JPMorganChase 🟢

Adam M. Gilbert
Managing Director

May 29, 2007

Office of the Comptroller of the Currency
250 E Street, SW.,
Attn: Public Information Room,
Mail Stop 1-5
Washington, DC 20219
Docket Number OCC-2007-0004
regs.comments@occ.treas.gov

Robert E. Feldman
Executive Secretary
Attn: Comments/Legal ESS
Federal Deposit Insurance Corporation
550 17th Street, NW.,
Washington, DC 20429
comments@FDIC.gov

Jennifer J. Johnson, Secretary
Board of Governors of the
Federal Reserve System
20th Street and Constitution Avenue, NW.,
Washington, DC 20551
Attention: Docket No. OP-1277
regs.comments@federalreserve.gov

Regulation Comments
Chief Counsel's Office
Office of Thrift Supervision
1700 G Street, NW.,
Washington, DC 20552
Attn: No. 2007-06
regs.comments@ots.treas.gov

Re: Proposed Supervisory Guidance for Internal Risk-Based Systems for Credit Risk, Advanced Measurement Approaches for Operational Risk, and the Supervisory Review Process (Pillar 2) related to Basel II Implementation

Introduction

JPMorgan Chase & Co. is pleased to provide comments on the Proposed Supervisory Guidance (Guidance) related to the implementation of a new risk-based capital framework in the United States known as Basel II, as published in the Federal Register on February 28, 2007.[1] As a large, internationally active banking organization, our firm is a "core bank"[2] that will be required under the proposed Basel II framework to implement the U.S. version of the advanced approaches[3] described in the new Basel II Capital Accord[4] (the Accord) rather than continue under the existing risk-based capital rules (Basel I[5]).

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[1] *Federal Register*, Vol. 72, No. 139, February 28, 2007: p. 9084.
[2] "Core bank" refers to any banking organization with either consolidated total assets of $250 billion or more or on-balance sheet foreign exposure of $10 billion or more that is required to adopt the proposed rule.
[3] "Advanced approaches" refer to the Advanced Internal Ratings Based (A-IRB) and Advanced Measurement Approach (AMA) for credit and operational risk, respectively.
[4] "International Convergence of Capital Measurements and Capital Standards, A Revised Framework." *Basel Committee on Banking Supervision*, June 2004, November 2005 and June 2006.
[5] "Basel I" regulations refer to the current risk-based capital regulations in the U.S., which represent the U.S. implementation of the original 1988 Basel Accord and subsequent modifications to date as published by the U.S. agencies.

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To avoid excessive repetition of comments previously made, we request the agencies incorporate by way of reference our March 26, 2007 letter in response to the Basel II NPR. Also in the Appendix to this letter, we indicate which portions of the Guidance refer to major issues previously addressed in our Basel II NPR response and include related excerpts from our NPR comments. We generally have not remarked on differences between the current and prior versions of the Guidance since earlier versions predate the NPR and are of limited relevance.

Our comment letter is structured as follows:
    I. Major Issues Addressed in Our NPR Response
    II. Summary of Additional Key Issues
         Appendix A: Detailed Comments on Specific Standards
         Appendix B: Excerpts from Our NPR Response

Our comments are formatted with reference to the draft standards including, where appropriate, the relevant explanatory text in italics. We have no comment on standards that are not referenced in this letter. Except for inclusion of prior Basel II NPR comments on counterparty credit risk, retail seasoning, and major issues identified in Section I, our comments are largely incremental to those made in the NPR response.

I. Major Issues Addressed in our NPR Response

JPMorgan Chase & Co. has fully and consistently supported the goals of Basel II capital adequacy reform: to create a more risk-sensitive capital framework and provide incentives for banking organizations to improve their risk management and measurement practices. We have a substantial investment program in place to implement the most advanced approaches to Basel II.

In our response[6] to the Basel II Notice of Proposed Rulemaking (NPR)[7] we noted with concern several specific requirements in the NPR that depart significantly from the international Basel II Accord. These departures imposed constraints and calculations that reduced the risk sensitivity of capital calculations, ran counter to the objective of improved risk management, unnecessarily added to costs and placed firms subject to this NPR at a competitive disadvantage. Several of the proposed supervisory standards further amplify and reinforce some of these key NPR proposals and heighten our concerns.

The specific supervisory standards of concern in this regard are as follows:

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[6] Our comment letter is available on the http://www.fdic.gov/ and other agency websites.
[7] *Federal Register*, Vol. 71, No. 185, September 25, 2006: p. 55830.

- <u>Wholesale Definition of Default</u> The proposed standards require use of the NPR definition of default for wholesale exposures, which is inconsistent with the definition in the Accord. In our NPR response, we opposed this change to the definition of default under which all obligations to a wholesale borrower must be considered in default if the sale or transfer of any exposure to the borrower resulted in a credit-related loss of 5% or more of initial carrying value. We requested that the agencies return to the language of the Accord, which requires recognition of default in the event of a material credit-related loss based on a bank's own judgment. We noted that imposition of a fixed percentage to determine materiality will create a greater risk of misclassification, substitute for a more fully fact-based determination of the obligor's likelihood to pay and impose additional regulatory burdens on those international firms operating in multiple jurisdictions because they will be required to maintain two definitions and two sets of capital calculations.

- <u>Downturn Loss Given Default (LGD)</u> The standards require the imposition of the supervisory mapping function for downturn LGD using the specific formula defined in the NPR. We opposed the application of this supervisory mapping function because it will systemically overestimate the impact of economic downturns on exposures with low to moderate LGDs. To the extent that banks can demonstrate sufficient conservatism in their estimation processes such that their estimate incorporates downturn conditions, the need to apply a markup via a supervisory formula to obtain a downturn LGD is obviated. The standards (consistent with the NPR) also impose supervisory LGDs in place of internal estimates for an entire exposure category where a bank can produce credible and reliable internal estimates for most but not all of the exposures[8], which we also opposed in our NPR response. We previously noted that maintaining multiple LGDs (expected, downturn and supervisory) is further problematic because this creates a gap to internal practice. The final rule can reflect the objective that LGD estimates are reasonable and appropriately conservative for a range of economic conditions without these additional requirements or standards.

- <u>Hedge Fund Treatment</u> The supervisory standards for securitization exposures make it clear that any exposure that can be considered to be "tranched" must be treated under securitization rules. While the treatment of hedge fund investments and investment funds with material liabilities is not clearly specified in either the NPR or the Guidance, there is a strong implication that hedge funds would be considered first loss tranches and be deducted from capital. We oppose this interpretation, which in our view creates an overly broad definition that could be similarly extended to other exposure categories. We

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[8] The NPR defines five broad credit exposure subcategories: residential mortgage, retail revolving, other retail, high volatility commercial real estate (HVCRE) and wholesale ex HVCRE.

reiterate that hedge fund exposures should be subject to the equity rules, except for exposures in the trading account which should remain subject to market risk rules.

II. Summary of Additional Key Issues

The specific standards raise a number of additional issues, as summarized below. A more detailed discussion of these and other issues is included in Appendix A.

In most cases the standards discussed here lack sufficient flexibility and would either impose additional implementation costs without a commensurate risk management benefit or create inappropriately stringent conditions as, for example, in instances cited below which limit the use of internal models, the role of the expert in expert judgment systems or the recognition of implied support.

Governance Standards

- Role of the Board of Directors Several of the standards suggest a very substantial level of board involvement in detailed oversight of credit and operational risk that is better placed with senior management and is inconsistent with a board's role in the oversight of other risks. The board of directors should have the discretion to delegate authority for the oversight of the implementation and ongoing assessment of the advanced Basel II systems for credit and operational risk to senior management.

Wholesale Credit Risk Standards

- Implied Support The supervisory standards contain numerous additional conditions for recognition of implied support that are not in the NPR or the Accord. We propose that these conditions should be excluded from this Guidance on the grounds that they are excessively prescriptive. While some of the specified conditions make practical credit sense, requiring that all of these conditions apply prior to recognizing implied support is inconsistent with market and internal practice.

- Expert-Judgment Systems While expert systems are recognized, flexibility is needed to permit the expert to decide how much weight to give to each rating criterion. It should also be clear that in an expert judgment system that there are no "overrides" per se in assessing the rating of a wholesale obligor because the application of judgment is the essential element of this system's design.

- Application of Wholesale Mapping Where raw historical probability of default (PD) data necessitates a smoothing and adjustment to the PDs, it is inconsistent for the standards to

require that the resulting risk weighted assets (RWA) be unaffected. Such a requirement to adjust PDs without changing RWA will in many cases negate a common sense adjustment process.

- Exposure at Default (EAD) Estimation Consistent with industry practice, EAD should only incorporate draws up to the default event, not post-default draws as the standards require.

- Use of Internal Models for All Similar Transactions With the frequent innovation in the derivatives marketplace and introduction of new products, banks will face significant operational challenges in calculating EAD for all transactions via internal models. As existing system limitations will always result in a number of transactions which cannot be handled by internal models, we recommend the flexibility to apply the Current Exposure Methodology to such transactions until they can be migrated to the internal models approach. The standard requires that all similar transactions use only the internal models approach and should be modified as indicated.

- Pre-collateral Calculations Not only do the standards require capital calculations on a pre-collateral basis, but the separately proposed reporting requirements would also require public disclosure of PDs without the effects of collateral. Running internal exposure models on a routine basis both with and without the effect of collateral agreements does not yield meaningful results and is not consistent with internal risk management processes. Our view is that a bank's internal model should have the capability to measure current and expected exposures gross and net of collateral, and this capability can be demonstrated to supervisors on an ad-hoc basis. On a routine basis, however, where banks can demonstrate legal confidence in collateral enforceability, banks should be required to estimate current and expected exposure only net of collateral.

- Historical Backtesting For internal models for counterparty credit risk, the standards require multiple backtesting exercises for several historical dates covering a wide range of market conditions (e.g., rising rates, falling rates, quiet markets, volatile markets). We have two concerns about historical backtesting: (1) its limitations as a validation tool with respect to historical stress periods; and (2) practical concerns that detailed requirements may result in unnecessary additional backtesting and create an operational burden without commensurate risk management or validation benefit.

We do not believe it is necessary or appropriate to do historical back-testing based on stressed market environments in the manner suggested. Given the large number of relevant market variables and complex dependencies of exposure on these variables, it is not practical to search out historical market periods that would stress a given portfolio of

trades. Testing a current portfolio against an historical stress period is unrealistic because the trades on the book now reflect recent market conditions. In addition, banks who are major derivative market makers typically actively hedge counterparty exposure against potential changes in the underlying markets which significantly mitigates the economic impact of stressed periods in the market.

If stress market environments must be addressed, banks should have sufficient latitude to propose solutions that address the limitations noted above rather than adhere to the specified historical data requirements.

- <u>Own Estimate of Alpha</u> For the expected positive exposure (EPE) methodology for counterparty credit risk, our internal models demonstrate that the 1.2 floor for internal alpha estimates required by the Guidance is unduly conservative. We do not understand the rationale for imposing such a high floor.

Retail Credit Risk Standards

- <u>Retail Seasoning</u> The requirement to estimate the annualized cumulative default rate (ACDR) for all segments to assess whether seasoning is material for each individual segment creates a burdensome estimation process that does not necessarily produce better PD estimates. We continue to recommend regulatory flexibility to permit alternative approaches, including a conservative adjustment to PD as suggested in the Accord.

- <u>Alternative Segmentations for Retail Portfolios</u> While banks should explore alternative segmentation schema in the development stage, the Guidance appears to require that banks invest in building and maintaining alternative segmentation schema on an ongoing basis for benchmarking purposes, creating an operational burden without significant risk management benefits. Alternative benchmarking procedures short of building multiple segmentations should be adequate based on the initial conceptual design and the statistical or risk management framework used in development.

- <u>Securitization Treatment of Tranched Guarantees of Multiple Retail Exposures</u> The Guidance emphasizes that any exposure involving the tranching of credit risk must be considered a securitization. We request banks should be permitted the option to ignore the benefit of tranched guarantees for multiple retail exposures and not apply synthetic securitization treatment if the result is more conservative. Not only would this avoid an operational burden, but we note that the ceiling for capital under the securitization approach is the capital calculation without the guarantee.

- <u>Retail Footprint</u> The Guidance appears to be inconsistent in its definition of geographic

footprint. We support flexibility to define footprint based on a bank's judgment of the appropriate combination of product and geography at a suitably disaggregated level.

- <u>Guarantees in Support of Retail Exposures</u> We wish to confirm that private student loan guarantees/insurance and insurance covering any other retail exposure would also be considered guarantees similar to mortgage insurance.

Other Credit Risk Issues

- <u>Stress Testing</u> We believe stress testing is a capital adequacy element under Pillar 2 of the Accord. The standards call for additional stress testing as part of Pillar 1 minimum capital requirements, although how the results would be applied under Pillar 1 is unstated. We oppose this additional requirement and recommend that it be dropped from the international Accord as well. We also note that the language in the Guidance is less clear than the Accord in describing the nature of the stress test.

- <u>"All or None" Use of the Internal Models Approach (IMA) for Equity</u> In cases where a bank can apply the IMA approach consistently to a substantial portion of its equity portfolios, then it should be permitted to do so even if it applies the SWRA to its remaining exposures.

- <u>Securitization</u> The Guidance requires that securitization treatment must always be applied for all exposures that may involve tranching of risk. In our view this is not always appropriate for exposures that more naturally fall into a different exposure category.

Operational Risk Standards

- <u>Summing Operational Risk Exposures if Dependence Estimates Cannot be Demonstrated</u> The proposal to sum the exposure estimates in the absence of required demonstrability has two fundamental drawbacks:
  (1) It is unsupported by any empirical analysis and will result in a punitive and unrealistic increase in capital in almost any circumstance; and
  (2) It provides the strongest disincentive for institutions to fully and appropriately investigate relevant units of measure. The potential for regulators to require the simple aggregation of capital across units of measure will drive banks to reduce units of measure to the lowest number possible consistent with the conditions laid out in the Guidance.

Moreover, the proposal to sum capital across measurement units is inconsistent with the Basel II Capital Accord. An alternative proposal to require the bank to be conservative in its dependence assumptions, instead of the extreme of aggregation, would be more reasonable and in line with other guidance standards.

The industry should be encouraged to continue model development in this area. Banks should be able to pursue a level of measure appropriate to their organization and circumstances, together with an approach to dependence that in combination will produce a realistic result reflective of the risk profile. The assessment of the appropriateness of dependence assumptions cannot simply rely on statistical / empirical demonstration alone, but must provide for banks' discretion in their assumptions and ultimately rest on the reasonability of the result.

- Isolating Components of Operational Risk Models It is not always feasible to meet the requirement to isolate the effect on exposure of each model component (internal operational loss event data, relevant external operational loss event data, scenario analysis, and assessments of the bank's business environment and internal control factors) of the quantitative model, and the results are not always relevant.

  It would be reasonable to expect that banks can adequately demonstrate the rationale for directly including or excluding each of the four elements in/from the calculation, without specifically requiring irrelevant calculations and/or the creation of benchmarks. Wherever the effects of a given element can be shown with relevance and without a benchmark, this could be required (e.g. an ex post facto adjustment of an initial exposure calculation to reflect Business Environment and Internal Control Factors).

- 20% Limit on Recognition of Operational Risk Mitigants Imposing an arbitrary ceiling on the recognition of Operational Risk mitigants will restrict not only the benefit to a single bank, but also the potential size of the risk transfer market, and consequently impede the development of sound risk mitigation tools.

- Operational Risk Offsets The eligibility for operational risk offsets for losses that are highly predictable and reasonably stable should be allowed in all circumstances that conform to the established criteria and not be limited to external credit card fraud and securities processing errors as the Guidance suggests.

Pillar 2 Capital Adequacy Standards

- Increase in Capital Commensurate with Increase in Risk A real or projected change in

the risk environment alone should not automatically trigger a requirement to increase the level of actual capital as suggested in the Guidance. If a bank has adequately anticipated future capital needs by correctly assessing a future increase in risk, then it may not be necessary to increase capital in a future period when the level of capital may already include an adequate capital buffer.

Concluding Remarks

We appreciate the opportunity to comment on the Supervisory Guidance and support the effort to provide a more risk sensitive capital framework for U.S. financial institutions. We would be pleased to discuss our comments in more detail. If you have any questions regarding the views expressed this letter, please contact me at (212) 270-8928.

Sincerely,

Adam M. Gilbert
Managing Director, Risk Management
JPMorgan Chase & Co.

cc.   Ned Pollock, OCC
       Barbara Yelcich, FRBNY

Adam M. Gilbert
Managing Director

Appendix A: Detailed Comments on Specific Standards

A. Governance of Advanced Systems (Ch. 1)

Role of the Board of Directors

S 1–3 The board of directors or its designated committee must at least annually evaluate the effectiveness of, and approve, the bank's advanced systems.

The board of directors or its designated committee should at least annually ensure that management has appropriate processes and controls in place that support effective advanced systems for credit risk.

The board should be provided with information that will enable it to conclude, with reasonable assurance, that management has appropriate processes and controls in place that support effective advanced systems for credit risk.

To allow for ongoing monitoring, the board should be provided with reports summarizing the design and performance of the advanced systems. The board's strategic direction and oversight is essential to effective advanced systems.

S 7–3 The annual assessment of the IRB system presented to the board of directors should be supported by the bank's comprehensive and independent reviews of the IRB system.

The board of directors should have the discretion to delegate authority for the oversight of the implementation and ongoing assessment of the advanced IRB systems to senior management. The draft standards above suggest a more substantial level of involvement in the Pillar 1 apparatus for credit risk that is better placed with senior management and inconsistent with its oversight of other risks. (Please see our analogous comment below on standards for Operational Risk).

S 1–4 Each bank (including each depository institution) must ensure that the risk parameters and reference data used to determine its risk-based capital requirements are representative of its own credit risk.

Where the risk parameters and data applied to a given exposure class of the bank are the same as those used for firm-wide computations, a review may suffice to determine that the firm-wide parameters are representative of the bank's credit risk. In such cases separate modelling and estimation processes for the exposure class of at the bank level should not be required.

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Managing Director

B. Wholesale Risk Rating Systems, Quantification and Validation (Ch. 2, 4, 7)

<u>Recognition of Implied Support</u>

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

Ch. 2 Par. 35. *Supervisors will assess the appropriateness of a bank's usage of implied support as a ratings criterion. A bank should recognize implied support only if the following are true:*
- *The support is from a parent corporation or sovereign;*
- *The implied support provider is rated investment grade by an NRSRO;*
- *The implied support is a factor only in assigning an obligor rating, not a loss severity rating;*
- *The final rating assigned to the obligor reflects greater credit risk than the rating assigned to the implied support provider (the parent corporation or sovereign);*
- *The bank has considered the magnitude of the rating benefit accorded from the recognition of implied support and the bank has performed and documented comprehensive due diligence to assess the parent corporation or sovereign's willingness and capacity to support the obligor;*
- *There is broad market recognition of the implied support. This can be evidenced through a number of market indicators including situations where the external ratings of the parent corporation and subsidiary are closely linked or the ratings of the parent or sovereign reflect an expectation of support. It could also include evidence derived from traded credit spreads of the parent and subsidiary;*
- *The bank has established a stand-alone rating for the obligor and continues to monitor the stand-alone rating throughout the term of the exposure;*
- *The bank's internal tracking processes monitor the dollar volume of [such]credit exposures;*
- *The provision of significant implied support to a subsidiary or subsidiaries is incorporated into the parent corporation's obligor rating.*

The conditions under which implied support may be recognized represent a new set of constraints than is neither outlined in the Accord nor in the NPR. We propose that they should be excluded from this Guidance on the grounds that they are excessively prescriptive.

While some of the specified conditions make practical credit sense, requiring that all of these conditions apply prior to recognizing implied support is inconsistent with market and internal practice in a number of respects:

As acknowledged in the NPR, *in determining an obligor rating, a bank should consider key obligor attributes, including both quantitative and qualitative factors that could affect the obligor's default risk.*[9] Here, as in all qualitative factors, it is expected that bankers will use their judgment in assessing the likelihood of support based both on capacity and willingness to provide such support. Constraining judgment in this manner negates the benefit of the application of qualitative judgment and the desire to have ratings reflect an internal approach.

The Guidance further requires as part of meeting the broad principles associated with wholesale risk rating systems that *banks must rank obligors by their likelihood of default* and that *obligors within a rating grade have similar default risk.*[10] A key validation test is an outcomes analysis, wherein estimated defaults for a given rating are compared to actual defaults. To the extent that ratings are forced to be misclassified due to constraints on supports, it is inevitable that noise will be introduced to prevent the validation of the rank ordering and accuracy assessment of any rating system.

Support should not be restricted to those instances where a support provider is rated investment grade by an NRSRO. For example, rating agencies have recently expanded their view of supports associated with banks' financial strength ratings and specifically allow for non-investment grade supporters.[11]

The observation that there is value in broad market recognition of the implied support is welcome. We note, however, that evidence from traded credit spreads of the parent and subsidiary need to be parsed into default and recovery components. Implied support does not necessarily need to be confined to an obligor rating as it may be incorporated into the LGD assessment. However, it may be difficult to separate these two components.

Rating Criteria

S2-15 Rating criteria should be written, clear, consistently applied, and include the specific qualitative and quantitative factors used in assigning ratings.

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[9] *Federal Register*, Vol. 71, No. 185, September 25, 2006: p. 55845.
[10] *Federal Register*, Vol. 72, No. 139, February 28, 2007: p. 9093.
[11] Standard and Poor's, "External Support Key in Rating Private Sector Banks Worldwide," Feb 27, 2007, www.standardandpoors.com/ratingsdirect.

Without clearly defined rating criteria, expert-judgment rating systems are not sufficiently transparent. A risk rating system with vague criteria or one defined only by PDs, ELGDs, or LGDs is neither replicable nor transparent.

The Guidance recognizes that the *key feature of expert-judgment systems is flexibility...the expert should decide how much weight to give to each of these criteria...*[12] The challenge in prescribing qualitative criteria in advance is that they are designed to signal to the expert the issues that should be examined for obligors relative to other obligors. It is usually when some attribute is relatively strong or weak or explains away some of the more quantitative financial characteristics that the qualitative factors come into play. While we agree that a set of qualitative factors can be specified in advance, their relative importance in the form of weights cannot be easily prescribed in advance. Thus the requirement for "criteria" for assessing qualitative factors is better satisfied by examining the documented rating rationale that would accompany the rating.

In addition, the bank should demonstrate that its credit review processes either at the industry level or other segment level are an important element of a system that ensures that the relative ranking of borrowers, derived through a combination of quantitative and qualitative factors, is consistent.

Assessment of LGDs is similarly characterized by a logical analysis of the benefits of alternative structures available to the bank upon obligor default. Differentiated facility structures should lead to differentiated LGD estimates through the application of qualitative judgment.

Definition of Default

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

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

The definition of default should allow flexibility to incorporate situations where default occurs on other lenders' debts but not on obligations to the bank. Over the last several years bankers have become adept at structuring facilities with security so that even when a borrower defaults and enters bankruptcy, the court applies an "adequate protection doctrine" and permits the bank to continue to collect interest during the pendency of the bankruptcy. Often, the terms of the facility dictate that the principal amount of debt is automatically accelerated upon bankruptcy. However, the bank will make an assessment that the exposure need not be placed on non-accrual as collection of interest and principal is relatively safe.

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[12] *Federal Register*, Vol. 72, No. 139, February 28, 2007: p. 9093.

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Managing Director

In assessing the obligor rating at the time distress is apparent, the bank will rate the likelihood that the company will default on any of its obligations and not just on its well-secured obligation to the bank. The bank will not confound the fact that the LGD is likely to be very low with the likelihood of default. As a result, when applying an outcomes analysis to the obligor rating, it will count the default in validating its assessments of ratings and PDs. Similarly, if as expected, there will be a complete recovery of principal and interest, the LGD assessment will, after taking into account any discounting, will also reflect the estimated values.

Application of Wholesale Mapping

Ch. 4 Par. 88 *After the bank applies the PD estimation method to its existing exposures using the mapping process, adjustments to the raw results derived from the estimation stage may be appropriate to obtain final rating grade PD estimates. For example, the bank might aggregate individual obligor default probabilities to the rating grade level or otherwise produce a rating grade PD estimate, or might smooth results because a rating grade's PD estimate was higher than a lower quality grade.*

Example

A bank uses external data to estimate long-run average PDs for each wholesale rating grade. The resulting PD estimate for Grade 2 is slightly higher than the estimate for Grade 3, even though Grade 2 is supposedly of higher credit quality. The bank uses statistics to demonstrate that this anomaly occurred because defaults are rare in the highest quality rating grades. The bank judgmentally adjusts the PD estimates for Grades 2 and 3 to preserve the expected relationship between obligor rating grade and PD, but demonstrates that total risk-weighted assets across both rating grades using the adjusted PD estimates are no less than total risk-weighted assets based on the unadjusted estimates, using a typical distribution of obligors across the two rating grades. An adjustment such as given in this example is consistent with this Guidance.[13]

The example addresses the issue that when a PD for Grade 2, a presumably higher quality rating, is slightly higher than for Grade 3 (a recognized anomaly) one can judgmentally adjust PD estimates so the logical relationship between grades and PDs is preserved. Yet, the example requires a demonstration that the total RWA across both rating grades using these adjusted PD estimates are no less than the total RWA based on unadjusted estimates using a typical distribution of obligors across the two rating grades. However, this solution effectively reinstates the incorrect relationship between PDs and ratings. To illustrate, assume that the grades, estimated and adjusted PDs, and typical portfolio composition is as follows:

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[13] *Federal Register*, Vol. 72, No. 139, February 28, 2007: p. 9107.

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Managing Director

Grade	Historical PD (bps)	Adjusted PD (bps)	Portfolio Composition
1	0.50	0.50	10
2	5.00	1.80	20
3	4.10	4.30	30
4	7.25	7.25	40

While the anomaly lies with a thin data set associated with Grade 2, it may be appropriate to adjust an adjoining grade's PDs. The requirement, however, to match the RWA of the original data set with that of the adjusted data set does not lie within any accepted statistical or credit relationship among the grades. The requirement to adjust the PDs so that the RWA comes out unchanged will in many cases negate a common sense adjustment process.

Estimating Parameters before the Impact of Guarantees

S 4–3 Banks must separately quantify wholesale risk parameter estimates before adjusting the estimates for the impact of eligible guarantees and eligible credit derivatives.
Ch. 4 Par. 17 Banks must perform the basic quantification of the risk parameters separately from the process of determining an adjustment to an exposure's risk rating assignment resulting from the credit protection or any adjustments to the risk parameters for recognition of the credit protection.

It is not always necessary to calculate the PD of the obligor(s) in cases where the bank's credit process is based on evaluation of the guarantor rather than assigning a rating to one or more individual obligors. A vendor leasing program is one example (in this case a multi-obligor situation) where PD estimation, documentation and reporting requirements for the obligor(s) adds unnecessary compliance costs with no additional risk management benefits.

Loss Given Default (LGD) Estimation

Ch. 4 Par. 103 Banks should evaluate adjustments in the ELGD and LGD estimation process to ensure that they do not result in an overall bias toward lower estimates of risk.

There appear to be inconsistencies in the Guidance where in some instances past history needs to be faithfully followed and in other instances the past may not be a good basis. In the discussion of collateral (Example 2), *although the available internal and external data indicate a higher ELGD, the bank judgmentally assigns a loss estimate of 2 percent for exposures secured by cash collateral. The bank contends that the lower estimate is justified because it expects to do a better job of following policies for monitoring cash collateral in the future. Such an adjustment is*

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Managing Director

generally not appropriate because it is based on projections of future performance rather than realized experience. This practice is generally not consistent with the Guidance.[14]

However, when it comes to estimation of LGD, the Guidance states, *Note that although estimates are empirically based, the purpose of quantification is not to measure past patterns and dependencies, but to generate predictions of likely future outcomes.*[15]

In assessing risk, bankers are trained to exercise their judgment as to whether past history either associated with risk management practices, financial indicators, qualitative issues, or portfolio composition is useful or not for assessing the current state and the future. Dictates that specify how judgment should be exercised interferes with the basic reliance on an internal system. Both bankers and supervisors share a common objective of developing accurate estimates. Qualification should rest on an analysis of whether the documented rationale and the supporting policy and operational changes result in sound judgments.

Exposure at Default (EAD) Estimation

Ch. 4 Par. 141 *To derive EAD estimates for lines of credit and loan commitments, characteristics of the reference data are related to additional drawings on an exposure up to and after the time a default event is triggered. Estimates of any additional extensions of credit expected by a bank <u>subsequent to realization of a default event</u> should be factored into the quantification of EAD.*

Consistent with industry practice, EAD should only incorporate draws up to the default event. Cash flows associated with subsequent draws should be factored into the LGD estimate. It is important that all the risk parameters be defined on a consistent basis relative to the time of default. For example, if a bank chooses to advance additional money to complete a real estate construction project, these cash flows should be considered as outflows in any recovery analysis and will be properly discounted along with any cash inflows.

Maturity

Ch. 4 Par. 154 *For exposures with pre-determined cash flow schedules...the calculation of the weighted-average remaining maturity is straightforward... Cash flows associated with other types of exposures may be less certain. In such cases the bank should establish a method of projecting expected cash flows. In general, the method used for any exposure should be the same as the one used by the bank for purposes of valuation or risk management.*

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[14] *Federal Register*, Vol. 72, No. 139, February 28, 2007: p. 9109.
[15] *Federal Register*, Vol. 72, No. 139, February 28, 2007: p. 9111.

We welcome the alignment of estimating maturity with internal bank practice. Such estimates are often applied to warehousing mortgage loans prior to securitization and the likely prepayment of certain other loans such as bridge loans and tax exempt municipal borrowings. The standard should explicitly state that such alignment with internal practice can apply to other areas not specifically addressed.

Judgmental Overrides

S 7-11 Banks must conduct ongoing process verification of the risk rating and segmentation system systems and the quantification process to ensure proper implementation and operation
Ch. 7 Par. 38 *"Judgmental overrides" occur when judgments are made to reject the decision of an objective process...overrides are an explicit component of such a rating system's design.*

It should be clear that in an expert judgment system that there are no "overrides" per se in assessing the rating of a wholesale obligor, since the application of judgment is the essential element of this system's design. Policy overrides will need to be justified.

Outcomes Analysis and Backtesting

S 7-13 Banks must analyze outcomes and develop statistical methods to back test their risk rating and segmentation systems and the quantification process

We agree with the cautionary comment in the Guidance that *for wholesale risk rating systems, banks face the challenge of how to measure the system's performance when back testing is not conclusive. Because of the rarity of defaults in most years and the bunching of defaults in a few years...In its early stages the validation...will depend on bank management's exercising informed judgment about the strength of the systems, not simply on empirical tests.*

C. Retail Segmentation, Quantification and Validation (Ch. 3, 4, 7)

Guarantees in Support of Retail Exposures

Ch. 4 Par. 18 *Insurance in support of retail exposures, for example private mortgage insurance (PMI), generally would be considered a guarantee.*

We wish to confirm that private student loan guarantees/insurance and insurance covering any other retail exposure would also be considered guarantees. Similarly, we seek confirmation that the Guidance regarding credit quality deterioration of a private mortgage insurer (Ch. 4, Par. 21) would also apply to other guarantors.

Tranched Guarantees of Multiple Retail Exposures

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

We request banks should be permitted the option to ignore the benefit of tranched guarantees via application of synthetic securitization if the result is more conservative. The standard appears to imply that the synthetic securitization rules must be applied without exception. This option would permit banks to adopt an operationally simpler and less costly approach. Not only would this avoid an operational burden, but we note that the ceiling for capital under the securitization approach is the capital calculation without the guarantee.

Best Available Data

S 4-7 Quantification should be based upon the best available data for the accurate estimation of the risk parameters.

We are concerned that supervisors may challenge reference data that does not include external data sets based on a view that such data constitutes "best available data". Even in the absence of complete internal data history, we believe this standard should not form the basis for a requirement to use external data.

Retail Seasoning

S 4-18 Effects of seasoning, when material, must be considered in the PD estimates for retail portfolios.
Par. 67 A bank should determine whether age since origination is a significant risk factor for its retail exposures on the balance sheet. If so, then seasoning may be a material risk factor.
Par. 68 Material seasoning effects are generally indicated when default rates of a segment of retail exposures follow a characteristic age profile, rising for the first several periods following origination.
Par. 69 Additional common indicators of material seasoning effects are large or rapidly growing portfolio concentrations of unseasoned exposures where age is a significant risk factor.
Par. 70 Even when age is a significant risk factor and default rates follow a characteristic age profile, seasoning effects may not be material if a retail exposure subcategory's age distribution is stable and the age distribution of the portfolio is not concentrated in unseasoned exposures.
Par. 71 The operational definition of material seasoning effects for a segment of retail exposures is that the annualized cumulative default rate (ACDR) for that segment materially exceeds the long-run average of one year default rates.
Par. 72 If seasoning effects are material for the retail exposure subcategory, banks must use a PD that reflects a longer-run horizon and provides adequate risk based capital to cover potential

credit losses for its unseasoned segments in that subcategory. Specifically, rather than the best estimate of the long-run average of 1-year default rates, the higher PD that must be used is defined as the estimated annualized cumulative default rate of the segment over the expected remaining life[16] of the exposures in the segment.

***Example 4 (Ch. 4 Appendix B): PD Quantification with Adjustments for Seasoning Estimation**—It is necessary to calculate two different PDs for each segment of the portfolio: (1) The long run average of one-year default rates from the historical reference data, in the same manner as for wholesale PDs, and (2) the estimated annualized cumulative default rate ("ACDR") over the remaining expected life of the loans in the segment. If the ACDR is larger than the long run average of one-year rates, then seasoning effects for this segment are deemed to be material, and the ACDR must be used as the estimated segment PD.*

Our understanding is that paragraphs 67-72 establish the following requirements:
- Seasoning must be material at both the subcategory and segment levels to require PD adjustment for that segment;
- Seasoning is not material for a segment if age is not a significant variable in a statistical model;
- If statistical models are not used, then age is a significant risk factor if default rates rise over the life of the exposure;
- Even if age is a significant risk factor, seasoning may not be material if the age distribution is stable and there are no concentrations of unseasoned exposures;
- If seasoning is deemed material for a subcategory, banks will be required to estimate the annualized cumulative default rate (ACDR) for all segments to assess whether seasoning is material for each individual segment.

We find this last requirement (ACDR calculations for every potentially affected segment) creates a burdensome estimation process that does not necessarily produce superior PD estimates compared to simpler methods. As Example 4 in Appendix B makes clear, the ACDR approach also requires a forward projection of future defaults for accounts that remain performing on the balance sheet. While past cohorts of accounts can be analyzed over time to estimate default patterns as a function of age, ultimately there is no guarantee that the behavior of unseasoned accounts will be any better predicted for new cohorts by using the ACDR approach.

While the precise methodology for estimating remaining life and calculating ACDR are left to the bank, the full application of this process would require an additional set of models to estimate a lifetime PD and determine average remaining life by product segment. In our response to the

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[16] Expected remaining life is the average period from today until an exposure of a particular type will prepay, pay in full through normal amortization, or default.

NPR, we indicated alternative approaches that can effectively address seasoning without creating the substantial operational burden of ACDR calculations.[17] We continue to recommend regulatory flexibility to permit alternative approaches that comply with basic principles, as well as a simple conservative adjustment to PD as suggested in the Accord.

<u>Retail Footprint</u>

Ch. 4 Par. 119 *To identify periods of downturn conditions, the bank should first articulate both product and geographic scope, since default rates for different types of exposures in different areas are themselves likely to differ.*
A bank may choose to use lower levels of aggregation in order to achieve better measurement of actual credit risk and greater risk sensitivity.

Par. 120 *The geographic scope for identification of economic downturn conditions is the geographic "footprint" of the bank within an exposure subcategory,[18] that is, the geographic area from which exposures of each type are drawn (or can be expected to be drawn customarily).*

Below the subcategory level, different products within a subcategory may be offered in different geographic regions ("footprints"). Paragraph 120 appears to define footprint as the entire geographic area for all products at the subcategory level, which is inconsistent with the expectation in paragraph 119 that default rates may differ based on the combination of product and geography below the subcategory level.

We believe a bank should define the geographic footprint for a portfolio at a level of aggregation it deems appropriate, based on a combination of product, geography and other relevant factors.

<u>Alternative Segmentations for Retail Portfolios</u>

S 7–12 *Banks must benchmark their risk rating and segmentation systems, and their risk parameter estimates.*

An example given for segmentation benchmarking is: *Periodically comparing the separation power of the IRB retail segmentation to alternative segmentations used in credit risk*

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[17] Please refer to our NPR comment letter pp. 27-29, portions of which are also included in Section IV of this letter.
[18] The NPR defines five exposure subcategories: high volatility commercial real estate, all other wholesale, residential mortgages, revolving retail, and all other retail.

management and comparing the risk parameter estimates derived from the IRB retail segmentation with an alternative segmentation.[19]

While banks should explore alternative segmentation schema in the development stage, the example above would appear to require that banks invest in building and maintaining alternative segmentation schema on an ongoing basis for benchmarking purposes. This creates an operational burden without significant risk management benefits. Alternative benchmarking procedures short of building multiple segmentations should be adequate, based on the initial conceptual design and the statistical or risk management framework used in development.

D. Stress Testing (Ch. 8)

S 8–1 Banks must conduct and document stress testing of their advanced systems as part of managing risk-based capital.
Banks should use a range of scenarios and methods when stress testing to manage risk-based capital.
Such scenarios may be less severe than those used for other purposes, such as testing a bank's solvency.

We believe stress testing is a Pillar 2 element. However, the stress test described in S 8-1 is included in the Guidance and the NPR as a Pillar 1 requirement. Yet there is no indication that the results of this additional stress testing are applied in any way to Pillar 1 requirements. We conclude that such additional stress testing is unnecessary because it will either be redundant with Pillar 2 stress tests or else it will fail to have an end use appropriate to risk management or bank capital management.

E. Counterparty Credit Risk Exposure (Ch. 9)

Use of Internal Models for All Similar Transactions

S 9-3 Banks must use the same method for determining risk-based capital requirements for all similar transactions.

With the frequent innovation in the derivatives marketplace and introduction of new products, banks will face significant operational challenges in calculating EAD for all transactions via internal models. As existing system limitations will always result in a number of transactions which cannot be handled by our internal models, our current approach is to develop two

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[19] *Federal Register*, Vol. 72, No. 139, February 28, 2007: p. 9130-31 (Par. 45).

controlled parallel processes – one for calculating online transactions and one for offline transactions. The Internal Models Method will be used to calculate EAD for the online trades and the Current Exposure Methodology will be used for the offline trades. Over time, we anticipate that the existing set of offline transactions calculated under CEM will be migrated to the Internal Models Method. This approach is similar to the current construction of the Market Risk rules for specific risk where banks use the standard approach for positions where specific risk cannot currently be modeled.

Pre-collateral Calculations

Ch. 9 Par. 51 *A bank must estimate expected exposure for OTC derivative contracts both with and without effects of collateral agreements*

As we have previously commented, running internal exposure models on a routine basis with and without the effect of collateral agreements does not yield meaningful results and is not consistent with our internal risk management processes. Our view is that a bank's internal model should have the capability to measure current and expected exposures gross and net of collateral, and this capability can be demonstrated to the supervisors on an ad-hoc basis. On a routine basis, however, where banks can demonstrate legal confidence in collateral enforceability, banks should be required to estimate current and expected exposure only net of collateral.[20]

Historical Backtesting

S 9-7 Historical backtesting on representative counterparty portfolios should be part of the model validation process. The representative portfolio should be held fixed over the backtesting interval. A bank should conduct such backtesting on a number of representative counterparty portfolios (actual or hypothetical) looking back an appropriate time period. These representative portfolios should be chosen based on their sensitivity to the material risk factors and correlations to which the firm is exposed. It would be appropriate to conduct such backtests once each quarter.

Starting at a particular historical date, the backtest would use the internal model to forecast each portfolio's probability distribution of exposure at various time horizons. Using historical data on movements in market risk factors, the backtest then computes the actual exposures that would have occurred on each portfolio at each time horizon assuming no change in the portfolio's composition. These realized exposures would then be compared with the model's forecast distribution at various time horizons. The above should be repeated for several historical dates covering a wide range of market conditions (e.g., rising rates, falling rates, quiet

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[20] See p. 51 of our response to the NPR.

markets, volatile markets). Significant differences between the realized exposures and the model's forecast distribution could indicate a problem with the model or the underlying data.

We have two concerns about historical backtesting: (1) its limitations as a validation tool with respect to historical stress periods; and (2) practical concerns that detailed requirements may result in unnecessary additional backtesting and create an operational burden without commensurate risk management or validation benefit.

From both a conceptual and practical point of view, we do not feel that it is necessary or appropriate to do historical back-testing based on stressed market environments for three reasons. First, given the large number of relevant market variables and complex dependencies of exposure on these variables, it is not practical to search out historical market periods that would stress a given portfolio of trades. Second, testing a current portfolio against an historical stress period is unrealistic because the trades on the book now reflect recent market conditions. Finally, banks who are major derivative market makers typically actively hedge counter-party exposure against potential changes in the underlying markets which significantly mitigates the economic impact of even stressed periods in the market. Please also see our response to the Market Risk NPR where we have previously commented on the limitations of backtesting as a validation tool.[21]

If stress market environments must be addressed, banks should have sufficient latitude to propose solutions that address the limitations noted above rather than adhere to the specified historical data requirements.

Own Estimate of Alpha

***Ch. 9 Par. 67** A bank with sufficiently sophisticated models that can perform the necessary credit and market risk simulations and that has supervisory approval to do its own estimate of alpha may use the greater of that estimated alpha or 1.2.*

As we have previously commented, our internal models demonstrate that the 1.2 floor for internal alpha estimates is very conservative. We do not understand the supervisors' rationale for imposing such a high floor.[22]

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[21] See pp. 12-13 of our Jan. 22, 2007 response to the Market Risk NPR on the http://www.fdic.gov/ and other agency websites.

[22] See p. 51 of our response to the NPR.

Adam M. Gilbert
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F. Equity and Securitization (Ch. 10, 11)

<u>Equity (Ch. 10)</u>

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

A bank may apply (i) the SRWA (Simple Risk Weight Approach) to private equity exposures and the IMA (Internal Model Approach) to public equities, or (ii) the IMA to all equity exposures, or (iii) the SRWA to all equity exposures.

Several Basel II NPR comment letters, including ours, have noted that there are disincentives for firms to adopt the IMA approach. The inability to use the IMA approach for a subset of portfolios is one of these disincentives. We suggest that in cases where a bank would prefer the IMA approach and can apply it consistently to a substantial portion of its equity portfolios, then it should be permitted to do so even if it applies the SWRA to its remaining exposures.

Also, the 100% risk weight for non-significant exposures (i.e. the amount of equity exposures less than 10% of regulatory capital) is permitted in the NPR only for exposures subject to the SWRA approach. This rule should apply to banks making full or partial use of the IMA approach as well. Otherwise there will be little incentive for banks to consider the IMA approach since capital required for their least risky portfolios would more than double.

<u>Securitization (Ch. 11)</u>

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

Because securitization treatment must be considered first for all exposures that may involve tranching of risk, we remain concerned that the securitization framework would be applied to exposures that in our view should be more appropriately treated under rules for a different exposure category. One case in point is the potential treatment of hedge funds which could be viewed as tranched due to the presence of material liabilities. We are further concerned that an overly broad interpretation of the definition of securitization in conjunction with the revised market risk rules could result in inappropriate capital deductions as also discussed in our comment letter on the Market Risk NPR.[23]

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[23] See p. 9 of our Jan. 22, 2007 response to the Market Risk NPR on the http://www.fdic.gov/ and other agency websites.

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Managing Director

G. Request for Clarification of Other Credit Issues

<u>Grading Updates</u>

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

We seek confirmation that exposures in *de minimus* portfolios may be exempted from annual updating.

H. Operational Risk

The following comments on operational risk standards are incremental to those made in the NPR response.

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

Sound internal controls, assessed annually for effectiveness by internal audit, should also reduce the possibility of significant human errors and irregularities in internal processes and systems, and should assist in their timely detection when they do occur. The audit function's annual assessment is not required to assess all operational risk controls, but the scope of the assessment should be sufficient to assess the effectiveness of the controls supporting the bank's AMA System.

S 32 The bank must validate, on an ongoing basis, its AMA system. The bank's validation process must be independent of the AMA System's development, implementation, and operation, or the validation process must be subject to an independent review of its adequacy and effectiveness.

The verification and validation functions should annually assess and report to the board of directors on the adequacy of the overall AMA System.

Throughout the year, the Internal Audit Department conducts reviews of the internal risk management controls of the firm, including the operational risk control framework. While not specific to the AMA System, the frequency and scope of audit coverage are determined from an on-going risk assessment process. This risk based approach is designed to ensure an appropriate mix of audit coverage focusing on the key risks and controls of each functional and business area.

Internal Audit submits periodic reports to the Audit Committee and our Registered Public Accounting Firm, PriceWaterhouseCoopers, on the program of audit coverage and the condition of the overall control environment. Reports relating to individual audits are addressed to the

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applicable senior officers who are required to respond and provide the corrective actions to be taken.

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

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

The board of directors should have the discretion to delegate authority for the oversight of the implementation and ongoing assessment of the AMA system to senior management. The draft standards S4 and S5 suggest a level of involvement in operational risk that is better placed with senior management and inconsistent with its oversight of other risks.

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

Banks should be able to demonstrate (see Standard 30) the effect of each element on the operational risk exposure estimate. In cases where this is not possible, or where an element is not used as a direct input into the quantitative model, the bank should calculate a benchmark estimate using that element individually.

Since the four elements[24] are used in combination to generate an estimate of exposure, the isolation of the impact of a single component is not always feasible or relevant. For instance, external data may be used in the model directly in order to generate a reasonable capital number and / or to bring stability to the exposure calculation. In this case, while it may be technically

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[24] The four elements of an AMA quantification system are: internal operational loss event data, relevant external operational loss event data, scenario analysis, and assessments of the bank's business environment and internal control factors.

possible to model without external data, the results would not be meaningful. Similarly, the requirement to calculate a benchmark from an element not directly input into the quantitative model may not be feasible or relevant. For instance, if the result of a scenario analysis process is a set of stress losses, or the use of "well-reasoned, external data" as allowed for in S 20, the results cannot be used as a benchmark without employing some type of model to generate an aggregate loss estimate.

It would be reasonable to expect that banks can adequately demonstrate the rationale for directly including or excluding each of the four elements in/from the calculation, without specifically requiring irrelevant calculations and/or the creation of benchmarks. Wherever the effects of a given element can be shown with relevance and without a benchmark, this could be required (e.g. an ex post facto adjustment of an initial exposure calculation to reflect Business Environment and Internal Control Factors (BEICFs)).

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

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

The eligibility for operational risk offsets should be allowed in all circumstances that conform to the established criteria and not limited to only the two examples identified.

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

Estimating dependence is an issue that has been widely discussed in the industry, with academics, and with regulators, without the emergence of any commonly accepted approach or guidelines. Industry practitioners continue to explore alternative approaches to modeling

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operational risk dependency. However given the available data, robust empirical tests that allow the differentiation between alternative approaches continues to be a challenge. The assessment of the appropriateness of dependency assumptions cannot simply and solely rely on empirical demonstration.

The proposal to sum the exposure estimates in the absence of required demonstrability has two fundamental drawbacks:

(i)   It is unsupported by any empirical analysis and will result in a punitive and unrealistic increase in capital in almost any circumstance; and

(ii)   It provides the strongest disincentive for institutions to fully and appropriately investigate relevant units of measure. The potential for regulators to require the simple aggregation of capital across units of measure will drive banks to reduce units of measure to the lowest number possible consistent with the conditions laid out in S 27.

Moreover, the proposal to sum capital across measurement units is inconsistent with the Basel II Capital Accord. An alternative proposal to require the bank to be conservative in its dependence assumptions, instead of the extreme of aggregation, would be more reasonable and in line with other guidance standards.

Similarly, the assertion that "dependence may not be constant over time and may increase during stress environments" cannot be demonstrated empirically. It can equally be argued in other circumstances that operational risk decreases in stress situations (e.g. in a recession, drops in business volume may result in fewer losses).

Again, the statement that "Banks should not restrict dependence structures to those based on normal distributions, as normality may underestimate the amount of dependence between tail events" is an assertion that is extremely difficult for a bank to test empirically.

In summary, the industry should be encouraged to continue model development in this area. Banks should be able to pursue a level of measure appropriate to their organization and circumstances, together with an approach to dependence that in combination will produce a realistic result reflective of the risk profile. The assessment of the appropriateness of dependence assumptions cannot simply rely on statistical / empirical demonstration alone, but must provide for banks' discretion in their assumptions and ultimately rest on the reasonability of the result.

S 29 The bank may adjust its operational risk exposure results by no more than

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20 percent to reflect the impact of operational risk mitigants. In order to recognize the effects of risk mitigants, management must estimate its operational risk exposure with and without their effects.

The 20% figure is an arbitrary ceiling. The banks, independently and in association, together with the brokers and insurance companies are engaged in developing more comprehensive solutions to risk transfer than those that exist today. The existence of a healthy risk transfer market will aid in the safety and soundness of banks. Imposing a ceiling will restrict not only the benefit to a single bank, but also the potential size of the risk transfer market, and consequently impede the development of sound risk mitigation tools.

I. Pillar 2

Par. 8 *On an ongoing basis, the supervisory assessment process determines whether a bank's overall capital remains adequate as underlying conditions change. Changes in a bank's risk profile or in relevant capital measures are areas of particular focus that are effectively addressed through the supervisory review process. Generally, material increases in risk that are not otherwise mitigated should be accompanied by commensurate increases in capital.*

Par. 30 *A bank's ICAAP should ensure adequate capital is held against all material risks not just at a point in time, but over time, in order to account for inevitable changes in a bank's strategic direction, evolving economic conditions, and volatility in the financial environment.*

If a bank has adequately anticipated future capital needs by correctly assessing a future increase in risk (ex ante) as required in Par. 30, then it may not be necessary to increase capital in that future period when that higher risk scenario becomes a reality (ex-post) as suggested in Par. 8. A literal interpretation of the Guidance would appear to require raising the same incremental capital twice to cover the same risk event. Furthermore, a real or projected change in the risk environment alone should not automatically trigger a requirement to increase the level of actual capital which may already include an adequate capital buffer.

Appendix B: Excerpts from Our NPR Response

We have previously commented in our response to the Basel II NPR on a number of issues that are also covered in the proposed supervisory standards. Below are the major issues previously addressed in our comment letter and a list of standards related to each issue.

TABLE

NPR Topic	Supervisory Guidance References
Wholesale Definition of Default	S 2-1, 4-2
5% Loss on Sale	S 2-1
Use of Internal Estimates of LGD for all Exposures within a Subcategory	Ch. 4 Par. 113
Supervisory Mapping Function	Ch. 4 Par. 114
ACDR Requirement for Retail Seasoning	S 4-18, Ch. 4 Appendix B Example 4
Broad Application of Securitization Treatment	S11-1

The following are selected excerpts from our comment letter on these issues with some introductory remarks.

Definition of default

S 2–1 Banks must identify obligor defaults in accordance with the IRB definition of default.
Par. 14 The consistent identification of defaults is fundamental to any IRB risk rating system.
For IRB purposes, a bank's wholesale obligor is in default if, for any wholesale exposure of the
bank to the obligor, the bank has:
• Placed the exposure on non-accrual status consistent with the Call Report Instructions or the
Thrift Financial Report ("TFR") and the TFR Instruction Manual;
• Taken a full or partial charge-off or write-down on the exposure due to the distressed financial
condition of the obligor; or
• Incurred a credit-related loss of 5 percent or more of the exposure's initial carrying value in
connection with the sale of the exposure or the transfer of the exposure to the held-for-sale,
available-for-sale, trading account, or other reporting category.

Paragraph 14 indicates that, for wholesale, all obligations of an obligor are in default if any one defaults. Below is our prior response to NPR question 13 on this point.

The context for qualification of an internal risk rating system begins with an acknowledgement that when determining an obligor rating a bank should consider both quantitative and qualitative factors that could affect the obligor's default risk. As such, supervisory restrictions that serve to

exclude certain qualitative factors, such as ownership and implied support by a parent of its subsidiary from the rating consideration will only lead to conflicts with internal practices. In addition, it will be difficult to validate ratings with imposed restrictions against assumed PDs using an analysis of outcomes.

It should be recognized that different exposures to the same obligor, some involving transfer risk and some exempt from transfer risk could arguably be classified as exposures to two different economic entities, even though they may be the same legal entity. In the case of the transfer risk exposure, the sovereign inserts itself in place of the obligor and forces default, while where there is no transfer risk, the risk is that of the underlying obligor. For internal economic assessments, two "quasi obligors" are often created, one having a country risk rating overlay and one having a rating that is not directly affected by the transfer risk.

In the same way, creating a single obligor rating for multiple income producing properties where there are no guarantees on the part of the principal nor no cross defaults among the facilities tends to distort the risk assessment process. While a legal entity approach is a good starting point, it needs to be modified to take into account the assessment process of the likelihood of default and its consequences. It can be argued that for income producing property the amount of equity and therefore the value of the collateral pledged to the bank clearly affects the likelihood that the borrower will default on that property. With a substantial amount of equity value the borrower may continue to support the property even when it becomes troubled and as a consequence, if a default were to occur, the recovery may be greater. The same borrower could more easily walk away from a thinly capitalized project and possibly refer prospective tenants to the more heavily capitalized property. While theoretically, LGDs and PDs should be considered separately, the reality is that for individually collateralized exposures they are inevitably intertwined.[25]

Definition of Default – 5% Loss on Sale

As stated in our prior comment letter, we oppose the change to the definition of default under which all obligations to a wholesale borrower must be considered in default if the sale or transfer of any exposure to the borrower resulted in a credit-related loss of 5% or more of initial carrying value. We request that the agencies return to the language of the Accord, which requires recognition of default in the event of a material credit-related loss based on a bank's own judgment. Imposition of a fixed percentage to determine materiality will create a greater risk of misclassification, substitute for a more fully fact-based determination of the obligor's likelihood to pay and impose additional regulatory burdens on those international firms operating in

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[25] See p. 37 of our response to the NPR.

multiple jurisdictions because they will be required to maintain two definitions and two sets of capital calculations.[26]

Use of Internal LGD Estimates for all Exposures in a Subcategory

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

We believe the requirement to qualify for use of internal LGD estimates should not be artificially constrained by this "all or none" rule for exposure in each of the five asset subcategories (wholesale, HVCRE, residential mortgage, revolving retail, other retail). Internal estimates of LGDs should be applied at appropriate and defensible level of granularity. If for some subset of exposures there is lack of data or other practical limitations, appropriate conservatism could be applied without jeopardizing the use of internal LGD estimates for the majority of exposures.

As stated in our prior comment letter, we oppose the imposition of supervisory LGDs in place of internal estimates for an entire exposure category where a bank can produce credible and reliable internal estimates for most but not all of the exposures.

Supervisory Mapping Function

Ch. 4 Par. 114 *If a bank has not received prior written approval from its primary Federal supervisor to use internal LGD estimates, the bank must use the supervisory mapping function. The supervisory mapping function calculates LGD by taking 92 percent of the ELGD and adding eight percentage points to that result.*

We have previously opposed the use of a supervisory formula as well as the specific formula incorporated in the guidance for reasons reiterated below. In addition, when combined with the "all or none" rule in par. 113, supervisors may be inclined to view the mapping as a de facto criterion to judge conservatism of internal LGD estimates, which may result in inappropriately disallowing the use of such internal estimates.

As stated in our prior comment letter, for wholesale exposures with default-weighted average LGD (ELGD) of 40%, for example, assuming that the vast majority of exposures met the requirements to use internal estimates, this "all-or-none" rule would require LGD (and capital) to be set 12% higher than default-weighted average LGD (and capital) as a result of supervisory mapping, even if sound internal estimates for the majority of exposures do not justify this increase.

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[26] See p. 4 of our response to the NPR.

The supervisory mapping function also produces progressively larger percentage increases in LGD as ELGD decreases, which translates directly into larger percentage increases in capital as ELGD declines. For an ELGD of 25%, supervisory LGD would be 31%, or 24% higher than ELGD. For an exposure with a 2% ELGD, supervisory LGD would be 500% higher. The formula also imposes an effective floor of 8% on LGD, which would not be appropriate for certain types of exposures with negligible losses even in downturn environments. We are unaware of any empirical analysis that supports the proposed supervisory mapping formula. We oppose the use of a supervisory mapping function that arbitrarily imposes higher percentage increases in required LGD and capital as default-weighted average LGD values decline.

We are also concerned that the supervisory mapping formula would create a "de facto" standard that supervisors might incorporate as a leading consideration in the approval process for use of "own estimate" LGD.[27]

Retail Seasoning

Please also see our comments on retail seasoning and securitization in Section II above.

Seasoning should be considered material only if both of the following criteria are met:
- Unseasoned loans perform differently than seasoned loans, all other risk characteristics equal; and
- Unseasoned loans represent either:
  a) A large concentration of the reference data relative to the current portfolio, or;
  b) A large concentration of the current portfolio.

Only under these circumstances would seasoning impact capital requirements. Either:
- current capital needs would be underestimated due to failure to recognize a difference in near-term performance between seasoned and unseasoned exposures; or
- future capital needs would increase as the portfolio seasons.

As stated in our response to the NPR, we request that the agencies consider the following more comprehensive approach to adjust capital requirements for seasoning effects.

Include Age in Segmentation Analysis. If unseasoned accounts were over-represented in the development portfolio (relative to the actual portfolio mix in a subsequent period) and the risk segmentation process did not include an age variable, PDs might be underestimated. To address this concern, preliminary segmentation analysis should initially include at least one age variable. If age or another time-based variable is determined to be a significant risk driver, then seasoning

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[27] See pp. 16-17 of our response to the NPR.

is material and directly addressed in PD estimation. If age is not significant, any capital impact is either immaterial or is already captured by other variables. This approach is consistent with the Guidance's requirement to determine whether seasoning is a material risk factor or not (S4-18, Par. 76).

Perform Migration Analysis. If unseasoned accounts were under-represented in the development portfolio (relative to the actual portfolio mix in a subsequent period), computed capital could be low relative to subsequent capital required as the portfolio seasons. To correct for this potential shortfall, a separate migration analysis would be performed to assess additional capital for unseasoned segments as follows: project account migration across segments for the succeeding year or years; calculate expected future RWA based on migration and in the event of projected materially higher capital, adjust RWA upward by the estimated amount.

This two part approach has the following advantages:
- Adjustments are made directly to capital, not indirectly via PD;
- This approach simultaneously captures PD, LGD and attrition factors, e.g. aging portfolios may exhibit higher PDs but associated with significantly fewer accounts;
- The segmentation test separates seasoned from unseasoned exposures;
- The approach measures both materiality of aging and the magnitude of the actual RWA adjustment;
- This approach is conservative in that it covers capital required for the succeeding year plus future marginal capital needs due to seasoning.

We believe this combined approach more directly addresses seasoning concerns, as well as being more practical and less burdensome. We request that the agencies permit this and similar alternatives in lieu of the ACDR requirement. The ACDR method is not contained in the Accord and is neither the best nor the only approach to addressing seasoning concerns. More broadly, we encourage the agencies to permit banks the necessary flexibility to develop their own internal approaches to address retail seasoning.