ANPR) and the associated Draft Supervisory Guidance (the DSG). Bank of America, with \$737 billion in total assets, is the sole shareholder of Bank of America, N.A., with full-service consumer and commercial operations in 21 states and the District of Columbia. Bank of America provides banking, investing, corporate and investment banking services and financial products to individuals and businesses across the United States of America and around the world.

Over the last decade, the banking industry has evolved and transactions have become increasingly complex. The limitations of the existing Capital Accord have become apparent and highlighted the need for regulatory capital requirements that more appropriately reflect the risk profiles of individual banks and the industry as a whole. The Basel Committee on Banking Supervision issued its third consultative paper, "The New Basel Capital Accord" (the Proposed Accord), to address these limitations. We commented on the Proposed Accord in a letter dated July 31, 2003. Many of the

comments in that letter also pertain to the ANPR and, where applicable, have been repeated in this letter. We have further expanded our discussion to address issues specific to the U.S. and have attached an Appendix to answer questions raised by the Agencies.

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 measurement and management processes and promote international consistency in regulatory standards. We commend the Agencies' leadership in these areas and acknowledge significant progress toward a broadly accepted and reasonable set of capital regulations. The consultative dialogue the Agencies have maintained with the industry has been mutually beneficial and improved the transparency of the decision process. The number and depth of the questions raised and the specific requests for comments within the ANPR indicate that the Agencies value this feedback and will provide it due consideration. Toward that end, we hope the Agencies find our response useful.

We generally support the approach outlined in the ANPR, but we remain concerned by the following aspects:

- Treatment of Expected Losses
- Prescriptiveness of the Draft Supervisory Guidance
- Cumulative Effects of Conservative Assumptions
- Limited Recognition of Credit Risk Hedging
- Treatment of Maturity
- Retail Calibration Issues
- Complexity of the Securitization Framework
- Counterparty Credit Risk
- Supervision Processes
- Excessive Disclosure Requirements

We support the Pillar I capital requirements for operational risk. The operational risk approach strengthens the overall risk-based capital framework, creates greater transparency than Pillar II alternatives and aligns the regulatory capital with industry best practice.

Bank of America is a member of the Risk Management Association (RMA), the American Securitization Forum (ASF) and the International Swaps and Derivatives Association (ISDA), and has participated in the preparation of the comment letters of those organizations as well as other groups. With some minor differences, we endorse the comment letters of those organizations. Therefore, we have limited repetition of many of the more technical comments common to Bank of America, RMA, ASF and ISDA.

Impact on Competition

The potential impact of Basel II on the competitive environment has received significant attention during the past few months. We believe the notion that changes in capital requirements will alter the competitive landscape is exaggerated and that the proposals will have at most a limited effect on the behavior of the banking industry.

The increasing alignment of regulatory capital to economic risk is a positive development. However, this change will have no impact on our competitive strategy. Minimum regulatory capital requirements are considerably less important than internal economic capital in the determination of the price and availability of credit. Bank of America manages its business activities on the basis of economic capital and shareholder value metrics. This management framework spans pricing and origination decisions, strategic planning processes, portfolio management, management reporting and incentive compensation. In no cases are business activities evaluated on the basis of return to regulatory capital.

Competitive advantage is determined by good risk management rather than the regulatory capital framework. Bank of America has invested significant time and resources to develop industry leading risk management processes and economic capital models. We believe these tools enable us to make better risk and return decisions and the benefits of improved decision-making are the return on our investment. Banks that are not required to implement Basel II may elect to do so based on their own cost-benefit analysis. Since the new requirements will not alter the behavior of the more advanced banks with existing economic capital processes and because they are optional for other banks, we expect them to have no direct effect on the competitive environment.

Similar concerns have been raised regarding the prospects for consolidation as a result of Basel II. Acquisition strategy is driven by the business realities of economies of scale, operating efficiency and diversification rather than capital regulation. We are aware of no evidence linking industry consolidation to the implementation of Basel I or any other changes in capital regulation.

The direct effect of the new regulations for institutions that are positively affected will be an increase in their regulatory capital ratios to reflect their low levels of risk. It is unlikely that these institutions will respond to the new rules by reducing equity to any great extent. While regulatory ratios are an input to the capital management process, internal capital models, capital market expectations, rating agency targets and business strategy have equal or greater importance. The leverage ratio and associated prompt corrective action rules continue to exist under the new regime and will ultimately constrain reductions in capital.

Treatment of Expected Losses

The ANPR recognizes differences of opinion over the appropriateness of a definition of capital that encompasses both expected and unexpected loss (EL and UL). We are encouraged by recent progress in the Basel Committee deliberations on this topic and commend the Agencies' leadership in the discussion. As expressed in our previous comment letters, we strongly believe it is inappropriate to

assign capital for expected loss. We do not know of a single industry practitioner that assigns capital for expected loss in its internal model. Banks consider expected loss to be a cost of doing business. Margins on loan products are therefore set at a level sufficient not only to cover operating costs, but also to cover expected loss and provide a favorable return on capital. Including expected loss in the regulatory capital requirement disregards the most fundamental pricing practices. It assumes that revenue is sufficient only to cover operating costs, but not to compensate for the average level of credit losses or to generate a profit.

A sensible capital adequacy framework would match the risk measured by the model to the financial resources available to cover that risk. The financial resources available to cover expected and unexpected loss include common equity, loan loss reserves and future margin income (FMI). Failure to recognize the full benefit of loan loss reserves and limited recognition of FMI are fundamental flaws in the ANPR.

The industry approach to measuring risk is firmly based on unexpected loss. To determine capital adequacy, the capital requirement for unexpected loss should be compared to common equity and the total amount of reserves in excess of expected loss on already defaulted assets. This approach implicitly recognizes the risk mitigating benefit of FMI. It assumes only that FMI on performing loans is sufficient to cover their operating costs and expected loss. It does not include the profit margin embedded in loan pricing as a financial resource and is therefore conservative.

The best approach for regulatory capital would eliminate the expected loss component of the capital charge altogether and allow banks to recognize the amount of loan loss reserves in excess of expected loss on defaulted assets as Tier 1 capital. Importantly, there should be no artificial limit to the amount of reserves which qualify as capital. Nor should reserves be viewed as a form of secondary capital. This change would reduce the complexity of the regulations, align their risk measures with industry practice and eliminate the need to separately estimate and validate FMI.

We understand that a proposal is under consideration to eliminate the expected loss component of the capital requirement. However, the proposal also limits the recognition of reserves to the amount in excess of expected loss on both performing and non-performing assets and imposes a ceiling for qualifying reserves at 20% of Tier 2 capital. While we support the direction of this change, we note that the approach still fails to recognize that pricing covers expected loss on performing assets. By eliminating the expected loss component of the capital requirement, but at the same time replacing it with a capital deduction for expected loss, the proposal simply rearranges terms but leaves the final result unchanged. To reiterate, only expected loss on non-performing assets should be deducted from reserves. If total expected loss is deducted, then recognition of FMI on the performing portfolio is required to avoid understating the available financial resources. Perhaps more importantly, there should be no limitation on the amount of reserves that qualify as capital.

Any approach to offset either a capital requirement or capital deduction for expected loss should avoid unnecessarily complex implementation requirements and distortions between products. If this route is chosen, an offset based on FMI is the natural choice. However, it should be applied to all exposures regardless of product type. The circumstances for qualifying retail portfolios are not unique. Margins on all products are available to buffer expected loss.

Agencies have expressed concern that the value of FMI may be insufficient in the 99.9% credit scenario to offset expected losses and have conservatively imposed a limit on the amount of capital reduction due to FMI (75% of EL). We believe this concern is not warranted for several reasons. First and most importantly, the costs of foregone income from defaulted credits are already included in the LGD estimates for each product. Second, late fees and other mitigating revenue tend to increase when credit conditions deteriorate. In fact, our analysis of the statistical relationship between margin income and chargeoffs for the credit card product indicates a positive correlation of approximately 24%. We have provided the details of this analysis in Appendix 2.

Rather than set an absolute limit on the amount of expected loss that can be offset, the Agencies should consider applying a haircut to the FMI for each product. Banks should be permitted to offset the expected loss component of the capital charge or any deduction from reserves with the adjusted FMI. Applying haircuts to FMI would remain conservative, but would have the added benefits of accommodating partial recognition and eliminating the need for separate threshold tests. Appendix 1 contains a more detailed explanation of this approach. We would look forward to the opportunity to work with the Agencies to further explore this issue and to provide further analysis of the relationship between FMI and credit losses.

Prescriptiveness of the ANPR and DSG

We commend the Agencies for adopting a principles-based approach in crafting the ANPR and DSG. As noted in our previous comment letters, we believe only a principles-based approach will be flexible enough to accommodate the continuing evolution of risk management and the development of new financial products. Limiting regulations to core principles and producing strong guidance rather than complex rules is a significant step in this direction. We are heartened by the explicit statement in the DSG that ultimately institutions must have credit risk management practices consistent with the substance and spirit of the standards in the guidance. We further agree with the principle that the DSG should neither dictate the precise manner in which institutions should seek to meet supervisory expectations nor provide technical guidance on how to develop a risk management framework.

We are concerned that the benefits of the principles-based approach may be negated by the prescriptive text following each supervisory standard in the DSG. This language contradicts the Agencies' stated intention of establishing a principles-based approach. We recommend that the language in the guidance be softened to ensure that the general principles remain the focal points. This could be done by explicitly recognizing that other alternatives are acceptable and referencing key issues that should be considered. The relationship between the supervisory standards and the supporting text should be clarified to ensure a focus on the substance and spirit of the standard rather than the detailed text of the guidance.

Definition of Default

The definition of default should be simplified to correspond more closely to that commonly used by risk practitioners. Default for the corporate model should coincide with non-accrual or chargeoff status. The definition of default for the retail model should match the Uniform Retail Credit Classification standards published by the FFIEC.

For corporate borrowers, non-accrual status subsumes the more detailed definitions of default. An asset is placed on non-accrual when it is 90 days past due or when reasonable doubt exists about its collectibility. A declaration of bankruptcy would almost certainly satisfy the latter criterion. Exceptions to this policy are applied only in limited cases where the loan is fully collateralized and in the process of collection. There are well-tested internal controls, audit procedures and supervisory processes to ensure that non-accrual and charge-off policies are applied correctly. These policies, which govern the recognition of income, should be sufficient to administer the Basel definition of default. Once consideration is given to materiality and technical defaults, the difference between the broader definition and our recommendation is negligible. Implementation of duplicative control procedures to support a broader definition is a meaningless yet costly exercise. These fine differences in the definition will only shift the mix of PD and LGD in an offsetting fashion. Moreover, our analysis of the tradeoff between PD and LGD in the model indicates that a more narrow definition of default results in slightly more conservative estimates of capital as long as expected loss remains constant.

We believe the emphasis the Agencies have placed on capturing silent defaults is unwarranted. Capturing data on credits that are well secured and in the process of collection adds little value for two reasons. First, this criterion is applied precisely because there is a strong expectation of zero loss in these exceptional cases. Second, the net result of capturing these exposures as defaults would again be negligible since any increase in PD estimates would be offset by lower LGD estimates.

The Agencies should consider dropping the criterion which includes loan sales at material credit related discounts in the definition of default. Loan sales are motivated by concentration management, balance sheet usage, market liquidity and many other factors. Including sales of performing loans in the definition of default would clearly introduce comparability problems across institutions with different portfolio management strategies. Moreover, discounts can be due to a variety of factors such as interest rates, market liquidity, and technical supply and demand issues. It would be quite difficult and ultimately arbitrary to disentangle these effects. On a more fundamental level, the loss in a loan's value due to credit deterioration is migration risk rather than default risk. Migration risk is already reflected through the maturity adjustment portion of the A-IRB formula. To be consistent with the derivation of the formula, the default probabilities should not be artificially inflated when that deterioration is realized through discretionary loan sales.

Cumulative Effect of Conservative Assumptions

We strongly support a prudent level of conservatism to ensure that the risk inherent in businesses is adequately considered. However, the regulations described by the ANPR will not yield a true

minimum capital requirement. The ANPR reflects many conservative decisions with regard to parameter values, formula options and constraints. Considered in isolation, each of these conservative choices appears logical. Collectively however, their effect generates a capital amount that is unduly conservative and well exceeds a true minimum capital requirement. This level of conservatism is highlighted by the following examples:

- The confidence levels chosen as reference points contradict the goal of a minimum standard. The requirement to measure credit and operational risk at a 99.9% confidence level approaches the level that is used by banks for economic capital purposes. This high confidence interval represents an investment grade or well capitalized target level of capital rather than a minimum standard of capital adequacy. A more appropriate confidence level for a minimum standard is 99.5%, which is approximately the border between investment and non-investment grade.
- The ANPR inadequately considers the full economic benefit of credit hedging. As we discuss later, the substitution approach does not recognize the lower risk of joint default and joint recovery and accordingly does not appropriately reflect the risk of these transactions.
- The ANPR fails to recognize the benefit of diversification between different portfolios (e.g., wholesale and retail), risk types, geographies and industries. Diversification is an important and effective risk-mitigation technique and banks should be allowed to recognize this benefit. Acknowledging and providing capital relief for well-diversified portfolios will have the added benefit of encouraging sound management practices and reducing overall risk exposure.
- The ranges of asset value correlation prescribed in the retail section exceed those used by the industry in many cases by more than 50%.
- The 10% LGD floor for mortgages fails to consider mortgage insurance and the possibility of low loan-to-value ratios.
- The incorporation under the A-IRB approach of a floor of 90% in 2007 and 80% in 2008 for total minimum capital seems arbitrary and unnecessary. U.S. Banks have to meet all the requirements, obtain approval from supervisors and perform parallel calculations under the A-IRB approach for 1 year prior to adoption. The additional benefit that could be derived from the floors after the parallel calculation period is not clear.

Although a minimum standard is necessary to ensure the financial soundness of individual banks and the banking industry as a whole, the ANPR currently prescribes a level of capital well beyond a true minimum standard.

Limited Recognition of Credit Risk Hedging

Credit risk mitigation techniques have evolved significantly over the last decade in both effectiveness and volume. The proposed credit hedging approach attempts to capture the benefits of credit risk hedging and guarantees through substitution. This approach simply substitutes the default probability

of the guarantor for that of the borrower when determining risk weightings. We believe this approach is far too conservative and should be changed. The proposal is inconsistent with the stated objective of promoting better risk management practices and could send inappropriate signals regarding the value of risk mitigation. Consider the case of an exposure to a AA rated industrial company which is hedged in the credit derivative market with a AA rated bank as the counterparty. Under the proposed substitution approach, the risk mitigating value of the hedge would simply not be recognized. Even under the Basel I regime, capital relief is provided when the counterparty is an OECD bank.

Both the borrower and the guarantor must default for a bank to experience a loss on a hedged exposure. Banks may also be able to seek recovery from both counterparties. Therefore, banks should be permitted to recognize the lower probability of joint default and the lower LGD of joint recovery in the treatment of credit hedging and guarantees.

Joint default probability should be calculated using the same correlations used elsewhere in the regulatory framework for corporate exposures (i.e., 12% - 24%). For related entities, the correlation assumption should be set conservatively at 100%. This effectively yields the same result as the substitution approach. In cases where the bank can pursue recoveries from both counterparties (e.g., CDS), it is appropriate to also apply a joint LGD. ISDA has proposed an approach that recognizes double-default while balancing it with the supervisors' concern over the correlation between the borrower and the guarantor. Even with a conservative assumption of correlation (e.g., 50%), this approach yields meaningful discounts to the substitution approach.

In addition, the treatment of maturity mismatches for credit hedges is overly conservative and adds unnecessary complexity. The proportional adjustment mechanism is not consistent with the treatment of maturity for corporate exposures. There is little reason to implement two separate sets of maturity adjustments. Accordingly, we recommend that maturity mismatches between credit hedges and the underlying assets should be reflected using the standard A-IRB formula to compute a capital offset for the credit hedge which is subtracted from the capital requirement of the underlying asset. In this approach, the counterparty risk of the hedge is reflected by an additional exposure with joint default probability and recovery.

Finally, we are troubled by the prohibition of capital relief for hedges with a maturity of less than 1 year when the maturity of the hedged asset is longer. Even in their final year, these hedges provide risk-mitigating benefit. We acknowledge the declining value of the hedges as they approach maturity, and recommend that the risk associated with the shorter maturity be calculated using the corporate A-IRB risk weighting function in combination with the short term maturity adjustment described in the next section.

We have provided sample calculations under our recommended approach to recognizing credit hedges in Appendix 3a. As noted above, this approach recognizes joint default probability and joint loss given default. When the entities are related and maturities match, our recommendation produces the same capital requirements as specified in the ANPR. We have tested this approach relative to the ANPR proposal and found that it produces much more coherent capital requirements when maturities of the hedge and underlying asset do not match. Appendices 3b and 3c provide sensitivity analyses of each approach across the spectrum of remaining hedge maturities.

Maturity Adjustments

We strongly support the inclusion of a maturity adjustment in the risk-weighting formula to appropriately differentiate the risk of instruments with different tenors. With exceptions for capital market transactions and certain one-off transactions, the ANPR rules currently adjust for maturities from 1 to 5 years. This fails to distinguish the risks of assets with tenors outside this limited range. We believe these restrictions should be removed.

The maturity limitation is of critical concern for short-term transactions and can be easily addressed without additional complexity. Banks should follow a simple extrapolation procedure to adjust the 1-year default probability for the remaining term of the transaction. For example, an asset with a remaining maturity of 3 months should be assigned a default probability that is .25 times the 1-year default probability. If necessary, a reasonable floor, such as 1 month, could be established to constrain the minimum default probability. Extrapolation would avoid obvious discontinuities and cliff effects. We have attached our analysis of this recommendation in Appendix 4. The appendix clearly shows that the current approach for short-term credits overstates their capital requirements.

We understand the concern that banks will be tempted to minimize capital requirements by rolling over sequential short-term transactions rather than originating a long-term transaction. However, we believe that such behavior is legitimate when accompanied by an explicit decision to renew based on the customers evolving credit quality. Controlling credit risk exposure to borrowers and counterparties by limiting the maturity of transactions is an effective risk mitigation technique.

Finally, we are concerned with the inconsistent application of the maturity adjustment across asset categories. In the interest of equitable treatment across institutions, we disagree with the notion that maturity adjustments should only apply to corporate assets and not to retail assets as well. A particular problem arises when exposures to Small and Medium-Sized Entities (SME) are transferred to the retail category. The SME exposures would then be treated with the lower correlations appropriate for their level of systematic risk while the maturity adjustment would, paradoxically, no longer apply. In order for the model to be equitable across banks with different business mixes, the retail and commercial capital models must both include a maturity effect.

Retail Calibration Issues

We support the introduction of separate risk-weighting curves for mortgages, revolving credits and non-mortgage non-revolving credits. The separate risk-weighting functions reflect important differences in correlation. Unfortunately, several concerns remain regarding the calibration of capital requirements for retail assets. Compared to the results of internal models and the industry study conducted by the RMA, the capital requirements for consumer assets under the proposed approach are generally higher than justified by the level of risk.

The primary flaw in the calibration is the inclusion of expected loss in the capital formula that we have already addressed. We would like to highlight that including expected loss not only distorts the absolute level of capital but also the relative levels of capital for assets of different credit quality.

The RMA study found that the levels of correlation set in the ANPR are generally higher than industry correlation estimates. For example, the correlation assumed for mortgages is approximately 150% of the median of values used by industry participants. We suggest that these correlations be reviewed in light of industry evidence. The correlations are also inappropriately linked to default probabilities. The risk-weighting function assumes that asset correlations and systematic risk levels decrease as default probabilities rise. The RMA study found that this inverse relationship is not well supported. This tends to overstate the capital requirements for high-quality consumer assets. For example, the median correlation value used by the industry for high-quality secured consumer loans (i.e., PD of 1%) is approximately 4%. The correlation used in the risk-weighting function for these assets is 12.72%.

The 10% floor on the LGD for mortgage portfolios is arbitrary and should be eliminated. For exposures with low LTVs and private mortgage insurance, this assumption is unreasonable. Supervisors should evaluate the appropriateness of LGD estimates in the context of Pillar 2. To the extent that low LGDs are supported by empirical data, banks should be allowed to use them in determining capital requirements.

Complexity of the Securitization Framework

We generally support the proposed securitization framework. However, we remain concerned with its overall complexity and conservatism, and the burden of its implementation.

The securitization framework should allow banks to use their internal ratings in the Supervisory Formula and IRB approaches. This is consistent with the A-IRB approach described throughout the ANPR. Banks that qualify for the A-IRB approach should use internal ratings to determine risk weights, especially for credit enhancements and ABCP conduits.

We are also concerned with the requirement that the originator deduct all of a position equal to or less than KIRB, even though an external rating may be available that better represents the underlying risk exposure. It is more appropriate to require the originator to hold capital commensurate with that rating than to require full deduction.

For unrated liquidity positions, banks should be able to look through to the average risk weight assigned to the underlying assets. The underlying assets represent the true risk of the liquidity position and should serve as a proxy in calculating the capital requirement. In addition, we believe the ANPR does not appropriately recognize the risk-reducing benefits of dynamic asset quality tests, which significantly reduce the risk of funding liquidity facilities.

Counterparty Credit Risk

We are aware that the Basel Committee is willing to reassess the method for calculating the capital charge for counterparty credit risk. The current approach that requires add-on factors for potential future exposure is inconsistent with the best practices of leading banks. It is essential that netting and

exposure diversification across risk factors be considered in determining effective exposure for derivative and foreign exchange portfolios. ISDA has submitted a proposal to estimate expected future exposure profiles based on well-established market risk approaches. As the Committee proceeds with its review, we strongly encourage the Agencies to seriously consider ISDA's proposals on the use of expected exposure profiles.

Operational Risk

We strongly support the ANPR's requirement that banks hold capital against operational risk. We believe the AMA, which leverages the flexibility of internal methods in association with supervisory review, will allow for the most appropriate measurement and management of operational risk. We reiterate our stance in favor of a more principles-based approach over a prescriptive rules-based approach. Along this line, we urge that the language in the ANPR be changed wherever it currently states "must (have)" to "should (consider)". Quantitative operational risk management is still in a nascent stage of development. Care should be taken when establishing prescriptive guidance in the early stages of development as it could curb the evolution of alternative and superior operational risk quantification techniques. Similarly, the Agencies should be cognizant of the impact of arbitrary floors or ceilings (e.g., the ceiling on allowance for risk mitigation from insurance). These can have the undesirable effect of stifling development of new products or techniques.

We are sensitive to the international regulators' concern regarding appropriate capitalization of the individual legal entities. The potential under-capitalization of subsidiaries that may result from the allocation of the group-level diversification benefit is a case in point. Unfortunately, sufficient data simply will not be available to implement a full AMA for each legal entity. To address this issue, we recommend that institutions utilizing a loss distribution approach be permitted to apply group level severity distribution estimates for a particular business activity. Loss frequencies can be determined for legal entities (provided that the frequency follows a Poisson distribution) based on exposure indicators, such as gross revenue or total assets. This approach follows credibility theory as applied in the insurance industry where, barring contradictory data, all policyholders within a specific demographic are assumed to represent average risk. In cases where the parent company has guaranteed the obligations of its subsidiaries, banks should be permitted to recognize diversification effects in the subsidiary capital assignment. We recommend that the Agencies amend the ANPR to reflect this alternative.

We recognize the importance of understanding expected loss in managing risk, but believe expected loss should be reflected as a cost of doing business and be excluded from the capital requirements. For operational risk as for credit risk, capital should be held against unexpected loss subject to Pillar 2 review of the calculation approach.

We understand operational risk is often embedded in both credit risk and market risk. We agree these risks should continue to be included in the capital charges for credit and market risk, but prefer more flexibility in the requirement to break out the operational risk components within the bank's internal operational risk databases. This differentiation will require significant effort and only yield modest benefits.

Supervision (Pillar 2)

Supervision will play a crucial role in the overall effectiveness of the proposed Accord, especially in the mitigation of implementation risk across international jurisdictions. We appreciate the progress that the Agencies have made towards establishing a principles-based approach in the ANPR. We believe quality and consistency are best ensured by clearly stating the principles of the overall risk-based capital requirement rather than by prescribing in detail the method of its calculation. The effectiveness of supervision is also best ensured by this approach. A principles-based approach will allow supervisors to focus on the sufficiency of the capital instead of merely verifying that the calculations, regardless of their appropriateness, have been correctly performed.

In addition, the complexity of the new rules poses a particular challenge for international banks regulated in multiple jurisdictions. We recommend adoption of the principle of lead supervision, where a single regulator, usually in the bank's home country, would be responsible for the global supervision of the bank. This should enhance cooperation among regulators by requiring improved communication across borders and the delegation of responsibilities by the lead supervisor. Lead supervision would also prevent duplicate reviews of centralized models and conflicting requirements from different regulators.

Although it may be argued that detailed rules are required to ensure consistent treatment of capital across borders, we believe a principles-based approach regulated by a lead supervisor with the flexibility to approve unique aspects of the practices of individual banks will be more effective. A rules-based Accord implemented by multiple regulators with little latitude of judgment can only stunt the development and implementation of industry-wide best practices. Therefore, we ask regulatory supervisors to encourage, as much as possible, the consistent application of principles rather than the rigid adherence to a set of rules. This, combined with the transparency of regulation and the appropriate disclosure by the banks themselves, will best contribute to the effectiveness of the new capital Accord.

We share the concerns of many banks that differences in supervisory application of the advanced approaches could result in uneven regulatory and compliance burdens across international borders. US regulators tend to take a more conservative approach towards regulation and supervision. If other countries do not follow the US lead in the strict application of the minimum capital requirements, it could place US banks at a disadvantage and lead to comparability problems. We appreciate the difficulty of maintaining consistency across multiple jurisdictions and encourage the US regulators to continue their lead role in the Accord Implementation Group to ensure consistent application of the standards and address conflicts between jurisdictions.

Excessive Disclosure Requirements (Pillar 3)

We agree with the importance of market discipline and believe that disclosure has a very important role to play in the effective implementation of the Accord. We appreciate the steps taken to reduce the amount of required disclosure. Unfortunately, the disclosure requirements are still grossly excessive.

The risk of misinterpretation of this information and the burden its distribution will place upon banks far outweigh its potential benefit.

Transparency is better achieved by the clear presentation of important information than by the publication of large amounts of data. Providing data without insight is potentially dangerous and could undermine the safety and soundness of individual banks and the industry as a whole in stressed market conditions. The possibility for unintended consequences of excessive disclosures should be given greater consideration. Local regulators have the historical context and sufficient knowledge of the institution to correctly interpret this information. They are intimately familiar with the bank's corporate governance policies, control environment, portfolio content and level of diversification. Many market participants, on the other hand, lack the same depth and breadth of understanding of the institution. Even with volumes of notes, they will struggle to assess the relative importance of the various required disclosures and perhaps draw inappropriate conclusions from the information. Rather than encouraging market discipline, the proposed volume of disclosure will slow the absorption of information by the market and increase the likelihood of inappropriate or contradictory conclusions by investors.

The effort required to amass the sheer volume of data, prepare it for presentation and provide explanatory comments will make it nearly impossible to meet the deadline of 30 days following quarter-end for Call Report and SEC filings that will be effective by the time Basel II is implemented. Banks announce their financial results long before the 30-day deadline. It is essential that investors be provided with the appropriate level of information at the right time. Under the current Basel I regime, we are able to present risk-based capital ratios and supporting detail when we announce earnings. The proposed level of disclosure is inoperable within that same timeframe. As a result, the presentation of capital adequacy information will be delayed and the timeliness of our disclosures will suffer.

While we appreciate the desire of supervisors for uninhibited access to information, we believe corporations have a valuable role to play in summarizing and analyzing data for their shareholders. We therefore recommend that the Agencies, in association with the industry and the investor community, identify a smaller subset of key disclosures that will appropriately convey a bank's risk profile without inundating the user with irrelevant information or risking misinterpretation. Remaining disclosures should be left to the judgment of each institution based on the demands of their investors, the relevance of the information to the current financial condition of the bank and the overall economic environment.

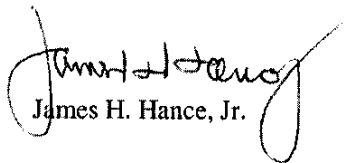
Summary

We strongly support the approach outlined the ANPR. However, we remain very concerned about the treatment of expected losses, the grossly excessive disclosure requirements, the level of conservatism throughout, the limited recognition of credit mitigation techniques, and the inconsistency between the risk management methodology of the ANPR and accepted practice in the industry. We fully support

the addition of operational risk as it strengthens the overall capital methodology and aligns the regulatory capital approach with newly developed internal risk measures.

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 (704) 388-8433.

Sincerely,



James H. Hance, Jr.

Appendix 1
Specific Responses to ANPR Requests for Comment

Boundary Issues (p 10-11)

1. *The New Accord proposed additional criteria for positions includable in the trading book for purposes of market risk capital requirements. Agencies encourage comment on these additional criteria and whether the Agencies should consider adopting such criteria (in addition to the GAAP criteria) in defining the trading book under the Agencies' market risk capital rules. The Agencies are seeking comment on the proposed treatment of the boundaries between credit, operational and market risk.*

- The application of U.S. GAAP criteria ensures a clear and consistent measurement of market risk capital. The U.S. GAAP classification is based on management's intent to take advantage of short-term price changes and requires that all trading book assets be carried at fair value. We believe the benefit of additional criteria is not significant and does not justify the addition of new items to reconcile U.S. GAAP and regulatory financial statements. We are concerned that the cost necessary to track these additional requirements will not be justified by their limited value, and therefore prefer the definition of the trading book remain consistent with the current practice under U.S. GAAP.

Competitive Considerations (p 12-15)

2. *What are commenters' views on the relative pros and cons of a bifurcated regulatory framework versus a single regulatory framework? Would a bifurcated approach lead to an increase in industry consolidation? Why or why not? What are the competitive implications for community and mid-size regional banks? Would institutions outside of the core group be compelled for competitive reasons to opt-in to the advanced approaches? Under what circumstances might this occur and what are the implications? What are the competitive implications of continuing to operate under a regulatory capital framework that is not risk sensitive?*

- The bifurcated regulatory framework is a sensible approach. It achieves the goals of risk sensitivity and comparability of capital requirements of the large, more complex institutions.
- The bifurcated framework limits the implementation costs to those segments of the industry where more risk-sensitive regulatory capital regulations are truly needed. Given the complexity and costs of the framework, it should be mandatory only for internationally active institutions. As they are already subject to high standards for capital management and risk measurement (FRB SR 99-18), large complex banking institutions in the U.S. should be well positioned to implement Basel II.
- The risk sensitivity of the approach provides greater comparability and transparency for the mandatory and opt-in banks. Comparability between these banks and those that remain under

the general approach is no worse than under Basel I.

- Acquisitions are driven by the real business benefits of economies of scale and scope, operating efficiency and diversification. The implementation of Basel II will not affect these factors. In fact, we are aware of no evidence from the experience of Basel I that changes in capital regulation have affected industry consolidation. Consolidation in the U.S. occurred in response to changes in interstate banking laws and a wave of bank and S&L failures.
- Competitive advantage accrues from best practice risk management rather than capital regulation. Bank of America has invested significant time and resources into developing best practice risk management processes and economic capital models. We believe these tools enable us to make better risk and return decisions and the benefits of improved decision-making are the return on our investment. We do not compete on the basis of minimum regulatory capital requirements, as our internal capital models are the basis of our decisions and business strategies.
- While general banks are not required to implement Basel II, they can do so if they judge the benefits to exceed implementation costs. Because the general banks have this option, a competitive advantage could not persist over time even if one existed.
- Since the new requirements will not alter the behavior of the more advanced banks that must implement them, and since they are optional for other banks, we expect them to have no effect on the competitive environment.

3. If regulatory minimum capital requirements declined under the advanced approaches, would the dollar amount of capital these banking organizations hold also be expected to decline? To the extent that advanced approach institutions have lower capital charges on certain assets, how probable and significant are concerns that those institutions would realize competitive benefits in terms of pricing credit, enhanced returns on equity, and potentially higher risk-based capital ratios? To what extent do similar effects already exist under the current general risk-based capital rules (e.g., through securitization or other techniques that lower relative capital charges on particular assets for only some institutions)? If they do exist now, what is the evidence of competitive harm?

- The QIS results have shown that the impact on capital ratios will be mixed. Capital ratios of individual institutions may either increase or decrease with the implementation of Basel II. While A-IRB banks will face lower capital for some types of lending, the capital for other types of lending will increase. A-IRB banks will also face the additional capital requirements for operational risk and possibly additional buffers under Pillar 2 to cover cyclical effects.
- The notion that institutions will dramatically reduce their capital ratios is exaggerated. Institutions that are positively affected by Basel II will most likely allow their risk-based capital ratios to increase rather than reduce equity. While regulatory ratios inform the capital management process, internal capital models, rating agency targets, capital market expectations and business strategy play equal or greater roles. Furthermore, the leverage ratio

and associated prompt corrective action rules will persist in the new regime and ultimately constrain capital levels.

- Bank of America manages its business activities on the basis of its economic capital rather than regulatory capital. This includes pricing and origination decisions, strategic planning processes and profitability measurement. In no case are businesses activities evaluated on the basis of returns to regulatory capital. The increasing alignment of regulatory capital to our assessment of risk-based economic capital validates our strategy; however, it will not affect our decisions. Since our decisions are already based on economic capital, the change in regulatory capital will have no impact on our competitive strategy.
- Another reason that the new regulatory framework will not change the competitive landscape is that the industry has used asset securitization not only to provide alternative funding sources and transfer risk, but also to reduce regulatory capital requirements. By setting the recourse on a securitization to a low level, the regulatory capital requirement can be reduced to a level consistent with the economic risk of the asset. Although securitization is not without costs, it reduces the effective regulatory charge on low-risk assets under the current rules. Because this is already occurring in the industry and will be unaffected by Basel II, the lower risk weighting on securitizable assets under Basel II is somewhat cosmetic and should not influence competition or pricing.

4. Apart from the approaches described in this ANPR, are there other regulatory capital approaches that are capable of ameliorating competitive concerns while at the same time achieving the goal of better matching regulatory capital to economic risks? Are there specific modifications to the proposed approaches or to the general risk-based capital rules that the Agencies should consider?

- Most of the competitive concerns center on differences in capital requirements between mandatory and general banks. These are addressed below under the question regarding general banks.

A-IRB at Individual Bank/Thrift Level (p 16)

5. However, recognizing that separate bank and thrift charters may, to a large extent, be independently managed and have different systems and portfolios, the Agencies are interested in comment on the efficacy and burden of a framework that requires the advanced approaches to be implemented by (or pushed down to) each of the separate subsidiary banks and thrifts that make up the consolidated group.

- We generally support the application, subject to materiality considerations, of the A-IRB to each subsidiary of a consolidated group that is independent and subject to Call Report requirements. To the extent that the subsidiaries operate with explicit parent guarantees, separate reporting of risk-based capital ratios should not be required.

- However, implementation at the subsidiary level will require parameter estimation based on the larger data population of the consolidated group. There are three primary reasons supporting this argument. First, the corporate standards, validation requirements and risk management governance processes will ensure consistent parameters across subsidiaries. Second, in many cases the data for standalone legal entities will not be sufficient to yield statistically significant estimates of the model parameters. This is a critical concern for operational risk, where the data requirements for estimation are difficult to meet even at the consolidated level. Third, it would not be cost efficient to implement separate estimation processes and models for individual legal entities.

U.S. Banking Subsidiaries of Foreign Banking Organizations (p 16)

6. *The Agencies are interested in comment on the extent to which alternative approaches to regulatory capital are implemented across national boundaries might create burdensome implementation costs for the US subsidiaries of foreign banks.*

- The approach adopted by the Agencies fairly addresses the need for greater transparency and risk sensitivity for large, complex institutions. This doctrine should be applied equally to all institutions within their jurisdiction. U.S. subsidiaries of foreign banks that meet the core bank criteria should be required to implement A-IRB and AMA approaches in order to do business in the U.S. These institutions will likely have the necessary resources, experience and support of parent companies to implement the new regime on a level playing field with U.S. banks.
- U.S. subsidiaries of foreign banks that do not meet the core bank criteria are not likely to be unduly burdened by the U.S. implementation. They may either elect to operate under Basel I or opt in to the A-IRB approach. The cost of continuing under Basel I should be modest since these systems are already in place.

General Banks (p 18)

7. *The Agencies seek comment on whether changes should be made to the existing general risk-based capital rules to enhance the risk-sensitivity or to reflect changes in the business lines or activities of banking organizations without imposing undue regulatory burden or complication. In particular, the Agencies seek comment on whether any changes to the general risk-based capital rules are necessary or warranted to address any competitive equity concerns associated with the bifurcated framework.*

- The Agencies should consider modifying the mortgage and credit card risk weightings for general banks. These changes would alleviate competitive concerns and achieve greater comparability between general and A-IRB banks without imposing significant costs on smaller institutions.

- In particular, the mortgage risk weighting could be reduced to 35% for general banks as in the standardized approach to Basel II. For credit cards, we suggest the application of a loan equivalency concept for unused lines. To offset these changes, the basic indicator approach or standardized operational risk approach could be implemented.

Majority-Owned or Controlled Subsidiaries (p 19)

8. *The Federal Reserve specifically seeks comment on the appropriate regulatory capital treatment for investments by bank holding companies in insurance underwriting subsidiaries as well as other nonbank subsidiaries that are subject to minimum regulatory capital requirements.*

- Deconsolidating insurance subsidiaries is inconsistent with the treatment of banking and securities subsidiaries. Subtracting the full amount of insurance subsidiary capital from Tier 1 capital deprives the holding company of the benefit of excess capital at the subsidiary level and recognition of diversification. Similar problems would occur for other non-bank subsidiaries.
- A fair and consistent approach would consolidate the assets of the insurance subsidiary and apply the A-IRB and AMA to the entire concern. The unique risks of the insurance business, such as liability risk, could be covered under the Pillar 2 approach. The benefit of excess capital and diversification would then accrue to the holding company.
- If the insurance company must remain separate, ignoring the diversification effect, only the minimum capital requirement of the subsidiary based on insurance regulations should be deducted from Tier 1 capital. The subtraction of total capital would penalize the parents of well-capitalized subsidiaries and reduce the consistency of capital measurements across institutions.

Transitional Arrangements (p 19-20)

9. *Given the general principle that the advanced approaches are expected to be implemented at the same time across all material portfolios, business lines, and geographic regions, to what degree should the Agencies be concerned that, for example, data may not be available for key portfolios, business lines, or regions? Is there a need for further transitional arrangements? Please be specific, including suggested durations for such transitions.*

- The collection of sufficient data for all portfolios will be difficult, especially for less material portfolios. We do not believe a delay of the implementation date is necessary but would prefer some flexibility in applying the rules in the first few years of adoption. The level of flexibility could be balanced with a more conservative approach to key parameters.
- For portfolios that are narrowly defined or have low default experience, the data to support portfolio-specific estimates of PDs, EADs and LGDs will be insufficient. A transition

approach for these portfolios could result in an indefinite application of the general bank rules and the accompanying lack of risk sensitivity. Lack of data on these portfolios is unavoidable. Therefore, rather than a transition approach for individual portfolios, we suggest that the industry would be better served by greater flexibility in the use of external data.

- In cases where internal data is not available for certain sub-portfolios or business lines, banks should use relevant external data to support their estimation process. For some portfolios, this will be only a temporary situation. For others, it may well be permanent. In cases where there is uncertainty regarding the appropriate parameters, conservative values should be chosen. However, the level of conservatism should not be onerous. It should reflect reasonable business judgment rather than a penalty for the unavoidable lack of data for narrowly defined or low default risk portfolios.

10. Do the projected dates provide an adequate timeframe for core banks to be ready to implement the advanced approaches? What other options should the Agencies consider?

- We appreciate the consultative approach the Agencies have taken with the industry in the process of developing the framework. Much progress has been made, and the overall framework has clearly benefited from the discourse. However, resolution of several key areas outlined in the body of this document will require further consultation with the industry. If there is a delay in publishing the final rules, the implementation date should be moved back commensurately. The parallel calculation period should not begin until the final rules are approved and adequate time has elapsed for the modification or development of necessary systems.
- We do not see any justification for separate data requirements for different portfolios or parameter estimates. The current framework requires 5 years of data for estimation of retail portfolio PDs, LGDs, and EADS. However, for corporate portfolios, the framework requires 5 years of data for PD estimation and 7 years of data for LGD and EAD estimation. These requirements unnecessarily complicate the estimation process. Back-testing and validation results will be difficult to interpret if individual parameters are estimated from different time periods. We recommend the Agencies consider a single data history requirement of five years across portfolios for all parameter estimates.
- We are perplexed by the omission of the transition arrangements for data requirements that appeared in CP3. The ANPR seems to require that all data requirements be fully met by the beginning of the parallel calculation period in January 2006. To meet this deadline, an institution must meet the 5 and 7-year requirements and receive supervisory approval by the end of 2005. Institutions without data meeting the high standards of the ANPR will have great difficulty obtaining this data retroactively. With that in mind, the Agencies should adopt the data transition requirements specified in CP3. More specifically, they should require a minimum two-year history of data by the beginning of the parallel calculation period. By the end of the three-year transition period that begins at the same time, each bank should be required to have a five-year history.

11. The Agencies seek comment on appropriate thresholds for determining whether a portfolio, business line, or geographic exposure would be material. Considerations should include relative asset size, percentages of capital, and associated levels of risk for a given portfolio, business line, or geographic region.

- Current U.S. GAAP practice uses 10% as the threshold for materiality in a number of instances. For example, in FAS 131, only segments exceeding 10% of total assets must be disclosed separately. We concur with this view and believe that 10% of total risk-weighted assets is an appropriate threshold to use in assessing the materiality at the consolidated level.
- We believe that 10% of risk-weighted assets estimated under the standardized approach or general rules is a better indicator of materiality than 10% of equity. Risk-weighted assets achieve the appropriate mix between the notional amounts and risk exposure. Portfolios below the 10% threshold could then, subject to regulatory approval, be assigned risk weights under the general or standardized rules until agreement is reached on the appropriate A-IRB treatment using external or proxy data if necessary.

Conceptual Basis of A-IRB Approach (p 23-25)

12. The Agencies seek comment on the conceptual basis of the A-IRB approach, including all of the aspects just described. What are the advantages and disadvantages of the A-IRB approach relative to alternatives, including those that would allow greater flexibility to use internal models and those that would be more cautious in incorporating statistical techniques (such as greater use of credit ratings by external rating Agencies)? The Agencies also encourage comment on the extent to which the model's necessary conditions of the conceptual justification for the A-IRB approach are reasonably met, and if not, what adjustments or alternative approach would be warranted.

- The A-IRB framework introduces a common set of risk-sensitive formulas for the calculation of required capital for credit risk. The underlying ASRF formula is consistent with industry models for determining capital requirements. However, the regulatory approach differs from that of best practice institutions in several important aspects.
- The regulatory model, in order to achieve portfolio invariance, assumes a single risk factor and an infinitely granular portfolio. Leading industry models, on the other hand, assume multiple risk factors for the economy, countries and industries. These models consider the specific composition of the institution's portfolio with the goal of incorporating overall diversification benefits and concentration costs.
- The decision to allow banks to use their own inputs is positive. Ultimately, the most effective way to reduce the divergence between regulation and market practice is to allow banks to fully utilize their internal models. The committee previously recognized the value of leveraging banks' modeling capability when adopting the Market Risk Amendment to Basel I. It has

continued on this path with the AMA approach for operational risk. Recognizing that supervisors are not yet prepared to fully endorse internal models for credit risk, we welcome A-IRB as a significant step in that direction.

- The confidence levels chosen as reference points contradict the goal of a minimum standard. The measurement of credit risk at a 99.9% confidence level approaches the level used by banks for economic capital. This high confidence level represents an investment grade or "well capitalized" target level of capital rather than a minimum standard of capital adequacy. A more appropriate minimum standard is 99.5%, which is approximately the border between investment and non-investment grade.
- The inclusion of expected loss in the capital assignment is perhaps the most significant issue in the A-IRB approach. Inclusion of expected loss overstates the absolute level of the capital requirement, distorts relative capital assignments between risk categories and steepens the risk-weighting curve. This penalizes portfolios with higher default probability even if they are well managed and priced commensurately with their risk. We strongly believe it is inappropriate to assign capital for expected loss. We know no industry practitioner that does so in its internal model. The industry views expected loss as a cost of doing business. The margins on loan products are therefore set at a level sufficient to cover expected loss, compensate for operating costs and provide a favorable return on capital. The inclusion of expected loss in the regulatory capital requirement contradicts fundamental pricing practices by assuming that margin revenue is sufficient only to cover operating costs.
- The asset correlation estimates of the ASRF model are improperly specified. Both the corporate and retail correlation assumptions are inverse functions of default probability. While this may be an expedient way to flatten the risk weighting function and to compensate for the inclusion of expected loss, there is little evidence supporting the relationship. Asset correlation is a function of company size rather than default probability. As a firm increases in size, internal diversification reduces its level of idiosyncratic risk, resulting in greater exposure to systematic risk. The relationship between correlation and default probability is spurious and simply reflects the tendency for larger companies to be highly rated.
- A table from the Federal Reserve Research Staff paper referenced in the ANPR is reproduced below. It clearly shows that, when both size and default probability are included, size is the main driver of correlation. When asset size is held constant, the table shows very little impact of credit quality except for within the largest open-ended bucket. Because the largest size category is not bounded from above, the average size of firms in each of the credit quality buckets could differ and drive the few differences that are shown in the table. We have confirmed using our own research that after controlling for size of the company, the EDF relationship is not statistically significant.

Table 5B2. Calibrated Average Asset Correlations at the 99.9% Percentile for the U.S. Portfolios based on EDF and Asset Size Categories

Asset Size Categories	EDF Categories (%)		
	0.00% to 0.52 %	0.52% to 6.94%	6.94% to 20.00%
\$0 mm to \$100 mm	0.1375	0.1250	0.1250
\$100 mm to \$1,000 mm	0.1875	0.1875	0.1750
> \$1,000 mm	0.3250	0.2750	0.2250

Source: Jose A. Lopez, "The Empirical Relationship between Average Asset Correlation, Firm Probability of Default and Asset Size", June 17, 2002

- Our own research indicates that correlation has a much stronger relationship to the size of the company than to credit quality. We have provided that analysis in Appendix 5. The underlying data used in the analysis are the asset correlations measured by the Moody's KMV Global Correlation Model for all U.S. companies. The first graph shows the correlation specification in the ANPR. Our internal fitting routine uncovered almost exactly the same parameters as those in the ANPR. We found this interesting since these correlations are estimated using a multi-factor model and therefore are higher than the correlations that would come from a single factor model. For comparison purposes, we have provided a graph showing the relationship between asset correlation and size of company. It is clear from visual inspection that the size based specification is more coherent and has more explanatory power. The R-squared of the asset correlation regressions were 27% for the credit quality based specification and 44% for the size-based specification. This corresponds to almost a 60% improvement in explanatory power.
- Given the stronger relationships shown above, we recommend the Agencies consider a unified framework for determining correlation that depends only on the size of the borrower. This would simplify the approach, align it with industry models and improve its risk sensitivity. Since banks must maintain financial statement data as a requirement for their rating systems, the incremental costs of using asset size or sales revenue in the A-IRB formula should be marginal compared to these benefits. The Small and Medium-Sized Entities (SME) approach already includes size in the formula for determining correlation. We view this as a more appropriate approach. Therefore, we recommend a formula similar to that used for SMEs be applied to all commercial exposures within one framework.

13. Should the A-IRB capital regime be based on a framework that allocates capital to EL plus UL, or to UL only? Which approach would more closely align the regulatory framework to the internal capital allocation techniques currently used by large institutions? If the framework were recalibrated solely to UL, modifications to the rest of the A-IRB framework would be required. The Agencies seek commenters' views on issues that would arise as a result of such recalibration.

- The ANPR recognizes differences of opinion over the appropriateness of a definition of capital that encompasses both expected and unexpected loss. As expressed in our previous comment letters, we strongly believe it is inappropriate to assign capital for expected loss. We know of no industry practitioner that assigns capital for expected loss in its internal model. Banks consider expected loss a cost of doing business. Margins on loan products are therefore set at a level sufficient not only to cover operating costs, but also to cover expected loss and provide a favorable return on capital. Including expected loss in the regulatory capital requirement discounts the principles of the most fundamental pricing practices by effectively assuming the revenue of a business is sufficient only to cover its operating costs.
- A sensible framework would compare the risk measured by the model to the financial resources available to cover that risk. The following table provides a summary of the various approaches. For exposition purposes, future margin income (FMI) has been shown as a financial resource rather than an offset to the risk measure. However, the underlying interpretation is the same.

<i>Approach</i>	<i>Risk Measure</i>	<i>Available Resources</i>
Economic Approach A	EL + UL	CE + LLR + FMI
Economic Approach B	UL	CE + (LLR - EL) + FMI
Economic Approach C	UL	CE + LLR + (FMI - EL)
Industry Approach	UL	CE + LLR
Regulatory Approach	EL + UL	CE + LLR* + FMI Card*

* The regulatory approach limits recognition of LLR to 1.25% of risk-weighted assets in Tier 2 capital. It provides limited recognition of FMI for credit card (i.e., 0% or 75% of credit card EL)

- The financial resources to cover expected and unexpected loss include common equity (CE), loan loss reserves (LLR) and future margin income (FMI) net of operating costs. In the table, this approach is labeled Economic Approach A. Two alternative but equivalent approaches based only on UL are also shown. The first, Economic Approach B, counts general reserves as a component of capital and recognizes the gross amount of FMI. The second, Economic Alternative C, counts the total reserves as capital and recognizes only the expected profit margin as an available resource to buffer loss. The equivalence of these two alternatives clarifies the seemingly contradictory industry remarks that both pricing and reserves cover expected loss.
- The industry approach, which compares unexpected loss to common equity and loan loss reserves, is more conservative than the pure economic approach, as the industry stops short of

recognizing the full impact of FMI. It assumes only that FMI is sufficient at the portfolio level to cover expected loss. It does not provide for a capital reduction for the profit margin embedded in loan pricing and is therefore appropriately conservative.

- The best solution would eliminate the EL component of the capital charge. This would reduce the complexity of the approach and align it with industry practice. If removing EL is unacceptable, approaches to offset the EL component should avoid unnecessarily complex implementation requirements and distortions between products. If FMI is chosen as an offset of EL, it should apply to all exposures regardless of product type. The circumstances for qualifying retail portfolios are not unique: margins on all products are available to buffer expected loss. They are set to cover both operating costs and expected loss and provide a return in excess of the cost of capital.
- The Agencies have expressed concern that the value of FMI may be insufficient in the 99.9% credit scenario to offset losses. We believe this concern is unwarranted for three reasons. First, the LGDs used in the credit model already include the cost of foregone income on defaulted credits. Second, prepayments on the performing portfolio tend to slow down as credit conditions deteriorate, thereby generating greater margin income. Third, the incidence of late fees will increase and provide mitigating revenue. Given these factors, we do not believe a limit on the FMI offset (i.e., 75% of EL) is necessary. Instead, the FMI for each product should be adjusted by a haircut analogous to that used for financial collateral. The adjusted FMI would then be applied against the EL component of the capital charge. This would allow partial EL offsets and eliminate the need for separate threshold tests. We provide later a more detailed explanation of this approach. We would be happy to work with the Agencies to provide further analysis of the relationship between FMI and credit losses and to further explore this issue.

Wholesale Exposures: Definitions and Inputs (p 29)

14. The Agencies seek comment on the proposed definition of wholesale exposures and on the proposed inputs to the wholesale A-IRB capital formulas. What are views on the proposed definitions of default, PD, LGD, EAD, and M. Are there specific issues with the standards for the quantification of PD, LGD, EAD, or M on which the Agencies should focus?

Definition of default

- The definition of default should be simplified to correspond more closely to that commonly used by risk managers. Default for the corporate model should be entry into non-accrual or chargeoff status. The definition of default for the retail model should accord with the Uniform Retail Credit Classification standards published by the FFIEC.
- For corporate borrowers, non-accrual status subsumes the more detailed definitions of default. An asset is placed on non-accrual when it is 90 days past due or when reasonable doubt exists about its collectability. A declaration of bankruptcy would certainly satisfy the latter criterion.

Exceptions to this policy are applied only in limited cases where the loan is fully collateralized and in the process of collection.

- Internal controls, audit procedures and supervisory processes ensure that non-accrual and charge-off policies are applied correctly. These policies, which govern the recognition of income, should be sufficient for the Basel definition of default. Once technical defaults are excluded and materiality is considered, the difference between Basel's detailed definition and our recommended definition is negligible.
- Implementation of a broader definition of default and of duplicative control procedures is a meaningless yet costly exercise, since these fine lines in the definition will only serve to shift the mix of PD and LGD in an offsetting fashion.
- The emphasis the Agencies have placed on capturing silent defaults is unwarranted. Capturing data on credits that are well secured and in the process of collection is unnecessary for two reasons. First, this treatment is applied in exceptional cases precisely because there is a strong expectation of zero loss. Second, the net result of capturing these exposures as defaults would be negligible since the resulting increase in PD estimates would be offset by the related decrease in LGD estimates.
- The Agencies should abandon the requirement that loan sales at material credit-related discounts be treated as defaults. Loan sales are portfolio management operations driven by concentration management, balance sheet usage, market liquidity and many other factors. Moreover, discounts are due to a variety of factors such as interest rates, market liquidity, and technical supply and demand issues. It would be quite difficult and ultimately arbitrary to disentangle these effects. Including sales of performing loans in the definition of default would also introduce comparability problems across and within institutions over time.
- On a more fundamental level, the risk of loss in a loan's value due to credit deterioration is migration risk rather than default risk. Migration risk is already included in the framework through the maturity adjustment portion of the IRB formula. To be consistent with the derivation of the formula, default probability should not be artificially inflated for deterioration, and then only for deterioration "realized" through discretionary loan sales.

Stressed LGD

- Certain aspects of the supervisory expectation regarding LGD estimation remain unclear. The ANPR specifies that LGD estimates should represent the loss severity expected when default rates are high, unless the bank can show that recoveries on a particular class of exposures are not significantly affected by cyclical factors. The supervisory guidance, on the other hand, requires only that LGD estimates be estimated using a sample that includes stressed periods.
- The Agencies should apply the same principles to estimation of PD, EAD and LGD. Without consistent estimation approaches, the resulting estimates of expected and unexpected loss will be nearly impossible to validate against actual portfolio experience.

- According to the ANPR, while PD estimates are long-run averages and EAD estimates are default-weighted averages, LGDs must be estimated using only stress periods. We recommend long-run default-weighted averages as the standard approach for both EAD and LGD estimates. Cases where the LGDs are cyclical should be considered exceptions rather than the rule. By definition, default-weighted averages will be conservative as they are driven by periods of high default rates. Use of stressed parameters is more appropriate as a component of stress testing.
- The calculation and validation of stressed LGDs will be difficult due to the lack of a standard definition of stress periods, changes in underwriting standards and different business cycles across economies. In many categories, there would not be sufficient data from recessions alone to produce meaningful estimates of LGD.

Maturity

- With exceptions for capital market transactions and certain one-off transactions, the ANPR currently contemplates a sliding scale for the treatment of tenor from 1 to 5 years. This ignores the different risk attributes of assets with tenors outside this limited range. We urge the Agencies to remove these restrictions and allow an open-ended tenor scale consistent with industry practice.
- The limited tenor range is of particular concern for short-term transactions. Clearly, transactions with remaining terms less than one year are proportionately less risky. We have attached our analysis of the capital requirements for short-term exposures as Appendix 4. It clearly shows a bias in the ANPR capital requirements for all exposures with maturities less than one year. For transactions with one month remaining term, the bias is in the range of 400% to 500% greater capital. We strongly urge the Agencies to allow adjustment of the one-year default probability for the remaining term of the transaction. For example, an asset with a remaining term of 3 months should be assigned a default probability that is .25 times the one-year default probability. If necessary, the Agencies could establish a reasonable floor such as one month to constrain the minimum default probability.
- The Agencies should consider specific guidance on the treatment of maturity for revolving commercial exposures. In particular, the supervisory guidance does not indicate a preference for the maturity of the commitment or the maturity of the underlying exposures. We recommend the maturity of non-binding facilities be based on the underlying utilizations.
- Maturity adjustments should apply to both corporate assets and retail assets. A particular problem arises when exposures to SMEs are transferred to the retail category. The SME exposures would be treated with the lower correlations appropriate for their level of systematic risk while the maturity adjustment would paradoxically no longer apply. In order for the model to be equitable across banks with different business mixes, it is essential that both retail and commercial capital models include a maturity effect.

Wholesale Exposures: SME Adjustment (p 33)

15. *If the Agencies include a SME adjustment, are the \$50 million threshold and the proposed approach to measurement of borrower size appropriate? What standards should be applied to the borrower size measurement (for example, frequency of measurement, use of size buckets rather than precise measurements)?*

- As noted earlier, we recommend applying the correlation adjustment across the entire spectrum of the corporate portfolio on a continuous basis. This would eliminate cliff effects between portfolios and better align the regulatory approach with internal models.
- If a continuous approach is unacceptable, we recommend a bucketing approach based on sales revenue that differentiates between small business (Sales <= \$10 mm), middle market (Sales from \$10 mm – \$500 mm) and corporations (Sales >= \$500 mm).
- To support the above distinctions, the following table provides asset correlation by firm size based on the Moody's KMV Global Correlation Factor Model.

<i>Company Size Categories (\$mm)</i>	<i>Mean</i>	<i>Median</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Standard Deviation</i>
\$0 to \$10	13.01%	12.49%	10.03%	25.43%	2.49%
\$10 to \$500	15.75%	14.71%	10.01%	39.11%	4.47%
> \$500	24.37%	22.71%	10.04%	64.89%	9.37%

- Company size should be updated with the receipt of new financial statements at the same time as ratings are updated. To ensure stability, the average size of the company over the previous three years should be used for the size adjustment to correlation. Revenue may not be the best indicator of size for certain industries. In particular, the Agencies should consider using asset size for firms in the financial services sector.

16. *Does the proposed borrower size adjustment add a meaningful element of risk sensitivity sufficient to balance the costs associated with its computation? The Agencies are interested in comments on whether it is necessary to include an SME adjustment in the A-IRB approach. Data supporting views is encouraged.*

- As noted earlier, company size is the most important driver of asset correlation differences among firms. The risk of smaller firms is mostly idiosyncratic and is diversified in the context of the overall portfolio. The risks of larger firms, on the other hand, tend to be more systematic.
- The marginal cost of implementing the size adjustment is small. The supervisory guidance on

data maintenance already requires the capture of all significant quantitative and qualitative factors used to assign the obligor rating. Basic financial data such as sales revenue and asset size fall under this requirement.

Wholesale Exposures: Specialized Lending (p 34)

17. The Agencies invite comment on ways to deal with cyclical in LGDs. How can risk sensitivity be achieved without creating undue burden?

- LGD estimation for specialized lending will be difficult due to the scarcity of default data, the narrow portfolio definitions and the customized nature of the transactions. The additional requirement to estimate LGD for these portfolios based on empirical data from stressed environments will be impossible to meet. The most reasonable solution would provide flexibility in the use of external data and a general principle requiring a greater degree of conservatism for cyclical exposures.

18. The Agencies invite comment on the merits of the SSC approach in the United States. The Agencies also invite comment on the specific slotting criteria and associated risk weights that should be used by organizations to map their internal risk rating grades to supervisory rating grades if the SSC approach were to be adopted in the United States.

- The SSC approach lacks transparency. The ASRF model, on the other hand, provides a useful structure and common language for credit risk management. We expect to apply the A-IRB approach to specialized lending but understand it will be inherently difficult to estimate PDs and LGDs for these exposures.
- The Agencies should leverage the benefits of the ASRF model. Rather than the SSC approach, we encourage the Agencies to set A-IRB qualification standards for specialized lending that are feasible yet provide for a reasonable level of conservatism. Supervisory parameters for LGD should be considered for institutions that do not meet these qualification standards.

Wholesale Exposures: HVCRE (p 36)

19. The Agencies invite the submission of empirical evidence regarding the (relative or absolute) asset correlations characterizing portfolios of land ADC loans, as well as comments regarding the circumstances under which such loans would appropriately be categorized as HVCRE.

- No specific comment

20. The Agencies also invite comment on the appropriateness of exempting from the high asset

correlation category ADC loans with substantial equity or that are pre-sold or sufficiently pre-leased. The Agencies invite comment on what standard should be used in determining whether a property is sufficiently pre-leased when prevailing occupancy rates are unusually low.

- No specific comment

21. The Agencies invite comment on whether high asset correlation treatment for one-to four-family residential construction loans is appropriate, or whether they should be included in the low asset correlation category. In cases where loans finance the construction of a subdivision or other group of houses, some of which are pre-sold while others are not, the Agencies invite comment regarding how the "pre-sold" exception should be interpreted.

- No specific comment

22. The Agencies invite comment on the competitive impact of treating defined classes of CRE differently. What are commenters' views on an alternative approach where there is only one risk weight function for all CRE? If a single asset correlation treatment were considered, what would be the appropriate asset correlations to employ within a single risk-weight function applied to all CRE exposures?

- No specific comment

Wholesale Exposures (p 37)

23. The Agencies are seeking comment on the wholesale A-IRB capital formulas and the resulting capital requirements. Would this approach provide a meaningful and appropriate increase in risk sensitivity in the sense that the results are consistent with alternative assessments of the credit risks associated with such exposures or the capital needed to support them? If not, where are there material inconsistencies?

- The A-IRB framework achieves the goal of introducing a common set of risk-sensitive formulas for the calculation of required capital for credit risk. The underlying ASRF formula is consistent with industry models for determining internal capital requirements. However, there are several differences in the application of the regulatory approach compared to those of best practice institutions. The key areas that must be addressed are the capital requirement for expected loss, the inverse relationship between PD and asset correlation, the limited treatment of maturity and the treatment of guarantees. Each of these concerns has been discussed in the detailed responses earlier in this document.

24. Does the proposed A-IRB maturity adjustment appropriately address the risk differences between loans with differing maturities?

- The limited maturity range is of particular concern for short-term transactions. Transactions with remaining tenor less than one year are proportionately less risky. We strongly urge the Agencies to consider allowing adjustment of the one-year default probability for the remaining term of the transaction. We have attached our analysis of capital requirements for short-term exposures in Appendix 4.

Retail Exposures: Definitions and Inputs (p 38)

25. The Agencies are interested in comment on whether the proposed \$1 million threshold provides the appropriate dividing line between those SME exposures that banking organizations should be allowed to treat on a pooled basis under the retail A-IRB framework and those SME exposures that should be rated individually and treated under the wholesale A-IRB framework.

- The preferred approach would differentiate small business lending on a continuous basis using revenue size rather than dollar amount of exposure. This would avoid cliff effects and discontinuities over time for individual borrowers. Using separate thresholds based both on revenue and dollars of exposure needlessly complicates the implementation. Furthermore, the specific requirement that SME exposures be managed and rated on a pooled basis to be eligible for lower correlation should be dropped. The internal management process is irrelevant to the level of correlation. Correlation is driven by borrower characteristics rather than internal management policies.

Retail Exposures: Undrawn Lines (p 40-41)

26. The Agencies are interested in comments and specific proposals concerning methods for incorporating undrawn credit card lines that are consistent with the risk characteristics and loss and default histories of this line of business.

- The most logical treatment for potential exposure from undrawn credit lines is to estimate exposure at default from historical experience. The Agencies should note that this is the preferred approach. The PD, EAD, and LGD structure provides a common language for risk management. Maintaining the integrity of that structure will ensure comparability among institutions and facilitate validation exercises. Distinct internal processes for recovery management and line authorization, respectively, drive LGD and EAD, which should therefore be modeled separately. Convolving the effects of EAD and LGD will provide less information and be less risk sensitive.
- We recognize that institutions using an expected loss portfolio segmentation approach may have to back out LGD or PD from their estimate of expected loss. The Agencies should retain some flexibility to accommodate these exceptions but provide guidance that separate estimation of EAD is preferred.

27. The Agencies are interested in further information on market practices in this regard, in particular the extent to which banking organizations remain exposed to risks associated with such accounts. More broadly, the Agencies recognize that undrawn credit card lines are significant in both of the contexts discussed above, and are particularly interested in views on the appropriate retail IRB treatment of such exposures.

- No specific comment

Retail Exposures: General (p 42)

28. For the QRE sub-category of retail exposures only, the Agencies are seeking comment on whether or not to allow banking organizations to offset a portion of the A-IRB capital requirement relating to expected losses by demonstrating that their anticipated FMI for this sub-category is likely to more than sufficiently cover expected losses over the next year.

- We strongly believe it is inappropriate to assign capital for expected loss. The industry considers expected loss a cost of doing business. Margins on loan products are therefore set at a level sufficient not only to cover operating costs, but also to cover expected loss and provide a favorable return on capital. Including expected loss in the regulatory capital requirement ignores fundamental pricing practices. It effectively assumes the revenue of business activities only covers operating costs.
- We maintain that the best approach is to eliminate the EL charge entirely. However, we recognize that this may not be politically feasible. Offsets to the EL charge are a means to a similar end, but these should avoid unnecessarily complex implementation requirements, distortions between products and unnecessary differences between international jurisdictions.
- Allowing organizations to offset the EL component by demonstrating sufficiency of FMI is a reasonable approach. The Agencies should not limit the percentage of EL that can be offset. Instead, banks should apply a haircut to the FMI similar to that used for financial collateral. The amount of FMI after the haircut should be compared to the EL component of the capital charge. This would result in full offset of the EL capital charge if the adjusted FMI sufficiently exceeds EL. A partial adjustment would apply if adjusted FMI does not exceed EL.
- Finally, the circumstances for applying FMI to qualifying revolving retail portfolios are not unique. The risk-mitigating benefits of FMI should be applied uniformly to all portfolios. We have provided detail of our specific proposal, for application across businesses and products, in our response to the Agencies' question, below in this appendix, about partial recognition of FMI (Question #35).

29. The Agencies are seeking comment on the proposed definitions of the retail A-IRB exposure

category and sub-categories. Do the proposed categories provide a reasonable balance between the need for differential treatment to achieve risk-sensitivity and the desire to avoid excessive complexity in the retail A-IRB framework? What are views on the proposed approach to inclusion of SME exposures in the other retail category?

- We generally agree with the retail categorization scheme with one exception. The rules currently require retail assets and qualifying SMEs to be managed on a pooled basis. Individually rated and managed residential real estate exposures for example must be treated under the wholesale A-IRB framework. We do not believe it is appropriate to classify assets based on how the exposures are managed. We recommend the Agencies drop this requirement. The correlations are the real differences between the retail and wholesale A-IRB frameworks. We do not see any linkage between the management process and a borrower characteristic such as correlation. Simply because exposures are managed individually does not increase their correlation. Additionally, retail borrowers are all scored individually and only later sorted into pools for estimation and reporting processes. They are individually rated at the outset and would therefore fail such a criteria.
- At the subcategory level, the Agencies should consider either a separate category for home equity loans and lines of credit or an explicit treatment of maturity for retail assets. The correlations used in the mortgage model have been inflated to account for longer terms of the product. Since home equity products, which typically have shorter tenors than traditional mortgages, are included in the mortgage category, the current classification scheme will not be sufficiently risk sensitive.
- SMEs should be treated within the corporate framework using a unified approach to correlation based on company size. Separate treatment under the retail framework based on exposure size adds unnecessary complexity. Additionally, the lack of a maturity effect for retail assets will result in discontinuities within the SME segment depending on exposure size. Finally, it will be difficult to estimate and validate PD, LGD and EAD estimates if the portfolio segmentation scheme is based on the aggregate exposure and a changing population.

30. The Agencies are also seeking views on the proposed approach to defining the risk inputs for the retail A-IRB framework. Is the proposed degree of flexibility in their calculation, including the application of specific floors, appropriate? What are views on the issues associated with undrawn retail lines of credit described here and on the proposed incorporation of FMI in the QRE capital determination process?

- We strongly support the Agencies' proposal to include the FFIEC chargeoff criteria in the definition of default. However, it appears that the more detailed definitions have remained.
- The degree of flexibility in the calculation of retail PD, EAD and LGD appears sufficient given the description in the ANPR. We anxiously await the publication of the supervisory guidance for retail portfolios. The floors imposed on PDs and LGDs particularly concern us.

- For high credit score ranges, the incidence of default is virtually zero and often results in PDs below the 3 bp floor proposed in the ANPR. This reflects the high credit quality of consumers in this segment and the small size of the exposure relative to their financial assets and income.
- We strongly disagree with the 10% floor imposed on LGDs for residential mortgages. The LGDs should reflect a bank's internal experience with an appropriate degree of conservatism. LGDs for low LTV segments are often below 10%. The low LTV segment reflects significant price appreciation in some of our key markets and normal amortization of principal. These characteristics clearly mitigate credit risk. Imposing a floor will penalize banks that develop more granular LGD estimation processes. A bank using portfolio average LGD or broader LTV categorization scheme would be unaffected by the floor since the benefits of the very low LTV segment would be masked.
- There is no need for a separate floor, as the LGD history should include stressed periods and is subject to review by supervisors. If there are concerns that the data history does not contain sufficient observations during stressed periods, then the supervisory review process allows for this feedback.

31. The Agencies are seeking comment on the minimum time requirements for data history and experience with segmentation and risk management systems: Are these time requirements appropriate during the transition period? Describe any reasons for not being able to meet the time requirements.

- The 5-year data requirement for PD, LGD, and EAD is adequate and reasonable, although exceptions should be made where future performance is reasonably believed to vary significantly from the 5-year historical average. The 5 years of historical data may not be available for newly developed products or for portfolios obtained through acquisition. Transitional arrangements should be developed to accommodate these situations using either top down approaches, external data or management judgment.
- The 3-year requirement for experience with the segmentation and risk management system is unreasonable under the current implementation timeline. We recommend the Agencies adopt language to soften this requirement, which will be a binding constraint for all institutions whose systems do not currently meet the ANPR and DSG minimum criteria.
- The DSG for retail portfolios has yet to be published. Assuming the supervisory guidance is published by January 2004 and the 3-year experience requirement is rigorously enforced, institutions that do not already meet the standards would not be able to begin their parallel calculation period until January 2007. This would delay implementation until January 2008 for any institution that must modify its approach to segmentation and estimation.

Retail Exposures: Private Mortgage Insurance (p 44)

32. The Agencies also seek comment on the competitive implications of allowing PMI recognition for banking organizations using the A-IRB approach but not allowing such recognition for general banks. In addition, the Agencies are interested in data on the relationship between PMI and LGD to help assess whether it may be appropriate to exclude residential mortgages covered by PMI from the proposed 10 percent LGD floor. The Agencies request comment on whether or the extent to which it might be appropriate to recognize PMI in LGD estimates.

- We believe the competitive implications of allowing PMI recognition in the A-IRB approach will be minimal. Bank of America manages its business activities on the basis of economic rather than regulatory capital. This includes pricing and origination decisions, strategic planning processes and profitability measurement. Changes in regulatory capital will therefore have no impact on our competitive strategy.
- We would be happy to assist the Agencies in evaluating the impact of PMI on LGDs. We strongly believe that PMI should be recognized in the LGD estimation process. However, the LGD floor will rarely apply where PMI recognition is required. Typically, PMI is required for mortgage exposures with LTVs in excess of 80%, in which case the insurance reduces the LGD to a level commensurate with an LTV of 80%. We reiterate that the LGD floor is a critical issue for the much broader low-LTV segment.

33. More broadly, the Agencies are interested in information regarding the risks of each major type of residential mortgage exposure, including prime first mortgages, sub-prime mortgages, home equity term loans, and home equity lines of credit. The Agencies are aware of various views on the resulting capital requirements for several of these product areas, and wish to ensure that all appropriate evidence and views are considered in evaluating the A-IRB treatment of these important exposures.

- The risk of residential mortgage exposure depends on a number of parameters. Some of these parameters, such as PD, LGD and EAD, are included in the A-IRB model. However, maturity and asset correlation differences across these products are not reflected in the current approach.
- Home equity loans and lines of credit are typically originated with tenors of 10-15 years. The shorter term of these products is not reflected if they are aggregated with traditional mortgages.
- Bank of America no longer originates sub-prime loans. However, the effective tenor of these exposures is typically shorter than for prime mortgages, due to both shorter contractual terms and prepayment behavior that is strongly influenced by credit quality.
- Our internal models assign the same asset correlation to all mortgage exposures. There may be some merit, however, to assigning lower asset correlation to home equity loans and lines of credit. Home equity lines of credit usually substitute for credit card debt. It is logical to

expect that the performance of the real estate market will be less influential in driving default behavior for this portfolio than for traditional mortgages.

- We recognize that the Agencies may not be comfortable providing reductions in asset correlation for home equity exposures without statistical support. Accordingly, we recommend explicit treatment of maturity as an acceptable solution.

34. The risk-based capital requirements for credit risk of prime mortgages could well be less than one percent of their face value under this proposal. The Agencies are interested in evidence on the capital required by private market participants to hold mortgages outside of the federally insured institution and GSE environment. The Agencies also are interested in views on whether the reductions in mortgage capital requirements contemplated here would unduly extend the federal safety net and risk contributing to a credit-induced bubble in housing prices. In addition, the Agencies are also interested in views on whether there has been any shortage of mortgage credit under general risk-based capital rules that would be alleviated by the proposed changes.

- No specific comment

Retail Exposures: Future Margin Income Adjustment

35. The Agencies are interested in views on whether partial recognition of FMI should be permitted in cases where the amount of eligible FMI fails to meet the required minimum. The Agencies are also interested in views on the level of portfolio segmentation at which it would be appropriate to perform the FMI calculation. Would a requirement that FMI eligibility calculations be performed separately for each portfolio segment effectively allow FMI to offset EL capital requirements for QRE exposures?

- We have expressed our disagreement with the proposal to include expected loss in regulatory capital and have explained the conservative nature of the standard industry calculation of capital compared to the more holistic measurement, which includes EL in the capital requirement and FMI in the offsetting resources. A regulatory capital measurement that deviates from industry practice and aims to capture the entire potential for loss, including EL, must compare that amount to the related revenue and resources.
- The Bank determines product pricing largely to compensate for expected loss. FMI, which is driven by product pricing, should therefore offset portfolio EL. This offset should be conservatively calculated, but in a consistent and continuous manner unlike that detailed by the ANPR. The current proposal allows a 75% reduction in EL if it is greatly exceeded by FMI. This is unduly conservative, as the threshold test is based on the standalone standard deviation of loss for the segment, which ignores diversification effects and is biased by timing delays in the workout process and changes in accounting treatment. The proposal is also, due to its all-or-nothing formula, discontinuous, and liable to create differences among banks or even within banks over time.

- We recommend the agencies allow the full offset of EL by FMI that has been haircut to ensure it is sufficient. Banks will apply a haircut similar to that used to adjust collateral; the adjusted FMI will then offset up to the full amount of EL:

$$K = K_{NoFMI} - \text{Min}(EL, FMI^*)$$

$$FMI^* = \text{Haircut} \times FMI$$

- The size of the haircut should reflect the historical relationship of FMI and loss for the product. The agencies have expressed concern that FMI would be insufficient to offset loss at the 99.9% level of the loss distribution. We maintain that this is an empirical matter and the concern is not entirely warranted. LGD estimates already incorporate the effects of lost income from defaulted exposures. In addition, late fees and other mitigating revenue increase as credit conditions deteriorate. Our internal analysis of the relationship between margin income and credit losses for the card portfolio indicates a positive relationship (a 24% correlation). This analysis is included in Appendix 2. We would be happy to work with the agencies to further analyze the relationship between FMI and credit losses, as we believe a comprehensive regulatory capital framework must properly compare risk with the revenue a bank earns for bearing that risk.

Retail Exposures Formula (p 48)

36. The Agencies are seeking comment on the retail A-IRB capital formulas and the resulting capital requirements, including the specific issues mentioned. Are there particular retail product lines or retail activities for which the resulting A-IRB capital requirements would not be appropriate, either because of a misalignment with underlying risks or because of other potential consequences?

Expected Loss

- The primary flaw in the calibration is the inclusion of EL in the capital formula that we have already addressed. We would like to highlight that including EL not only distorts the absolute level of capital but also the relative levels of capital for assets of different credit quality.

Asset Correlations

- We participated in an RMA study investigating the differences between capital assignments under the regulatory approach and the economic capital models of RMA members. The RMA study found that the levels of correlation set in the proposed Accord and ANPR are generally higher than industry estimates. For example, the correlation assumed for mortgages is approximately 150% of the median of values used by industry participants. We suggest these correlation estimates be reviewed in light of industry evidence.

- We maintain that asset correlation is inappropriately linked to default probability. The risk-weighting function assumes that asset correlation and systematic risk levels decrease as default probability rises. The RMA study found that this inverse relationship is not supported. This link overstates the capital requirement for high-quality consumer assets. For example, the median correlation value used by the industry for high-quality secured consumer loans (i.e., PD of 1%) is approximately 4%. The correlation used in the risk-weighting function for these assets is 12.72%.

Maturity Effects

- We are concerned with the inconsistent application of the maturity adjustment across asset categories. We view the failure of the regulatory model to recognize maturity as a risk factor as a significant issue. We maintain that maturity adjustments should apply to both corporate and retail assets.
- A maturity factor would increase the risk sensitivity of the regulatory capital requirement for the retail category. It would also alleviate concerns regarding the treatment of home equity loans and lines of credit. Including them in the mortgage category, where maturities are substantially longer, penalizes these products. In order for the model to be equitable across banks with different product mixes, the retail capital model must include a maturity effect.

Floors on PDs and LGDs

- The default probability for significant portions of the mortgage market falls below the 3 bp floor. Imposing an artificial floor for these exposures will limit the risk sensitivity of the approach. The PD estimates must be validated and reviewed by supervisors, which should obviate the need for separate floors.
- The 10% floor on the LGD for mortgage portfolios is arbitrary and should be eliminated. For exposures with low LTVs and private mortgage insurance, this assumption is unreasonable. There should be no need for a separate floor, as the LGD history should include stressed periods and is subject to review by supervisors. If the data history does not contain sufficient observations during stressed periods, the supervisory review process allows regulators to provide feedback.

A-IRB Other Considerations: Loan Loss Reserves (p 49)

37. The Agencies recognize the existence of various issues in regard to the proposed treatment of ALLL amounts in excess of the 1.25 percent limit and are interested in views on these subjects, as well as related issues concerning the incorporation of expected losses in the A-IRB framework and the treatment of the ALLL generally. Specifically, the Agencies invite comment on the domestic competitive impact of the potential difference in the treatment of reserves described.

- We support the reduction of risk-weighted assets for ALLL in excess of the 1.25% limit.

However, we believe it more straightforward to allow 100% of the ALLL to be included as Tier 1 capital.

- The full amount of the ALLL is available to absorb credit losses; therefore the amount in excess of the limit should be counted either as a component of capital or as an offset to risk-weighted assets. Regulations should be neutral with respect to these two alternatives. The level of expected loss should not limit the reduction, as excess reserves are available to cover either expected or unexpected loss.
- The eligible offset is divided into two parts with different treatments. The amount of the primary adjustment is 12.5 times the difference between the expected loss and the 1.25% limit. Any remaining excess over the 1.25% limit is deducted from risk-weighted assets on a dollar-for-dollar basis. This two-step process is arbitrary, needlessly complicated and far too stringent. In practice, expected loss does not exceed the 1.25% limit, so the approach will yield the same result as the general risk-based capital rules. In other words, the impact on required capital will only be a fraction of the excess reserves.

38. The Agencies seek views on this issue, including whether the proposed US treatment has significant competitive implications. Feedback also is sought on whether there is an inconsistency in the treatment of general specific provisions (all of which may be used as an offset against the EL portion of the A-IRB capital requirement) in comparison to the treatment of the ALLL (for which only those amounts of general reserves exceeding the 1.25 percent limit may be used to offset the EL capital charge).

- The proposed treatment of portfolio-specific general reserves will reduce comparability between accounting jurisdictions. We understand that these reserves can be used to offset the expected loss component of capital; however, these rules will not apply under U.S. accounting standards. Banks in other jurisdictions, however, will reduce their capital requirements with these reserves.
- We maintain that the expected loss component of the capital charge should be eliminated entirely. If it remains, however, institutions should be treated on a level playing field. Restrictions on the individual mechanisms for offsetting the EL component should be relaxed.

A-IRB Other: Treatment of undrawn receivables purchase commitments (p 52)

39. The Agencies seek comment on the proposed methods for calculating credit risk capital charges for purchased exposures. Are the proposals reasonable and practicable?

- The Agencies should clarify whether the purchased receivables approach applies to all credit exposures purchased from third parties or to a more limited set of transactions of trade receivables.

- We appreciate the flexibility to apply top-down methods for purchased exposures. The Agencies should include guidance on the calculation methods to ensure comparability.
- The Accord applies dollar-for-dollar capital reduction for the purchase discount, which may yield a zero capital charge for assets where the discount is equal to or greater than the EL. The A-IRB formula is applied to the cost basis of the exposures using either bottom-up or top down estimates of the parameters. As a result, the dollar capital charge is reduced by the amount of the discount times the capital ratio.
- We believe this approach is too conservative and not sufficiently risk sensitive. A better approach would scale the LGD in relation to the discount. We recommend a floor of 25% on the scaling factor be set to assure non-zero capital assignments. The following formula would be applied:

$$LGD^* = LGD \times \text{Max}[(1 - \text{Discount} / EL), 0.25]$$

- If it applies to portfolio acquisitions, mergers, whole loan purchases, and secondary market transactions, the qualifying criteria for the top-down approach is too stringent. The conditions under which the top-down approach applies are limited to third-party transactions and tenors less than one year unless fully collateralized. The latter part of the criterion is too stringent and would exclude most retail assets.

40. *For committed revolving purchase facilities, is the assumption of a fixed 75 percent conversion factor for undrawn advances reasonable? Do banks have the ability (including relevant data) to develop their own estimate of EADs for such facilities? Should banks be permitted to employ their own estimated EADs, subject to supervisory approval?*

- There is no logical reason for separate treatment of committed revolving purchase facilities. The Pillar 2 validation and supervision processes should govern the process as they do under the rest of the framework. The supervisory parameter should only apply as an exception.

A-IRB Other: Capital Charge for Dilution Risk - Minimum Requirements (p 53-54)

41. *The Agencies seek comment on the proposed methods for calculating dilution risk capital requirements. Does this methodology produce capital charges for dilution risk that seem reasonable in light of available historical evidence? Is the corporate A-IRB capital formula appropriate for computing capital charges for dilution risk?*

- No specific comment

42. *In particular, is it reasonable to attribute the same asset correlations to dilution risk as are used*

in quantifying the credit risks of corporate exposures within the A-IRB framework? Are there alternative method(s) for determining capital charges for dilution risk that would be superior to that set forth above?

- No specific comment

43. The Agencies seek comment on the appropriate eligibility requirements for using the top-down method. Are the proposed eligibility requirements, including the \$1 million limit for any single obligor, reasonable and sufficient?

- No specific comment

44. The Agencies seek comment on the appropriate requirements for estimating expected dilution losses. Is the guidance set forth in the New Accord reasonable and sufficient?

- No specific comment

Credit Risk Mitigation Techniques (p 57)

45. The Agencies seek comments on the methods set forth above for determining EAD, as well as on the proposed backtesting regime and possible alternatives banking organizations might find more consistent with their internal risk management processes for these transactions. The Agencies also request comment on whether banking organizations should be permitted to use the standard supervisory haircuts or own estimates haircuts methodologies that are proposed in the New Accord.

- We believe the counterparty risk of repo-style transactions should be treated under a unified expected exposure method, which would apply to both OTC derivatives and securities financing transactions. We understand that the Committee has decided to review the treatment of future exposures for derivative transactions once the Accord is finalized but would appreciate clarification of the specific timetable for this review. As an intermediate step, we welcome the opportunity to apply a VAR methodology for repo-style transactions.
- We also strongly support the use of internal collateral haircuts. It is important however that the supervisors adopt a flexible approach rather than a prescriptive one in the requirements for collateral policies. Key areas of concern are the exclusion of non-investment grade corporate debt (vs. liquidity haircuts), separate assessment of currency mismatch at the transaction level, and a higher regulatory confidence level for setting the haircuts.
- ISDA's research on the VAR approach raises significant doubts about the level of the multipliers applicable when the measured VAR fails back testing requirements. We urge the agencies to consider ISDA's recommendations of lower multipliers.

- Enforceable netting agreements should not be a precondition for the application of VAR-based models. This would deprive banks from recognizing portfolio diversification effects. Even in the absence of netting, portfolio diversification mitigates risk.

Guarantees and credit derivatives (p 58)

46. Industry comment is sought on whether a more uniform method of adjusting PD or LGD estimates should be adopted for various types of guarantees to minimize inconsistencies in treatment across institutions and, if so, views on what methods would best reflect industry practices. In this regard, the Agencies would be particularly interested in information on how banking organizations are currently treating various forms of guarantees within their economic capital allocation systems and the methods used to adjust PD, LGD, EAD, and any combination thereof.

- Both PD and LGD are affected by the presence of a guarantee and therefore must be adjusted in the capital framework. Since the borrower and the guarantor must default together for there to be a loss, capital should be calculated using the joint default probability (JDP) of the two entities. The LGD should additionally reflect joint recovery if there is possibility of recovery from both the borrower and guarantor. When the borrower and guarantor are perfectly correlated, as would be the case for most affiliated entities, the JDP approach would be equivalent to substituting the PD of the guarantor for that of the borrower.
- Setting aside the joint default and recovery issues, we believe it is more appropriate to reflect the presence of a guarantee through adjustments to PD than LGD. The risk-mitigating value of the guarantee clearly depends on the credit quality of the guarantor and is directly reflected in the joint default probability. An LGD category for guaranteed transactions would not be sufficiently risk sensitive, as it would not depend on the credit quality of the guarantor.
- We recommend that the impact of CDS hedges be reflected in two parts. The hedge should be reflected as a short position with appropriate maturity, severity and correlation based on the characteristics of the hedge and reference entity. A capital offset would then be calculated for the hedge using the A-IRB formula. Because the calculation uses the specific maturity of the hedge, this approach provides a natural way to deal with maturity mismatches between the underlying asset and the hedge. The capital requirements only partially offset each other when the maturities do not match, the notional amounts differ, or the underlying reference asset has a different severity. This method also does not require specific links between the hedges and individual facilities.
- A separate exposure should reflect the counterparty risk on the hedge. The capital for the counterparty exposure would be determined using the joint default probability, joint severity and joint correlation to the portfolio. The joint default probability would be based on the default probability of the reference entity and the counterparty and a conservative estimate of the asset correlation between the two. The joint correlation of the exposure to the overall portfolio should be calculated using the industry, risk rating and size characteristics of the reference entity and the guarantor.

- We believe the mechanics of applying the A-IRB formula to the hedge offset and treating the counterparty exposure separately are much easier than the ANPR's PD substitution and maturity mismatch scaling approaches.
- A sample calculation using this approach is provided in Appendix 3a. We urge the Agencies to recognize the actual credit risk mitigation value of CDS hedges. The substitution approach in the ANPR is unduly conservative because it fails to recognize joint default and joint recovery. As shown in Appendix 3a, the substitution approach strongly biases the capital assignments for hedged transactions.
- Appendices 3b and 3c provide sensitivity analyses of the effects the PD of the guarantor and the remaining maturity of the hedge on a hypothetical 5-year asset. Appendix 3b uses the correlations from the A-IRB framework to derive the joint default probability. Appendix 3c provides the same results under the assumption that the entities are related. Thus, the joint default probability calculation yields the same values for JPD as the substitution approach. Note that Appendix 3b shows the combined impact of joint default, joint recovery and application of the A-IRB formula to calculate maturity mismatch. Appendix 3c on the other hand only includes the effects changing the maturity mismatch calculation.
- It is abundantly clear from Appendix 3b that the current ANPR treatment is flawed. The capital is overstated for a 5-year transaction hedged on a matched maturity basis by a factor of over 850%. The substitution approach also has obvious discontinuities when the remaining maturity of the hedge falls below 1 year and the guarantor risk rating falls below that of the borrower.
- From Appendix 3c, it is clear that the maturity mismatch calculation in the current ANPR treatment introduces its own bias. It also shows the capital requirements for a 5-year transaction. However, because the borrower and guarantor are related entities the joint default probability results in PD substitution. When the remaining maturity of the hedge is less than 5-years, the A-IRB formulas provide for a much lower capital assignment than the proportional adjustment calculation specific to credit mitigation. We see no logic to justify two separate treatments of maturity.

Additional requirements for recognized credit derivatives (p 60-61)

47. The Agencies invite comment on this issue, as well as consideration of an alternative approach whereby the notional amount of a credit derivative that does not include restructuring as a credit event would be discounted. Comment is sought on the appropriate level of discount and whether the level of discount should vary on the basis of for example, whether the underlying obligor has publicly outstanding rated debt or whether the underlying is an entity whose obligations have a relatively high likelihood of restructuring relative to default (for example, a sovereign or PSE). Another alternative that commenters may wish to discuss is elimination of the restructuring requirement for credit derivatives with a maturity that is considerably longer --for example, two years --than that of the

hedged obligation.

- Protection buyers are only exposed to restructuring risk when they have no control over the occurrence of restructuring events. We applaud the modification of earlier proposals to allow capital reduction for hedges that do not include restructuring as a credit event provided the bank has control over the decision to restructure.
- The Agencies are concerned that this modification will lead the restructuring of syndicated transactions to require unanimous consent of the creditors. We believe banks are capable of understanding the tradeoff between restructuring flexibility and the ability to recognize the risk-mitigating value of hedge transactions.
- We suggest the Agencies pursue the option of discounted recognition for CDS that exclude restructuring events. Even in the absence of control over restructuring, these hedges clearly offer some degree of protection. Moreover, partial recognition would alleviate the concern that the proposed rule will affect transaction structures.
- The discount should be a function of the relative incidence of restructuring events versus other forms of default and any differences between losses in default and losses in restructuring. ISDA has provided analysis suggesting a discount factor of approximately 35% for the capital relief provided by a CDS hedge that does not include restructuring events. This figure is a benchmark of the risk-mitigating value of these transactions. Banks should have the ability to account for restructuring risk by assessing their own experience and making adjustments to PD and LGD in the A-IRB formula
- The alternative, which eliminates the requirement to include restructuring events when the hedge maturity extends well beyond that of the transaction, is not economically justifiable from either a cost of compliance or risk management perspective. It would require banks to purchase unnecessary protection to achieve reductions in regulatory capital. More importantly, it would result in a net short position rather than a position neutral to credit risk.

48. Comment is sought on this matter, as well as on the possible alternative treatment of recognizing the hedge in these two cases for regulatory capital purposes but requiring that mark-to-market gains on the credit derivative that have been taken into income be deducted from Tier 1 capital.

- Ideally, the mark-to-market on both the underlying obligation and the hedge should both be recognized as income. However, accounting restrictions make this a practical impossibility for the banking book. We acknowledge the accounting asymmetry and would like to see a solution in U.S. GAAP rather than the regulatory framework.

Treatment of maturity mismatch (p 61)

49. The Agencies have concerns that the proposed formulation does not appropriately reflect

distinctions between bullet and amortizing underlying obligations. Comment is sought on the best way of making such a distinction, as well as more generally on alternative methods for dealing with the reduced credit risk coverage that results from a maturity mismatch.

- The treatment of maturity mismatches in the ANPR is unduly conservative and unnecessarily complex. There is little reason to implement two separate sets of maturity adjustments. The proportional adjustment mechanism is far more conservative than the treatment of maturity for corporate exposures.
- We believe the capital offset approach described in the general question on guarantees and credit derivatives provides a natural mechanism for maturity mismatches. The combined capital requirement reflects maturity mismatches using the A-IRB formula and the specific maturities of the underlying asset and the hedge. The A-IRB capital requirement reflects the effective maturity of each position and therefore takes into consideration the amortization schedule of the underlying asset and the bullet nature of most CDS. This approach treats cases where the maturity of the asset is longer than that of the hedge as forward credit exposures. A sample calculation is provided in Appendix 3a.
- We remain concerned by the prohibition of capital relief for hedges with a tenor of less than 1 year when the tenor of the hedged asset is longer, which eliminates the benefit in the final year of any hedge. These hedges remain valid risk-reducing instruments for which banks should be afforded capital relief. We acknowledge that the declining risk mitigation value of the hedges must be recognized as they approach maturity, but recommend that the risk associated with the shorter maturity simply be calculated using the corporate A-IRB risk weighting function. A sensitivity analysis of this effect is included in Appendix 3c.

Treatment of counterparty risk for credit derivative contracts (p 62)

50. The Agencies are seeking industry views on the PFE add-ons proposed above and their applicability. Comment is also sought on whether different add-ons should apply for different remaining maturity buckets for credit derivatives and, if so, views on the appropriate percentage amounts for the add-ons in each bucket.

- We reiterate our view that the approach for determining potential future exposure for counterparty risk is inconsistent with industry best practice. We are aware that the supervisors are willing to reassess the current approach of using simple add-ons to proxy for potential future exposure. Toward that end, we strongly encourage supervisors to consider ISDA's recent proposals on the topic.
- As an interim approach, the proposed PFE add-ons appear reasonable with only minor adjustments. ISDA's QIS 3 analysis indicated that the proposed 5% PFE add-on for investment grade underlyings was too high and recommended reducing the factor to 3%. For non-investment grade underlyings, the proposed 10% PFE appeared reasonable. We concur with this analysis.

- Based on ISDA's analysis, we do not believe that further delineation along maturity buckets is warranted. Priority should be placed on the use of expected exposure profiles rather than refinement of the add-on approach.

Equity Exposures: Positions covered (p 64)

51. The Agencies encourage comment on whether the definition of an equity exposure is sufficiently clear to allow banking organizations to make an appropriate determination as to the characterization of their assets.

- We find the definition of equity exposures sufficiently clear to differentiate these assets.

Equity Exposures: Materiality

52. Comment is sought on whether the materiality thresholds set forth above are appropriate.

- We support the Agencies' view that a materiality threshold for equity investments is appropriate. The materiality threshold of 10% of Tier 1 and Tier 2 capital appears appropriate. However, we disagree that a 100% risk weighting under the general rules should apply in these cases. We believe capital for institutions whose equity investments fall below the materiality threshold should be calculated using the minimum 300% risk weight for publicly-traded equity investments and the minimum 400% for all other equity investments.

Equity Exposures: Zero and low risk investments (p 65)

53. Comment is sought on whether other types of equity investments in PSEs should be exempted from the capital charge on equity exposures, and if so, the appropriate criteria for determining which PSEs would be exempted.

- The current exclusion of non-central government PSEs is sufficient. It is appropriate to exclude PSEs that are not publicly traded and are held as a condition of membership.

Equity Exposures: Nationally legislated programs (p 65-66)

54. The Agencies seek comment on what conditions might be appropriate for this partial exclusion from the A-IRB equity capital charge. Such conditions could include limitations on the size and types of businesses in which the banking organization invests, geographical limitations, or maximum limitations on the size of individual investments.

- It appears that equity investments in SBICs would be eligible for exclusion from the A-IRB capital charge for amounts up to 10% of Tier 1 and Tier 2 capital. The amount eligible for exclusion would be treated according to the general bank rules. The amount above the materiality threshold would require A-IRB treatment.
- The Agencies are contemplating a number of conditions for this partial exclusion, such as the sizes of businesses in which the SBIC invests, geographic diversification or the size of individual investments. We urge the Agencies to consider the cost-benefit tradeoff of formally tracking this level of detail for an immaterial exposure. We understand the desire to avoid open-ended exclusions. Therefore, we suggest that the Agencies review the specifics of the excluded investments under the Pillar 2 validation process rather than through formal Pillar 1 rules.

55. The Agencies seek comment on whether any conditions relating to the exclusion of CEDE investments from the A-IRB equity capital charge would be appropriate. These conditions could serve to limit the exclusion to investments in CEDEs that meet specific public welfare goals or to limit the amount of CEDE investments that would qualify for the exclusion from the A-IRB equity capital charge. The Agencies also seek comment on whether any other classes of legislated program equity exposures should be excluded from the A-IRB equity capital charge.

- We agree with the exclusion of CDC/CEDE investments from the A-IRB capital charge. We do not believe there should be a limit on the amount exempt from the capital charge. We agree with the ANPR on the importance of these investments in encouraging important public welfare goals.
- However, by including holdings subject to exclusions in determining materiality for the overall equity investment exposure category, the regulations would discourage banks from making legislated program investments, contrary to the statutes and regulations designed to promote such investments. Furthermore, it seems illogical and inefficient to require this step if such investments are ultimately to be excluded from the A-IRB capital charge.
- In addition, the current definition of CDC/CEDE investments should be clarified. It should encompass all investments made by national banks under the authority of Part 24, investments by other banks under comparable authority and any investments eligible for consideration under the Community Reinvestment Act of 1977 (CRA). Part 24 incorporates government oversight and restrictions on the types and amounts of investments as required for legislated programs. In addition, as appropriate levels of CRA investment are necessary to comply with the CRA, any investment eligible for positive consideration on examination should be included in the definition.

Equity Exposures: Description of quantitative principles (p 68)

56. Comment is specifically sought on whether the measure of an equity exposure under AFS accounting continues to be appropriate or whether a different rule for the inclusion of revaluation gains should be proposed.

- Management intent determines the treatment of gains and losses on securities which, excluding held-to-maturity debt securities, can be classified either as trading or available-for-sale (AFS). The entire change in the fair value of a trading security is accounted for in the income statement and effectively qualifies for Tier 1 capital. However, only 45% of the revaluation gains of the same security classified as AFS qualifies, and then only as Tier 2 capital. The capital treatment for these two accounting methods should not differ according to management's intent. The underlying risk, the carrying amount on the balance sheet and the realized or unrealized gain/loss in either case are the same. Accordingly, we believe that 100% of the net unrealized gains/losses after tax for AFS securities should be recognized as Tier 1 capital.

Supervisory Assessment of A-IRB Framework: U.S. Supervisory Review (p 72)

57. The Agencies seek comment on the extent to which an appropriate balance has been struck between flexibility and comparability for the A-IRB requirements. If this balance is not appropriate, what are the specific areas of imbalance, and what is the potential impact of the identified imbalance? Are there alternatives that would provide greater flexibility, while meeting the overall objective of producing accurate and consistent ratings?

- We commend the Agencies for adopting a principles-based approach in crafting the ANPR and DSG. As noted in our previous comment letters, we believe only a principles-based approach will be flexible enough to accommodate the continuing evolution of risk management and the development of new financial products.
- We remain concerned that the benefits of the principles-based approach may be negated by the prescriptive text following each supervisory standard in the DSG. This language contradicts the Agencies' stated intention of establishing a principles-based approach. We recommend that the language in the guidance be softened to ensure that the general principles remain the focal points.

58. The Agencies also seek comment on the supervisory standards contained in the draft guidance. Do the standards cover all of the key elements of an A-IRB framework? Are there specific practices that appear to meet the objectives of accurate and consistent ratings but that would be ruled out by the supervisory standards related to controls and oversight? Are there particular elements from the corporate guidance that should be modified or reconsidered as the Agencies draft guidance for other types of credit?

- We have actively participated in the RMA response to the Draft Supervisory Standards. The RMA response provides industry feedback on each of the supervisory standards. We

commend that response to the supervisors for consideration.

59. In addition, the Agencies seek comment on the extent to which these proposed requirements are consistent with the ongoing improvements banking organizations are making in credit-risk management processes.

- At a high level, the requirements and supervisory standards are consistent with ongoing or planned improvements in risk management processes. Despite the stated intentions of the Agencies, the tone of the detailed text within the Draft Supervisory Guidance remains too prescriptive. We continue to believe that decisions concerning the form, structure and prioritization of risk management processes and system enhancements should be left to individual banks.
- In several cases, the bank will be forced to maintain dual systems in order to comply with the ANPR and DSG because the detailed requirements are at odds with internal economic capital models. A few specific areas of concern include the definition of default, the treatment of credit risk hedges, stressed LGDs, LGD floors and limited recognition of maturity effects.

Securitization: Operational Criteria (p 74)

60. The Agencies seek comment on the proposed operational requirements for securitizations. Are the proposed criteria for risk transference and clean-up calls consistent with existing market practices?

- The operational requirements for risk transfer should be the same as those used for U.S. GAAP accounting purposes.
- Many clean-up calls are based on the size of issued exposures and would require unnecessary and costly amendments for the securitization to qualify for A-IRB treatment. A clean-up call is an administrative convenience used when the remaining size of a transaction no longer justifies the servicing costs. Banks should be permitted to exercise clean-up calls when the securitization exposures fall below 10% of either the original principal balance of exposures issued or the original pool balance of the underlying assets. When clean-up calls are appropriately exercised, it is irrelevant whether the threshold is denominated by remaining pool balances or the remaining securitization exposures.

Securitization: Maximum Capital requirement (p 76)

61. Comments are invited on the circumstances under which the retention of the treatment in the general risk-based capital rules for residual interests for banking organizations using the A-IRB approach to securitization would be appropriate.

- See comment below.

62. Should the Agencies require originators to hold dollar-for-dollar capital against all retained securitization exposures, even if this treatment would result in an aggregate amount of capital required of the originator that exceeded KIRB plus any applicable deductions? Please provide the underlying rationale.

- The capital charges must be neutral to securitization. Securitization does not create risk but rather redistributes the risk between the originator and investors, so the risk of the securitized assets cannot economically exceed the risk of the underlying assets. A bank may decide to retain a position in excess of the capital required for the underlying assets under the A-IRB approach simply to meet conservative rating agency criteria for investment grade ratings in the senior tranches.
- Such decisions are driven by the economic capital requirement of the retained position, which is capped by the capital for the underlying asset pool's balance sheet requirement. Since there is no additional economic cost to the firm, it is quite possible that a bank will retain a position in excess of KIRB to improve the marketability of the transaction.
- There is a conceptual flaw in the dollar-for-dollar capital assignment for retained exposure under the general rules which substitutes a capital requirement inferred from the interest the originator retains in a securitization. It is inappropriate to infer that a retained position corresponds to a market requirement: banks have a number of reasons for retaining securitization tranches. In any case, such substitution is inconsistent with the soundness standard of regulatory capital, as the market's required capital is not conceptually a minimum standard (i.e., 99.9%).

Securitization: Positions below KIRB (p 79)

63. The Agencies seek comment on the proposed treatment of securitization exposures held by originators. In particular, the Agencies seek comment on whether originating banking organizations should be permitted to calculate A-IRB capital charges for securitization exposures below the KIRB threshold based on an external or inferred rating, when available.

- We strongly support using the KIRB of the underlying pool of assets as a cap on required capital for retained positions. We further agree that true first loss positions should be supported dollar-for-dollar with capital. However, in some cases the retained position may have true credit protection, such as tranching below the KIRB threshold. Deduction from capital is unduly conservative in these cases.
- The capital requirements for originating and investing banks should be computed using the same approach. Under the current proposal, originating banks are required to deduct from capital all positions below KIRB regardless of rating. An investing bank that holds the same

position would calculate a lower capital requirement using the agency rating. Capital should be a function of a transaction's risk rather than its holder.

- Banks should be permitted to use external ratings to calculate capital both above and below the KIRB threshold. There is no reason to treat these ratings differently from those for positions above KIRB, nor is the risk of these retained positions different than that of other rated instruments.
- Allowing the use of external ratings would significantly ease the implementation burden of the securitization framework. It would be a significant operational burden to calculate KIRB for the underlying assets of conduit programs even under the top-down approach. Occasionally, an originating bank may also purchase its securities on the secondary market as part of its interest rate risk management program or to enhance liquidity. It would be unrealistic to require complete risk information for these securitizations when they had previously been sold in their entirety.

Securitization: Positions above KIRB (p 79)

64. The Agencies seek comment on whether deduction should be required for all non-rated positions above KIRB. What are the advantages and disadvantages of the SFA approach versus the deduction approach?

- The SFA approach, while elegant, is extremely complex and difficult to implement. In order to reduce the complexity of the overall securitization treatment, banks should be permitted to use internal ratings for unrated tranches when they are based on the same criteria as external ratings.
- The regulatory capital framework should not discriminate between the rating agency and similar internal rating processes. The rating agency methodology for primary asset classes and securitization structures is well established and publicly available. The Pillar 2 supervisory review process can easily determine whether a bank's internal rating system is consistent with rating agency criteria.
- Full deduction for unrated tranches above KIRB is unduly conservative. Whether they are externally rated or not, the risk of tranches above KIRB is considerably lower than the risk of a first loss position.

Securitization: Ratings Based Approach (RBA) (p 81)

65. The Agencies seek comment on the proposed treatment of securitization exposures under the RBA. For rated securitization exposures, is it appropriate to differentiate risk weights based on tranche thickness and pool granularity?

- We generally support differentiation of securitization exposures by granularity and thickness. However, we recommend the Agencies also consider the ASF recommendation for separate risk-weighting functions for each of the primary asset classes of securitization deals: (1) revolving credit cards, (2) other retail/non-revolving, (3) residential mortgages, (4) corporate exposures/commercial mortgages, and (5) collateralized debt obligations.
- We are concerned about the calibration of the RBA risk weights. The risk weights under the RBA appear too high. We understand they were primarily based on an analysis of CDO and corporate exposures, which require more capital than other asset types. Additionally, we understand that the underlying LGD assumption used to calibrate the risk weightings was very conservative and independent of the thickness of the rated tranche. We support the analysis of the ASF in their CP3 response and concur with their recommendation of an LGD in the range of 5%-10% for thick, highly granular tranches.
- The RBA approach could benefit from greater transparency. We strongly recommend that the calibration assumptions be published to allow further input from the industry.

66. For non-retail securitizations, will investors generally have sufficient information to calculate the effective number of underlying exposures (N)?

- Generally, sufficient information is available to calculate the effective number of exposures. However, the costs of measuring N on an ongoing basis outweigh the potential benefits from greater risk sensitivity. We recommend that the value of N be determined at the inception of the transaction.

67. What are views on the thresholds, based on N and Q, for determining when the different risk weights apply in the RBA?

- The thresholds for N and Q seem reasonable.

68. Are there concerns regarding the reliability of external ratings and their use in determining regulatory capital? How might the Agencies address any such potential concerns?

- The securitization market has equally embraced Standard & Poor's and Moody's as experts in rating securitization transactions. The requirement of external ratings by investors in securitization deals is prima facie evidence of their reliability.
- The Agencies should maintain a listing of rating agencies that meet their requirements if there are concerns that certain agencies do not have sufficient track records or are not of sufficiently high caliber.

69. Unlike the A-IRB framework for wholesale exposures, there is no maturity adjustment within the proposed RBA. Is this reasonable in light of the criteria to assign external ratings?

- The securitization framework is already too complex. While we do not argue with the principle of maturity adjustments, we urge the supervisors to be wary of creating additional complexity.

Securitization: Supervisory formula approach (SFA) (p 86)

70. The Agencies seek comment on the proposed SFA. How might it be simplified without sacrificing significant risk sensitivity? How useful are the alternative simplified computation methodologies for N and LGD?

- The SFA has great potential to provide the best method for assessment of regulatory capital requirements for originators who are in a position to compute KIRB. It is sensitive to the main risk drivers, such as granularity and tranche thickness. However, the excessive complexity and the inclusion of floors and various add-ons severely limit this potential.
- The QIS experience demonstrated that the formulas comprising the SFA are too complex and burdensome. The complexity of the approach will strain the resources of originating banks. It will also lead to greater uncertainties around the underlying capital requirements as banks struggle to apply the SFA rules to their positions.
- The proposed SFA formulas contain a number of add-ons that should be eliminated or modified to achieve a more practical version. These add-ons not only inflate the regulatory capital requirement but also add significant complexity to the implementation. The ASF presented a proposal for a simplified SFA in its response to CP3/WP2. We hope the Agencies will consider their proposal.
- More specifically, the ASF recommended elimination of the capital deduction within the SFA formula for positions below KIRB. The capital deduction results in an additional capital charge above the level required by a clean SFA approach where there is tranching below the KIRB level. It also significantly increases the complexity of the SFA formula. We understand that to compensate for the KIRB deduction requires the risk weight formula to be separated into regions, positions straddling KIRB to be separated and the addition of an extra variable to ensure continuity of marginal capital. If positions below KIRB were not artificially deducted, this would eliminate the need for the add-on. This change would significantly reduce the complexity of the formula.
- The 56 bp floor on the capital requirement for senior positions is unduly conservative. We understand the RBA risk weights for AAA positions determine the floor for the SFA. We recommend the Agencies reconsider the appropriate value for this floor based on the issues raised regarding the calibration of the RBA risk weights.

- The SFA also contains a factor (tau) to account for uncertainty in the prioritization structure of the securitization. This factor does not significantly affect the amount of capital for individual positions and therefore does not merit the attendant complexity. We recognize that the purpose of the factor is to assure non-zero capital assignments for positions in excess of KIRB. We suggest that the interests of transparency and minimizing operational burden would be better served by relegating this function to the overall floor.
- Conduits will not be able to meet the data standards to calculate bottom up measures of PD, LGD and EAD required for the KIRB calculation. The top down approach is available for retail portfolios. However, typically information sufficient only to compute EL. The rules require capital to be computed in this case assuming PD = EL and LGD = 100%. In practice, this produces results that are well in excess of the bottom up capital requirement for a given portfolio. We recommend that the Agencies agree on a standard set of values for LGD for each asset class to use in this situation.

Securitization: The look-through approach for eligible liquidity facilities (p 87)

71. The Agencies seek comment on the proposed treatment of eligible liquidity facilities, including the qualifying criteria for such facilities. Does the proposed Look-Through Approach -- to be available as a temporary measure -- satisfactorily address concerns that, in some cases, it may be impractical for providers of liquidity facilities to apply either the "bottom-up" or "top-down" approach for calculating KIRB? It would be helpful to understand the degree to which any potential obstacles are likely to persist.

- The criteria that distinguish between true liquidity facilities and credit enhancements are too stringent and do not correspond to current business practices. In particular, the requirements that the liquidity facility purchase assets at fair value, cancel when the credit enhancement is exhausted and ramps down if the pool falls below investment grade would disqualify most ABCP liquidity facilities. We believe the remaining criteria are adequate to identify true liquidity facilities.
- We believe that dollar-for-dollar capital deductions for facilities that fail this test are unduly conservative. The capital requirements for ineligible liquidity facilities (i.e., those deemed to be credit-enhancing based on the above criteria) should be calculated using the same approach as for other credit enhancements, using either the RBA or the SFA depending on whether a rating was available.
- For unrated liquidity positions, the ability to look through to the risk weights of the underlying assets is a welcome change. However, banks should be able to look through to the average rather than the worst risk weight. The worst risk weight does not represent the risks of the underlying pool. When a risk weight is available for the tranche, banks should be permitted to rely on that rating rather than the individual assets in the pool.

- Finally, we believe the ANPR does not appropriately recognize the risk-reducing benefits of dynamic asset quality tests and features that allow the conduit sponsor to actively manage the transaction to reduce the exposure to the liquidity bank. These features significantly reduce the risk of funding liquidity facilities. Therefore, we recommend that the Agencies consider a lower credit conversion factor for eligible liquidity facilities.

72. Feedback also is sought on whether liquidity providers should be permitted to calculate A-IRB capital charges based on their internal risk ratings for such facilities in combination with the appropriate RBA risk weight. What are the advantages and disadvantages of such an approach, and how might the Agencies address concerns that the supervisory validation of such internal ratings would be difficult and burdensome? Under such an approach, would the lack of any maturity adjustment with the RBA be problematic for assigning reasonable risk weights to liquidity facilities backed by relatively short-term receivables, such as trade credit?

- As mentioned above, we believe the use of internal ratings would alleviate concerns regarding the complexity of the SFA. The rating process for liquidity providers generally follows rating agency criteria. Therefore, internal ratings should receive the same treatment as agency ratings.
- It is easy to verify that a bank's rating system is consistent with rating methodology by comparing the bank's system to the methodology publications of the rating agencies. Internal ratings could also be tested by applying their criteria to publicly rated liquidity facilities and comparing the results. Consistency between the internal and public ratings of a transaction will support the validity of the system.

Securitization: Other Considerations - Capital treatment absent an A-IRB Approach - the Alternative RBA (p 87)

73. Should the A-IRB capital treatment for securitization exposures that do not have a specific A-IRB treatment be the same for investors and originators? If so, which treatment should be applied — that used for investors (the RBA) or originators (the Alternative RBA)? The rationale for the response would be helpful.

- No specific comments.

Securitization: Determination of CCFs for non-controlled early amortization structures (p 90)

74. The Agencies seek comment on the proposed treatment of securitization of revolving credit facilities containing early amortization mechanisms. Does the proposal satisfactorily address the potential risks such transactions pose to originators?

- Under the current proposal, the trigger point for calibration of step functions for all revolving assets is 450 basis points. While this level may be appropriate for revolving credit card receivable transactions, it is not appropriate for all revolving transactions.

75. Comments are invited on the interplay between the A-IRB capital charge for securitization structures containing early amortization features and that for undrawn lines that have not been securitized. Are there common elements that the Agencies should consider? Specific examples would be helpful.

- No specific comments.

76. Are proposed differences in CCFs for controlled and non-controlled amortization mechanisms appropriate? Are there other factors that the Agencies should consider?

- No specific comments.

Securitization: Servicer Cash Advances (p 91)

77. When providing servicer cash advances, are banking organizations obligated to advance funds up to a specified recoverable amount? If so, does the practice differ by asset type? Please provide a rationale for the response given.

- No specific comments.

AMA Framework for Operational Risk (p 92)

78. The Agencies are proposing the AMA to address operational risk for regulatory capital purposes. The Agencies are interested, however, in possible alternatives. Are there alternative concepts or approaches that might be equally or more effective in addressing operational risk? If so, please provide some discussion on possible alternatives.

- In general, the AMA has all the desirable characteristics of a risk measurement framework without being overly prescriptive. It allows banks to use their internal operational risk measurement systems to calculate the regulatory capital requirement, thereby providing desired flexibility. However, all banks are required to use a combination of internal loss data, relevant external loss data, internal control factors and scenarios. We believe that a principles-based proposal should not require a bank to use all of these elements but rather allow it to determine which of them are necessary.

AMA Capital Calculation (p 92)

79. Does the broad structure that the Agencies have outlined incorporate all the key elements that should be factored into the operational risk framework for regulatory capital? If not, what other issues should be addressed? Are any elements included not directly relevant for operational risk measurement or management? The Agencies have not included indirect losses (for example, opportunity costs) in the definition of operational risk against which institutions would have to hold capital; because such losses can be substantial, should they be included in the definition of operational risk?

- The guidance covers the major elements of an operational risk framework, outlining principles that are well thought out and agree with our risk management policies. The most critical objective of the operational risk capital framework is risk sensitivity, and the key elements for achieving this are effectively identified in the proposal. However, as noted above, we believe that the framework should focus on principles and favor language such as “should consider” as opposed to “must have.”
- We agree that opportunity costs resulting from operational failure can be significant and ideally should be included in the risk measure. However, the difficulty of defining and accurately measuring these and other indirect costs will inevitably lead to inconsistent application. For example, the time lag between an operational loss event and realization of the full opportunity cost can be substantial. The subjective assessment of the event’s duration could introduce large measurement errors.

AMA: Overview of Supervisory Criteria (p 93)

80. The Agencies seek comment on the extent to which an appropriate balance has been struck between flexibility and comparability for the operational risk requirement. If this balance is not appropriate, what are the specific areas of imbalance and what is the potential impact of the identified imbalance?

- The Agencies have provided an excellent starting point for achieving a balance between flexibility and comparability. However, it is difficult to assess whether the appropriate balance has yet been found. The flexibility of the proposal, which we applaud, requires that the comparability principle be addressed through a consistent supervisory assessment of each institution’s risk management infrastructure. To this end, the supervisory standards provide a good basis for ensuring that comparability is achieved.
- Ultimately, comparability will depend on the ability of the Agencies to work together to ensure consistent application of the supervisory standards.

81. The Agencies are considering additional measures to facilitate consistency in both the supervisory assessment of AMA frameworks and the enforcement of AMA standards across institutions. Specifically, the Agencies are considering enhancements to existing interagency operational and managerial standards to directly address operational risk and to articulate supervisory expectations

for AMA frameworks. The Agencies seek comment on the need for and effectiveness of these additional measures.

- We strongly encourage any efforts aimed at ensuring interagency consistency. The welcome and reasonable flexibility of the framework naturally gives rise to concerns regarding consistent interpretation across Agencies. Although we have no specific recommendation on how this should be addressed, we believe consistency should focus on the overall capital requirement rather than the specific method of calculation. We encourage the Agencies to make enhancements consistent with the principles of the proposal without making the framework more prescriptive.

82. The Agencies also seek comment on the supervisory standards. Do the standards cover the key elements of an operational risk framework?

- All the major elements of an operational risk framework are covered in the AMA. However, consistent with the principles-based approach, we encourage the Agencies to explicitly allow for the evolution of new methods, especially in the area of risk mitigation.

AMA: Corporate Governance (p 95)

83. The Agencies are introducing the concept of an operational risk management function, while emphasizing the importance of the roles played by the board, management, lines of business, and audit. Are the responsibilities delineated for each of these functions sufficiently clear and would they result in a satisfactory process for managing the operational risk framework?

- We are encouraged by the Agencies' recognition of the Board of Directors' need to delegate to management the responsibility for implementing the operational risk framework. However, we believe that the Board's responsibility should be limited to reviewing, questioning and approving operational risk management policy. Any other elements of the oversight role should be the responsibility of management.

Elements of an AMA Framework (p 97)

84. The Agencies seek comment on the reasonableness of the criteria for recognition of risk mitigants in reducing an institution's operational risk exposure. In particular, do the criteria allow for recognition of common insurance policies? If not, what criteria are most binding against current insurance products? Other than insurance, are there additional risk mitigation products that should be considered for operational risk?

- The risk mitigation of insurance is arbitrarily limited to 20% of the AMA capital requirement. The full contract amount should instead apply, subject to supervision. Additionally, the proposal makes no mention of allowing for other types of mitigation, which may stifle

development of alternative products that would allow banks to transfer operational risk more effectively (e.g., through outsourcing or access to the capital markets).

- Insurer soundness should be evaluated on a continuous scale (e.g., by using KMV EDFs or converting an S&P rating to a default probability). It is unreasonable to assume that a policy does not mitigate risk if the insurer has an S&P claims paying rating of A- or lower.
- The ANPR does not explain how institutions must discount the mitigation benefit of a policy with a remaining life less than one year. There are strong incentives for banks carrying claims-made insurance policies to continue doing so, and these can only be understood on a bank-by-bank basis. These incentives should be understood before applying haircuts to the insurance mitigation benefit.

Disclosure Requirements (p 102)

85. The Agencies seek comment on the feasibility of such an approach to the disclosure of pertinent information and also whether commenters have any other suggestions regarding how best to present the required disclosures.

- We support the Agencies' position on the importance of market discipline and believe that disclosure will play an important role in the effective implementation of the ANPR. However, the current level of proposed disclosure is excessive and counterproductive to the Committee's objectives and will only be of use to the most sophisticated user.
- Unfortunately, the risk of misinterpretation of the required disclosures still far outweighs any benefit of the additional information. Detailed disclosure of technical model parameters, such as PD and LGD information, to the public is a clear exposure to misinterpretation. Actual quarterly default rates, with normal deviations from the mean, will always differ from estimates based on long-term averages. Without a fairly strong background in statistics, the public is likely to perceive negative trends which could exacerbate banking crises.

86. Comments are requested on whether the Agencies' description of the required formal disclosure policy is adequate, or whether additional guidance would be useful.

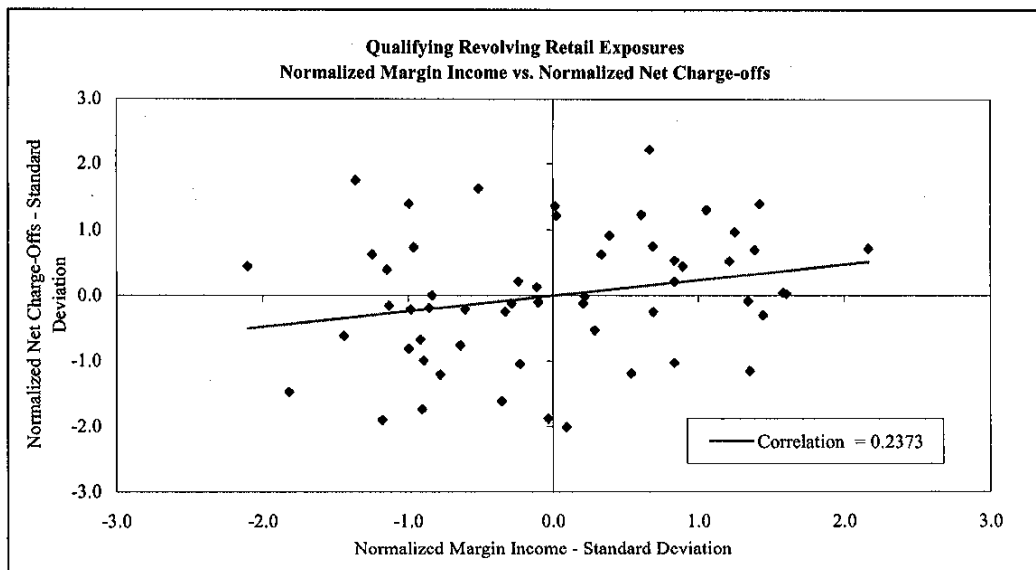
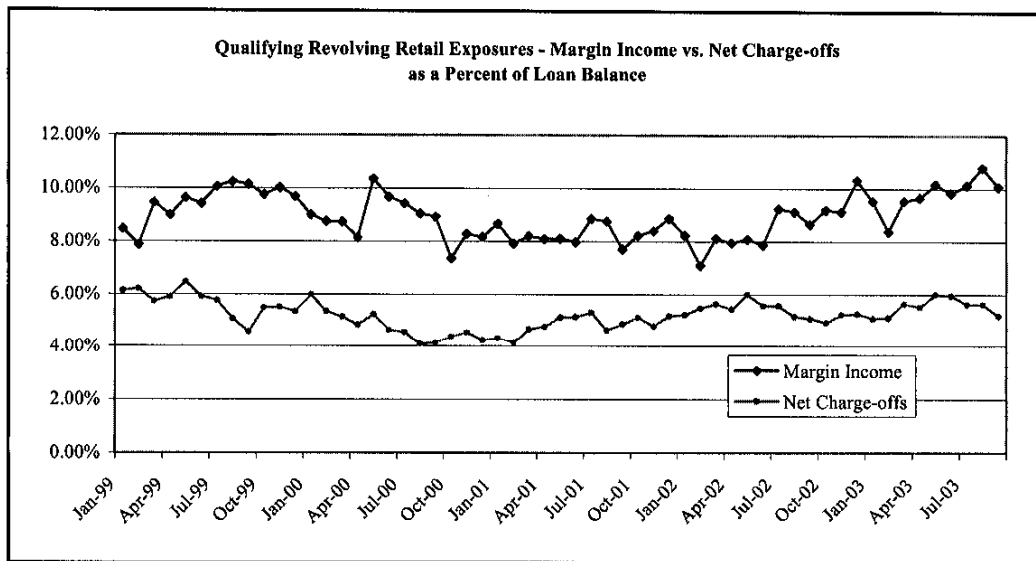
- A principles based approach is preferred which leaves some latitude of judgment to each institution in determining their own business policies. Additional guidance on disclosure policy is not desirable.

87. Comments are requested regarding whether any of the information sought by the Agencies to be disclosed raises any particular concerns regarding the disclosure of proprietary or confidential information. If a commenter believes certain of the required information would be proprietary or confidential, the Agencies seek comment on why that is so and alternatives that would meet the objectives of the required disclosure. The Agencies also seek comment regarding the most efficient

means for institutions to meet the disclosure requirements. Specifically, the Agencies are interested in comments about the feasibility of requiring institutions to provide all requested information in one location and also whether commenters have other suggestions on how to ensure that the requested information is readily available to market participants.

- The level of disclosure will certainly provide competitors with information that has previously been confidential. It may be possible for competitors to use the information to target particular segments that are disclosed on a disaggregated basis or to reverse engineer a banks pricing model or economic capital parameters.
- We believe it should be left to management to determine the means and breadth of disclosure. We do not believe the agencies should prescribe the method of communication of the information.

Appendix 2
FMI for Qualifying Revolving Retail Exposures



Notes

- 1) Margin Income is defined as net income before taxes, excluding provision expense, loan loss workout expenses, and funds transfer pricing on the loan loss reserve and economic capital.
- 2) Net Charge-offs include loan loss workout expenses.

Appendix 3a
 Alternative Treatment for Credit Hedges

ANPR Substitution Approach

Hedged Asset	Exposure at Default		PD	Guarantor	PD	LGD	Asset Maturity	Hedge Maturity	K Multiplier	Maturity Capital	Base Capital with Mitigation	Maturity Mismatch	Capital After Maturity Mismatch
	Borrower	Exposure											
	100	1.000%	0.100%	0.100%	45%	5	3	3	3.9%	2.52	10.27%	60.0%	6.43%

Recommended Hedge Offset Approach using JPD/JLGD

Position	Exposure at Default	PD	LGD	Asset Correlation	Asset K	Maturity Multiplier	Risk Weighting	A-IRB Capital
Underlying Asset	100	1.000%	45%	19.3%	10.27%	1.63	128%	10.27%
Hedge Offset	-100	1.000%	45%	19.3%	8.29%	1.31	104%	-8.29%
Counterparty Exposure	100	0.004%	20%	24.0%	0.23%	3.91	3%	0.23%
Total Capital								2.21%

Notes on Recommended Approach:

1. Capital requirements for underlying asset, hedge offset and counterparty exposure calculated using standard A-IRB formula.
2. Counterparty joint default probability (JDP) calculated using geometric average of A-IRB correlation formula for borrower and counterparty.
3. Joint LGD (JLGD) calculated assuming independence.
4. Hedge with remaining maturity less than 1-year recognized on discounted basis.

Appendix 3b
Recommended Capital Requirement for Credit Hedged 5-Year Exposures
(Borrower PD = 1%, LGD = 45%, Joint Default Probability, Joint Recovery, A-IRB Formula)

		ANPR Total Capital Requirements for Hedge Maturity of:							
		Unhedged							
Borrower PD	Guarantor PD	Substitution PD	Asset	1 Month	3 Months	6 Months	12 Months	3 Years	5 Years
1.00%	0.05%	0.05%	10.27%	10.27%	10.27%	10.27%	8.76%	5.75%	2.74%
1.00%	0.10%	0.10%	10.27%	10.27%	10.27%	10.27%	8.99%	6.43%	5.88%
1.00%	0.25%	0.25%	10.27%	10.27%	10.27%	10.27%	9.41%	7.70%	5.99%
1.00%	0.50%	0.50%	10.27%	10.27%	10.27%	10.27%	9.82%	8.92%	5.88%
1.00%	1.00%	1.00%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%
1.00%	2.00%	1.00%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%

		Recommended Total Capital Requirement for Hedge Maturity of:							
		Unhedged							
Borrower PD	Guarantor PD	Joint Default Probability	Asset	1 Month	3 Months	6 Months	12 Months	3 Years	5 Years
1.00%	0.05%	0.00%	10.27%	8.92%	7.39%	5.89%	3.99%	2.16%	0.32%
1.00%	0.10%	0.00%	10.27%	8.93%	7.40%	5.90%	4.01%	2.21%	0.40%
1.00%	0.25%	0.01%	10.27%	8.93%	7.42%	5.94%	4.07%	2.31%	0.56%
1.00%	0.50%	0.02%	10.27%	8.95%	7.45%	5.98%	4.14%	2.44%	0.74%
1.00%	1.00%	0.03%	10.27%	8.96%	7.49%	6.05%	4.25%	2.62%	0.90%
1.00%	2.00%	0.06%	10.27%	8.99%	7.55%	6.15%	4.42%	2.88%	1.34%

Appendix 3c
Capital Requirement for Credit Hedged Exposures with Maturity Mismatch
(Borrower PD = 1%, LGD = 45%, PD/LGD Substitution, Asset Maturity = 5 Yrs)

ANPR Total Capital Requirements for Hedge Maturity of:										
Borrower PD	Guarantor PD	Substitution PD	PD	Asset	Unhedged					5 Years
					1 Month	3 Months	6 Months	12 Months	3 Years	
1.00%	0.05%	0.05%	0.05%	10.27%	10.27%	10.27%	10.27%	8.76%	5.75%	7.74%
1.00%	0.10%	0.10%	0.10%	10.27%	10.27%	10.27%	10.27%	8.99%	6.43%	6.88%
1.00%	0.25%	0.25%	0.25%	10.27%	10.27%	10.27%	10.27%	9.41%	7.70%	5.99%
1.00%	0.50%	0.50%	0.50%	10.27%	10.27%	10.27%	10.27%	9.82%	8.92%	8.03%
1.00%	1.00%	1.00%	1.00%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%
1.00%	2.00%	1.00%	1.00%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%

Recommended Total Capital Requirement for Hedge Maturity of:										
Borrower PD	Guarantor PD	Substitution PD	PD	Asset	Unhedged					5 Years
					1 Month	3 Months	6 Months	12 Months	3 Years	
1.00%	0.05%	0.05%	0.05%	10.27%	9.04%	7.69%	6.41%	4.87%	3.81%	2.72%
1.00%	0.10%	0.10%	0.10%	10.27%	9.19%	7.92%	6.79%	5.49%	4.68%	3.88%
1.00%	0.25%	0.25%	0.25%	10.27%	9.38%	8.47%	7.67%	6.84%	6.42%	5.90%
1.00%	0.50%	0.50%	0.50%	10.27%	9.72%	9.19%	8.75%	8.35%	8.19%	8.03%
1.00%	1.00%	1.00%	1.00%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%
1.00%	2.00%	1.00%	1.00%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%	10.27%

Note: Substitution approach yields same result as joint default probability with 100% asset correlation.

Appendix 4
Regulatory Capital Requirements for Short Term Corporate Exposures

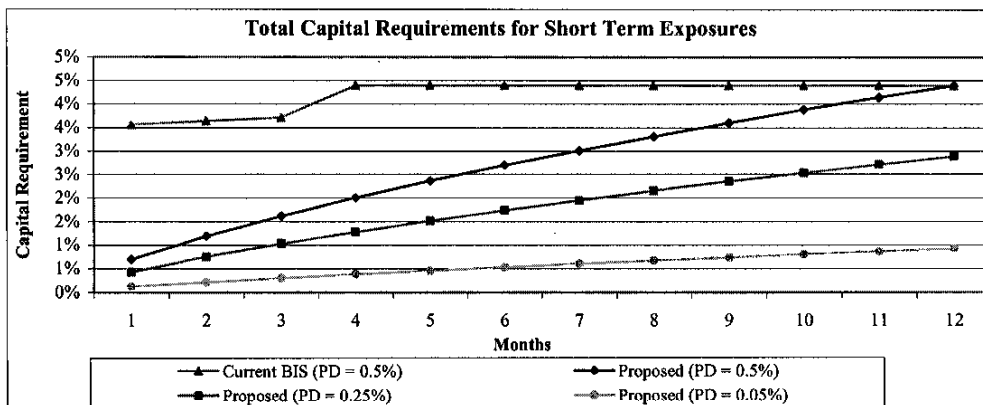
Total ANPR Capital Required for Assets with Maturity of:

PD (1 Yr)	1 Month	3 Months	6 Months	9 Months	12 Months
0.05%	0.50%	0.58%	0.92%	0.92%	0.92%
0.10%	1.00%	1.10%	1.54%	1.54%	1.54%
0.25%	2.17%	2.30%	2.89%	2.89%	2.89%
0.50%	3.57%	3.75%	4.40%	4.40%	4.40%
1.00%	5.41%	5.57%	6.31%	6.31%	6.31%
2.00%	7.65%	7.81%	8.56%	8.56%	8.56%
5.00%	11.91%	12.07%	12.80%	12.80%	12.80%
10.00%	17.67%	17.83%	18.56%	18.56%	18.56%
20.00%	26.01%	26.16%	26.84%	26.84%	26.84%

Total Recommended Capital Required for Assets with Maturity of:

PD (1 Yr)	1 Month	3 Months	6 Months	9 Months	12 Months
0.05%	0.12%	0.30%	0.53%	0.73%	0.92%
0.10%	0.21%	0.52%	0.91%	1.24%	1.54%
0.25%	0.43%	1.03%	1.74%	2.34%	2.89%
0.50%	0.70%	1.62%	2.70%	3.60%	4.40%
1.00%	1.05%	2.40%	3.93%	5.20%	6.31%
2.00%	1.48%	3.32%	5.40%	7.09%	8.56%
5.00%	2.30%	5.10%	8.19%	10.68%	12.80%
10.00%	3.58%	7.76%	12.21%	15.68%	18.56%
20.00%	5.84%	12.16%	18.50%	23.15%	26.84%

* PD adjusted by $PD = PD^{-1/4}$, LGD = 45%, Maturity Adjustment = 1 for M <= 12 Months



Appendix 5 Specification of Asset Correlation

