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VIA ELECTRONIC SUBMISSION

Office of the Comptroller of the Currency
250 E Street, SW
Mail Stop 1-5
Washington, DC 20219

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Board of Governors
Federal Reserve System
20th and Constitution Avenues, NW
Washington, DC 20551

FRB Docket Number: R-1265

Ladies and Gentlemen:

SAS Institute appreciates this opportunity to provide comment on aspects of the proposed rules relating to Risk Based Capital Standards. By way of background, SAS is the world's largest privately held software company, specializing in data integration and management, business intelligence, and analytics support. The company was formed in 1976. Today, SAS' revenues exceed $1.7 billion; we have a presence in 51 countries and an employee count topping 10,000. SAS' software serves a broad cross section of industries, including the financial services sector, to help meet a variety of analytical and technological needs, such as credit and risk management, regulatory compliance, and fraud detection. In fact, the financial services sector accounts for more than 35% of our annual revenues. We are one of the leading providers of Basel II compliance support, including technology and best practices consulting—with approximately 140 international clients relying on SAS for their credit and operational risk management. As such, SAS has direct, hands-on experience with current practices in almost all large banks throughout the world. In November 2006, Gartner awarded SAS the distinction of being named to its "leaders quadrant" in its "Magic Quadrant for Basel II Software Applications, 2006" report.

We offer the following comments in light of the expertise we have earned helping our customers develop processes, operations, and systems to comply with Basel II. Our comments touch three essential areas raised in the NPR: disclosure, capital floor/leverage ratios, and loss given default.

1. *Extent of Disclosure Regarding Capital Adequacy*

The concept of capital adequacy sits at the core of Basel II and is a critical element to disclose publicly. In order to provide additional transparency related to capital adequacy in both absolute terms and relative to the industry, we believe that banks should disclose

both regulatory capital and economic capital as well as the general methodologies used to compute these quantities.

From a regulatory perspective, the Accord was designed as a framework to assess capital adequacy in the banking system by enabling standardized comparisons of risk-based capital across banks.

However, by creating a standard framework for risk measurement, Basel II, by necessity, makes some simplifying assumptions. The complex math that quantitative risk analysts use to measure risk was simplified for the purposes of standardization. These simplifications are useful in creating a generalized framework but may omit some significant areas of risk that could potentially affect the bank's capital adequacy in certain scenarios.

Discussion of the technical issues of US Basel II NPR credit risk, and some of the underlying simplifications and consequences, can be found in this document:

Sanjiv Das, "Basel II Technical Issues: A Comment" (August, 2006)

Disclosure related to capital adequacy should exist at two levels – regulatory capital and economic capital. Both quantities provide important information for regulators, shareholders, bondholders, and ratings agencies.

In our opinion, banks should look to leverage their investment in the processes and technology used for Basel II to implement more robust economic capital capability as well. There is significant overlap in the data, processes, and technology required to compute both quantities. We would also encourage regulators to look at both quantities when assessing a bank's overall capital strength and the potential impact of an institution's failure on the banking system as a whole.

By disclosing both regulatory (Basel II) capital and economic capital, banks would provide a complete view of their risk profile which would provide additional transparency to regulators, shareholders, bondholders, and ratings agencies. Of course, banks need to be careful not to publicly disclose sensitive information, but we have not seen that any proprietary or competitive information would be compromised by disclosing aggregate figures and high-level methodological details.

2. *Commentary on Capital Floor/Leverage Ratio*

The methodologies in the Basel II Accord enable banks to estimate capital requirements based on their risk profile. If one assumes that the methods provided in the Accord are

meaningful and robust in measuring risk, then SAS would encourage the agencies to reconsider the implementation of a capital floor.

Under a Basel II regulatory framework, banks that manage their risk effectively should be rewarded with lower capital requirements. In fact, this is one of the main value propositions of Basel II from a business perspective. Without this benefit, it seems difficult to justify the cost and effort that will be needed to implement the Accord.

Instead, SAS would encourage the agencies to support a disclosure requirement for banks to report both regulatory and economic capital (as described earlier in this commentary). If this were the case, both regulators and the public should have sufficient information to evaluate the capital adequacy of each bank, and hence insure appropriate capital in the banking system as a whole, without resorting to mandatory floors.

Similar comments also apply to the Basel II NPR's 0.6% cap on applying excess expected loss reserves to reduce Tier 2 capital. In SAS' view, if the expected loss reserve exceeds the ECL, regulators should allow the entire excess to reduce Tier 2 capital. This would be more consistent with the Accord's vision of true risk-based capital. Mandatory caps should not be needed if banks have implemented effective procedures for computing loan loss reserves and risk-based capital.

In releasing the NPR, the regulators have requested specific data relating to capital floors and the leverage ratios. Although SAS has customer experience working with banking clients, we have engaged in an effort to collect our own empirical data on this front. However, much of the data requested would be similar to benchmarking data. We believe that to the extent data in this area exists, large, international consulting firms are more likely than others to be able to provide it.

3. *Calculation of Loss Given Default*

Loss given default (LGD) represents a critical parameter in calculating and monitoring credit risk exposures. Many banks, however, face significant obstacles to computing this parameter accurately. Ideally, calculation of LGD would consist of several steps that include linking collateral with each transaction (or facility) and dynamically valuing the collateral over time. In providing support to customers, SAS has found that most banks lack the data quality, business processes, and technology to do this across the enterprise. Currently, many banks simply compute a historical average LGD percentage for each portfolio segment or facility. This method has many shortcomings and ignores the dynamic nature of LGD over the economic cycle and the effects of volatility in the value of collateral. It also makes it difficult to accurately monitor the ongoing LTV ratio of each transaction. If downturn LGD is also desired, as specified in the NPR, LGD must be

modeled via quantitative techniques that consider macroeconomic conditions as well as transaction characteristics such as current LTV.

In the short term, implementation of robust LGD models may be hindered by problems with data availability and data quality. From our experience, LGD data in many banks has uneven quality. Although data may exist for some portfolios within an individual bank, many institutions have not collected this type of data with the same rigor as they have for other credit parameters such as probability of default. Typical data quality problems include missing observations, data that has been input via 'rules of thumb', or collateral information and workout costs that are difficult to link with individual transactions. Data issues related to collateral are particularly problematic. In addition, we have not seen many banks incorporate econometric modeling into their LGD estimates. To do so, banks will need to collect macroeconomic data related to the estimation of LGD. Based on our experience, this is not a common practice in most banks.

Because LGD is such an important parameter in computing credit risk exposure, SAS believes that accurate calculation of both average LGD and downturn LGD is a reasonable requirement. However, to perform these estimates at an accurate level, many banks will need to focus on improving their data collection processes around these calculations and develop internal models that relate macroeconomic data to LGD. Banks will likely need several years to implement these processes and collect a critical mass of data for this type of estimation.

Regarding the calculation of downturn LGD, the supervisory mapping function should be viewed as a necessary stop-gap measure given the issues described above. However, it should not be considered an effective long-term solution. Given the critical nature of LGD in computing credit exposure, SAS submits that banks should design effective data collection and modeling processes around this parameter.

Again, we appreciate the opportunity to provide comment to you and would be happy to provide any additional information that you or your counterparts may find useful.

Sincerely,

/s/ Jeff Hasmann

Jeff Hasmann
Credit Risk Management Solutions
SAS