BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Date: October 26, 2007

To: Board of Governors

From: Governor Kroszner

Subject: Implementation of Advanced Capital Adequacy Framework (Basel II Draft Final Rule)

Attached are a memorandum to the Board, a draft Federal Register notice (draft final rule), and a Technical Overview of the Final Rule that relate to the interagency implementation of an advanced capital adequacy framework. The framework, which is based on the Basel Committee on Banking Supervision's 2006 revised capital accord, will adopt advanced measurement approaches for assessing risk-based capital for credit risk and operational risk. The draft final rule would be published jointly by the four federal banking agencies in the Federal Register after all of the agencies have completed their internal review and approval procedures.

The Committee on Supervisory and Regulatory Affairs has been briefed on the draft final rule and I believe it is ready for the Board's consideration at an open Board meeting on November 2, 2007.

Attachments

Date: October 26, 2007

To: Board of Governors of the Federal Reserve System

From: Federal Reserve Staff[1]

Subject: Implementation of Advanced Capital Adequacy Framework (Basel II Draft Final Rule)

ACTION REQUESTED

Staff requests Board approval to issue a final rule implementing a new risk-based capital framework based on the Basel Committee on Banking Supervision's (Basel Committee) revised capital accord entitled "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (New Accord). Staff also requests Board approval to make non-substantive edits to the final rule text prior to its publication to accommodate further interagency discussion. A draft of the final rule is provided as Attachment 1.

Staff notes that the Federal Deposit Insurance Corporation is scheduled to hold a board meeting on November 5, 2007, to consider the final rule. It is not certain at this time when the other banking agencies (the Office of the Comptroller of the Currency and the Office of Thrift Supervision) will complete their internal review and approval procedures. If approved by the Board, the final rule would be published jointly by the agencies in the Federal Register after all agencies have obtained final approval. In the event that substantive issues arise prior to publication, staff would circulate a revised draft final rule to the Board for consideration by notation vote.

[1] Roger Cole, Steven Roberts, Deborah Bailey, Norah Barger, Robin Lumsdaine, Barbara Bouchard, Anna Lee Hewko, and Constance Horsley (Division of Banking Supervision and Regulation); David Jones (Research Division); Scott Alvarez, Mark Van Der Weide, Allison Breault, and April Snyder (Legal Division).

BACKGROUND

On September 25, 2006, the agencies issued a joint notice of proposed rulemaking (proposal or proposed rule) implementing the Basel Committee's New Accord.[2] The New Accord was designed to modernize the Basel Committee's first capital accord (Basel I) issued in 1988, which was developed in part to strengthen capital levels at banks and to foster international consistency in capital measurement. The New Accord encompasses three pillars: minimum regulatory capital requirements (pillar 1); supervisory review of capital adequacy (pillar 2); and market discipline through enhanced public disclosure (pillar 3). Under pillar 1, a banking organization calculates risk-based capital requirements for exposure to credit risk and operational risk. Banking organizations with significant trading activities also factor in a measure for exposure to market risk. The New Accord provides several methodologies for determining risk-based capital requirements for both credit risk and operational risk.

For credit risk, the New Accord includes a standardized approach, which modifies and enhances the modestly risk-sensitive Basel I approach, and two internal ratings-based (IRB) approaches, which use an institution's internal estimates of key risk parameters in combination with supervisory capital formulas to determine risk-based capital requirements. Under the foundation IRB approach, some risk parameters are estimated by banking organizations and others are set by supervisors. Under the advanced IRB approach, all of the key risk parameters are determined by banking organizations.

The New Accord also provides three methodologies for operational risk. The basic indicator approach and the standardized approach both link operational risk capital requirements

[2] 71 FR 55830. Also on September 25, 2006, the agencies issued a proposal to revise the market risk capital rules (market risk proposal, 71 FR 55958) as well as two notices and requests for comment addressing proposed regulatory reporting requirements related to the Basel II proposal and the market risk proposal (71 FR 55981 and 71

to fixed percentages of a banking organization's gross income. The advanced measurement approaches (AMA) rely on a banking organization's internal operational risk measurement and management processes.

The agencies' proposal included only the advanced IRB approach for credit risk and the AMA for operational risk (together, the advanced approaches). Under the proposal, banking organizations with at least $250 billion of consolidated total assets or at least $10 billion of on-balance-sheet foreign exposures (core banking organizations) would be required to use the advanced approaches, and other banking organizations that satisfied the substantial risk measurement and management infrastructure requirements of the proposed rule would be able to opt in to the advanced approaches.

The Federal Reserve Board received over 60 written comments, and staff and senior officials participated in numerous meetings with industry representatives and other interested parties to hear views on the proposal. Each of these written comments, and summaries of the meetings, are included in the public record of the proposal. A summary of the comments will be made available in the Office of the Secretary of the Board.

After reviewing all comments and considering issues and alternative approaches, agency staffs have developed this draft final rule for the Board's consideration. The remainder of this memorandum (i) highlights several of the reasons staff supports moving to the advanced capital adequacy framework, (ii) provides an overview of the draft final rule, and (iii) describes several key issues commenters identified and how staff has responded to those issues in the draft final rule. Attachment 2 provides a more complete overview of the mechanics of the final rule.

FR 55986). A draft final rule for market risk will be circulated later for Board consideration by notation vote. The regulatory reporting templates for both the advanced approaches and market risk are expected to be finalized soon.

DISCUSSION

Reasons for Moving to the Advanced Capital Adequacy Framework

Staff believes that prudent and risk-sensitive regulatory capital requirements are integral to ensuring that individual banks and the financial system in general have an adequate capital cushion against losses. While the Basel I-based risk-based capital rules provided a major step forward in capital risk sensitivity in the late 1980s, rapid and extensive evolution in the financial marketplace has substantially reduced the effectiveness of those rules for the largest internationally active banking organizations that offer evermore complex and sophisticated products and services in a competitive global environment.

The simple risk-bucketing approach of Basel I creates some perverse incentives for risk taking. For example, the Basel I-based rules require the same amount of regulatory capital against all unsecured corporate loans and bonds regardless of actual risk, and treat almost all first-lien residential mortgage exposures as equally risky. This provides an incentive for banking organizations to shed lower-risk exposures and acquire or retain higher-risk exposures within some asset categories. The Basel I-based rules also do not take into account important elements of credit-risk mitigation – such as most forms of collateral, many guarantees and credit derivatives, and the maturity and seniority of exposures – and, thus, may blunt incentives for banks to reduce or otherwise manage risk. Moreover, the Basel I-based rules are particularly inadequate for dealing with capital markets transactions, such as repurchase agreements, securities borrowing and lending, margin loans, and over-the-counter (OTC) derivatives.

The advanced approaches of the New Accord are designed to reduce substantially the perverse incentive effects and opportunities for regulatory capital arbitrage that exist under the Basel I-based rules. Under the advanced approaches, risk-based capital requirements for exposures will vary on the basis of a banking organization's actual risk profile and experience. A banking organization with higher risk will have higher regulatory capital requirements than a banking organization with a lower risk profile. This enhanced risk sensitivity should ensure that banking organizations have positive incentives for lending to creditworthy counterparties and for lending on a collateralized basis. The advanced approaches also provide more sophisticated methods to address capital market-related transactions.

In addition, the advanced approaches build on the economic capital and other risk-measurement and management approaches of sophisticated banking organizations and are designed to evolve over time as banking organizations refine and enhance their internal approaches. As a result, the advanced approaches are better able than the current system to adapt to innovations in banking and financial markets. The advanced approaches also should establish a more coherent relationship between the risk-based regulatory measure of capital adequacy and a banking organization's day-to-day risk management. Under the draft final rule, the agencies must approve a banking organization's use of models under the advanced approaches.

Staff notes that banking organizations have made substantial progress in developing more sophisticated risk measurement and management processes as a direct result of the advanced approaches implementation process. As banking organizations are taking a more granular approach to assessing risk drivers, they are making more informed decisions about extending credit, mitigating risk, and determining overall capital needs. Staff believes that moving to the advanced approaches will improve regulatory incentives for banking organizations and will serve to promote safety and soundness for the banking sector and the financial system as a whole. Before any banking organization will be permitted to use the advanced approaches without being subject to transitional safeguards, staffs of the agencies have committed to assess the functionality and the quantitative impact of the advanced approaches. Staff will recommend modifications to the framework if material deficiencies are found.

Overview of the Draft Final Rule

The draft final rule maintains the existing risk-based capital rules' (referred to as the general risk-based capital rules) minimum tier 1 risk-based capital ratio of 4.0 percent and total risk-based capital ratio of 8.0 percent. The components of tier 1 and total capital in the draft final rule are generally the same as in the general risk-based capital rules, although some adjustments have been made for purposes of the advanced approaches. (See Attachment 1, draft final rule preamble section IV.) Under the draft final rule, a banking organization must meet specified infrastructure and risk measurement and management requirements before it may use the advanced approaches to determine its risk-based capital requirements. (See Attachment 1, draft final rule preamble sections III.A. and B.)

Under the advanced approaches, a banking organization calculates its risk-based capital requirements by first identifying whether each of its on- and off-balance sheet exposures is a wholesale, retail, securitization, or equity exposure. Wholesale exposures include most credit exposures to companies, sovereigns, and other governmental entities. For each wholesale exposure, a banking organization must assign four quantitative risk parameters: (i) probability of default (PD, which is an estimate of the probability that the exposure's obligor will default over a one-year horizon); (ii) loss given default (LGD, which is an estimate of the economic loss rate on the exposure if a default occurs during economic downturn conditions); (iii) exposure at default (EAD, which is an estimate of the amount owed to the banking organization on the exposure at the time of default); and (iv) maturity (M, which reflects the effective remaining maturity of the exposure). Banking organizations may factor into their wholesale risk parameter estimates the risk mitigating impact of collateral, and of credit derivatives and guarantees that meet certain criteria. Banking organizations must input their risk parameter estimates for each wholesale exposure into the appropriate wholesale IRB risk-based capital formula to determine the risk-based capital requirement for the exposure.

Retail exposures include most credit exposures to individuals and certain small credit exposures to businesses. Under the draft final rule, a banking organization must sub-categorize each retail exposure as a residential mortgage exposure, a qualifying revolving exposure (QRE), or an other retail exposure. Within these subcategories, a banking organization must group exposures into segments with similar risk characteristics and then assign the risk parameters PD, LGD, and EAD to each retail segment. For retail exposures, a banking organization may take into account the risk mitigating effects of collateral and guarantees in the segmentation process and in the assignment of risk parameters. Similar to wholesale exposures, a banking organization must input its risk parameter estimates for each retail segment into the IRB risk-based capital formula for the retail subcategory to determine the risk-based capital requirement for the segment.

Securitization exposures include most tranched credit exposures to underlying financial assets, such as most asset- and mortgage-backed securities. For securitization exposures, the draft final rule has three general approaches, subject to various conditions and qualifying criteria: the Ratings-Based Approach (RBA), which uses external ratings to risk weight exposures; the Internal Assessment Approach (IAA), which uses a banking organization's internal credit assessments to risk weight exposures to asset-backed commercial paper programs; and the Supervisory Formula Approach (SFA), which uses banking organization inputs and a supervisory formula to risk weight exposures. Securitization exposures that do not qualify for the RBA, the IAA, or the SFA, and certain other types of exposures such as gain-on-sale and other credit-enhancing interest-only strips, are deducted from regulatory capital.

Equity exposures generally include ownership interests in the assets and income of a company. Under the draft final rule, banking organizations may use an Internal Models Approach (IMA) for determining risk-based capital requirements for equity exposures, subject to certain qualifying criteria and risk weight floors. If a banking organization does not have a qualifying internal model for equity exposures or chooses not to use such a model, it must use the Simple Risk Weight Approach (SRWA). Under the SRWA, publicly traded equity exposures generally are assigned a 300 percent risk weight and private equity exposures generally are assigned a 400 percent risk weight. Certain equity exposures, such as Federal Reserve stock, Federal Home Loan Bank stock, and community development equity investments, are subject to a zero to 100 percent risk weight.

Operational risk is generally defined as the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events (including legal risk but excluding strategic and reputational risk). For operational risk, the draft final rule requires a banking organization to develop qualifying AMA systems and to use its own methodology to identify operational loss events, measure its exposure to operational risk, and assess a risk-based capital requirement for that risk. A banking organization may take eligible operational risk offsets and qualifying operational risk mitigants (such as insurance) into account when determining its operational risk capital requirement.

The draft final rule also includes a pillar 2 requirement that a banking organization must have a rigorous process for assessing its overall capital adequacy in relation to its overall risk profile and a comprehensive strategy for maintaining an appropriate level of capital. In addition, the draft final rule contains pillar 3 public disclosure requirements to provide information to market participants on the capital structure, risk exposures, risk assessment processes and, thus, the capital adequacy of a banking organization.

Key Issues Raised by Commenters

General considerations

Overall, commenters on the proposal supported the direction of the new framework and the move to more risk-sensitive capital requirements. One overarching issue, however, was the degree to which the proposal differed from the New Accord. Commenters said the differences generally created competitive problems, raised home-host issues, entailed extra cost and regulatory burden, and did not necessarily improve the overall safety and soundness of banking organizations subject to the rule.

In addition, commenters generally disagreed with the agencies' decision to propose only the advanced approaches from the New Accord. Many commenters urged the agencies to permit use of the standardized approach to credit risk and the basic indicator and standardized approaches to operational risk. Commenters also objected to the agencies' retention of the leverage ratio and the transitional arrangements in the proposal, which included a one-year delayed implementation date relative to the New Accord and a three-year transition period with more gradual possible reductions in risk-based capital requirements compared to the New Accord's two-year transition period. Commenters also opposed the proposal's identified 10 percent numerical benchmark for evaluating and responding to capital outcomes during the transition period. Moreover, commenters raised numerous technical issues.

On July 20, 2007, representatives of the agencies issued a press release addressing several of these concerns. The press release announced the agencies' preliminary agreement to eliminate language concerning a 10 percent benchmark regarding aggregate reductions in risk-based capital requirements. Further, the press release noted the agencies' final rule should be technically consistent in most respects with the international approaches in the New Accord; however, the agencies continued to prefer to retain the transitional arrangements as proposed, including a parallel run period and three transitional floor periods. (See Attachment 1, draft final rule preamble sections I.E. and III.A.2.) Under the draft final rule, the first opportunity for a banking organization to begin its parallel run is 2008 and the transitional floors generally prohibit a banking organization's risk-based capital requirement under the advanced approaches from falling below 95 percent, 90 percent, and 85 percent of what it would be under the general risk-based capital rules during the banking organizations' first, second, and third transitional floor periods, respectively. The press release noted the agencies would publish a study after the end of the second transition period that evaluates the new framework to determine if there are any material deficiencies.

The press release also stated that the agencies had agreed to proceed promptly to issue a proposed rule that would provide all non-core banking organizations (that is, banking organizations not required to adopt the advanced approaches) with the option to adopt a standardized approach based on the New Accord. This new proposal will replace the agencies' earlier Basel I-A proposal, issued in December 2006.[3] Interagency work is progressing on the standardized proposal, and staff will submit that proposal to the Board for its consideration at a later date. As described in the press release, the agencies intend to finalize the proposed standardized option before core banking organizations begin the first transition year under the advanced approaches. In addition, while not specifically mentioned in the press release, the

[3] 71 FR 77446 (Dec. 26, 2006).

agencies intend to retain the leverage ratio and the prompt corrective action regulations without modification.

In response to commenters' concerns that some aspects of the proposed rule would result in excessive regulatory burden without commensurate safety and soundness enhancements, the agencies have reiterated a long-standing principle of conservatism in the final rule. In general, under this principle, in limited situations a banking organization may choose not to apply a provision of the final rule to one or more exposures if the banking organization can demonstrate to the satisfaction of its primary Federal supervisor that not applying the provision would, in all circumstances, generate a risk-based capital requirement for each exposure that is greater than that which would otherwise be required under the final rule. (See Attachment 1, draft final rule preamble section II.D.)

The draft final rule also includes modifications and technical amendments to address a range of issues raised by commenters. A number of these revisions are intended to bring the U.S. advanced approaches more in line with the New Accord. Other revisions are intended to address issues related to regulatory burden, to provide more flexibility to both supervisors and banking organizations, or to provide more certainty in areas where commenters believed the proposal was not clear. Still other modifications address particular issues related to U.S. markets. These modifications and technical amendments are discussed throughout Attachment 1 in the preamble to the draft final rule.

Scope of application of the final rule

The draft final rule includes without change the proposed criteria for identifying core banking organizations and continues to permit other banking organizations (opt-in banks) to adopt the advanced approaches if they meet the rule's qualification requirements. As noted above, core banking organizations are those with consolidated total assets (excluding assets held by an insurance underwriting subsidiary) of $250 billion or more or with consolidated total on-balance sheet foreign exposure of $10 billion or more. A depository institution (DI) is a core banking organization if it is a subsidiary of another DI or a bank holding company (BHC) that uses the advanced approaches. Similarly, a BHC is a core banking organization if it has a subsidiary DI that uses the advanced approaches.

While several commenters objected to these criteria, particularly as they might be applied to foreign-owned banking organizations, staff believes the criteria appropriately identify those banking organizations that, absent other relevant factors, should implement the advanced approaches. Staff has clarified in the draft final rule that a core banking organization's primary Federal supervisor may determine that application of the final rule is not appropriate in light of the banking organization's asset size (including subsidiary DI asset size relative to total BHC asset size), level of complexity, risk profile, or scope of operations. This determination may be made for either a U.S.-owned or a foreign-owned banking organization. (See Attachment 1, draft final rule preamble sections II.A. and B.)

The draft final rule does not give core banking organizations the option to use the simpler approaches in the New Accord. Staff believes it would be appropriate to require large, internationally active U.S. banking organizations to use the most advanced approaches of the New Accord for several reasons. First and most important, the less advanced approaches of the New Accord lack the risk sensitivity of the advanced approaches. As noted above, staff believes that risk-sensitive regulatory capital requirements are integral to ensuring that large, sophisticated banking organizations and the financial system more generally have adequate capital to absorb financial losses. Second, the advanced approaches are designed to substantially reduce the inappropriate incentive effects and opportunities for regulatory capital arbitrage present in the existing Basel I-based risk-based capital rules and most easily exploitable by large, complex banking organizations. The simpler approaches in the New Accord, which rely to a greater extent on fixed risk weight buckets and supervisory-determined risk parameters, provide significantly fewer impediments to arbitrage.

Third, the advanced approaches provide more substantial incentives for banking organizations to improve their risk measurement and management practices than do the other approaches. Staff also does not believe that competitive equity concerns support permitting large, internationally active U.S. banking organizations to adopt the simpler approaches in the New Accord. The Basel Committee did not design the New Accord's simpler approaches for large, complex banking organizations in the G-10 countries, and staff understands from the Fifth Quantitative Impact Study (QIS5)[4] results that no large, complex banking organization in the G-10 countries plans to use the New Accord's standardized approach for credit risk.

Credit Risk Capital Requirements

Commenters raised several issues related to key definitions in, and mechanics of, the proposal. For wholesale exposures, commenters objected to the wholesale definition of default, to the requirement that each wholesale obligor have only one associated PD, and to the proposal's failure to include a separate risk-weight formula for exposures to small- to medium-size enterprises (SMEs). For retail exposures, commenters disagreed with the proposal's retail definition of default and with the proposal's definition of PD for segments of retail exposures with material seasoning effects. For both wholesale and retail exposures, commenters opposed the proposed requirement that banking organizations estimate an expected loss given default

[4] Results of the Basel Committee's QIS5 dated June 16, 2006, is available through the Bank for International Settlements' website at www.bis.org.

(ELGD) risk parameter in addition to the LGD risk parameter, and use a supervisory mapping function to convert ELGD into LGD if they did not qualify to use their own internal estimates of LGD. In addition, a number of commenters requested further clarity about the procedures banking organizations should use to estimate risk parameters for portfolios characterized by a lack of internal data or by little default experience.

In the securitization context, some commenters asserted that the definition of a securitization exposure was too broad. With regard to equity exposures, commenters opposed the proposal's failure to include a grandfathering period. These issues are addressed below.

Wholesale exposures

Wholesale definition of default

Under the proposal, the agencies defined a wholesale obligor to be in default if, for any wholesale exposure of the bank to the obligor, the bank had (i) placed the exposure on non-accrual status; (ii) taken a full or partial charge-off or write-down on the exposure due to the distressed financial condition of the obligor; or (iii) 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 another reporting category.

This proposed definition was different from the definition in the New Accord, but was designed to be responsive to commenter concerns expressed in response to the agencies' earlier proposed definition of wholesale default.[5] Commenters on the proposal strongly objected to the proposed definition, noting that it was more prescriptive than the New Accord's definition. They asserted that the proposed definition would impose unjustifiable systems burden and expense on banking organizations operating across multiple jurisdictions. They also asserted that many

[5] The agencies issued an advance notice of proposed rulemaking related to the new risk-based capital framework based on a 2003 Basel Committee consultative paper (68 FR 45900, August 4, 2003).

banking organizations' existing data collection systems are based on the New Accord's definition, and therefore historical data relevant to the proposed definition are limited. Moreover, some commenters expressed concern that the proposal's U.S.-centric wholesale definition of default would affect PD and LGD estimation and create competitive inequities between U.S. banking organizations and non-U.S. banking organizations that use the New Accord's wholesale default definition. Finally, a number of commenters asserted that the proposed 5 percent credit-related loss trigger inappropriately imported LGD and maturity-related considerations into the definition of wholesale default, could hamper the use of loan sales as a risk management practice, and could cause some performing obligors to be treated as defaulted.

Staff agrees with many of these commenter concerns and has revised the definition of default for wholesale exposures to be consistent with the definition in the New Accord. (See Attachment 1, draft final rule preamble section III.B.) Thus, under the draft final rule, a banking organization's obligor is in default if, for any wholesale exposure of the banking organization to the obligor: (i) the banking organization considers that the obligor is unlikely to pay its credit obligations to the banking organization in full, without recourse by the banking organization to actions such as realizing collateral (if held); or (ii) the obligor is past due more than 90 days on any material credit obligation to the banking organization. The draft final rule notes that the following elements are indications of unlikeliness to pay:

(i) The banking organization places the exposure on non-accrual status;

(ii) The banking organization takes a full or partial charge-off or write-down on the exposure due to the distressed financial condition of the obligor;

(iii) The banking organization incurs a material credit-related loss in connection with the sale of the exposure or the transfer of the exposure to the held-for-sale, available-for-sale, trading, or other reporting category;

(iv) The banking organization consents to a distressed restructuring of the exposure that is likely to result in a diminished financial obligation caused by the material forgiveness or postponement of principal, interest or (where relevant) fees;

(v) The banking organization has filed as a creditor of the obligor for purposes of the obligor's bankruptcy under the U.S. Bankruptcy Code (or similar proceeding in a foreign jurisdiction); or

(vi) The obligor has sought or has been placed in bankruptcy or similar protection that would avoid or delay repayment of the exposure to the banking organization.

Assignment of PD to wholesale obligors

Under the proposed rule, a banking organization would assign each legal entity wholesale obligor to an internal rating grade and then associate a PD with each rating grade. Accordingly, if a single wholesale exposure of the banking organization to an obligor triggered the proposed rule's definition of default, all of the banking organization's wholesale exposures to that obligor would receive the capital treatment for exposures to defaulted obligors. While a few commenters expressly supported this approach, a substantial number of commenters expressed reservations about this requirement. These commenters observed that in certain circumstances an exposure's transaction-specific characteristics affect its likelihood of default. In particular, some commenters maintained that income-producing real estate lending should be exempt from the one-rating-per-obligor requirement. They asserted that the probability that an obligor will default on any one such facility depends primarily on the cash flows from the individual property securing the facility, and not on the overall condition of the obligor. Several other commenters asserted that exposures involving transfer risk and debtor-in-possession (DIP) financing exposures also should be exempted from the one-rating-per-obligor requirement because the likelihood of default for such exposures is affected by exposure-specific factors.[6]

In general, staff believes that a two-dimensional rating system that strictly separates obligor and exposure-level characteristics is a critical underpinning of the IRB approach. However, staff agrees with commenters that in some circumstances a departure from this principle may be reasonable. Accordingly, staff has modified the draft final rule to provide that the following three types of exposures to the same legal entity or natural person may avoid the one-rating-per-obligor requirement: exposures with transfer risk; certain income-producing real estate exposures; and certain DIP financing exposures. (See Attachment 1, draft final rule preamble section III.B.)

Risk weight formula for SMEs

The New Accord includes a separate risk-based capital formula for exposures to SMEs. The SME formula in the New Accord results in a lower risk-based capital requirement for an exposure to an SME than for an exposure to a larger firm that has the same risk parameter estimates. A number of commenters urged the agencies to include in the final rule the SME risk-based capital formula from the New Accord, expressing concern about potential competitive disparities in the market for SME lending between U.S. banking organizations and foreign banking organizations subject to risk-based capital rules that include the New Accord's SME treatment.

[6] DIP financing occurs when a borrower enters into bankruptcy and the banking organization extends additional credit to the borrower under the auspices of the bankruptcy proceeding. DIP financing is different from other exposure types in that it typically has priority over existing debt, equity, and other claims on the borrower.

While commenters raised important issues related to SME exposures, staff does not believe that a distinct risk-weight formula for SME exposures is supported by sufficient empirical evidence. Staff also has concerns about creating a domestic competitive disparity between U.S. banking organizations subject to the advanced approaches and U.S. banking organizations subject to other risk-based capital rules. As a result, the draft final rule does not include a distinct risk-weight formula for SME exposures. Such exposures generally are included in the treatment for wholesale exposures. (See Attachment 1, draft final rule preamble section V.A.1.)

Retail Exposures

Retail definition of default

Under the proposal, qualifying revolving retail exposures and residential mortgage exposures would be in default at 180 days past due; other retail exposures would be in default at 120 days past due. In addition, a retail exposure would be in default if the banking organization has taken a full or partial charge-off or write-down of principal on the exposure for credit-related reasons. The proposed days-past-due timeframes are consistent with those embodied in the Federal Financial Institutions Examination Council's Uniform Retail Credit Classification and Account Management Policy,[7] and are consistent with national discretion provided in the New Accord. While some commenters supported the proposed definition of retail default, other commenters urged the agencies to adopt a 90-days-past-due trigger. Others requested that a non-accrual trigger be added to the retail definition of default similar to the proposed wholesale definition of default.

Staff has not incorporated a 90-days-past-due or non-accrual trigger into the draft final rule. Retail non-accrual practices vary considerably among banking organizations, and staff believes that adding a non-accrual trigger to the retail definition of default would result in inconsistency among banking organizations in the treatment of retail exposures. Moreover, staff believes that the 120- and 180-days-past-due thresholds, which are consistent with the New Accord, reflect a point at which retail exposures in the United States are unlikely to return to performing status. A banking organization that considers retail exposures to be defaulted at 90 days past due would likely have higher PD estimates and lower LGD estimates relative to a banking organization using the proposed 120- and 180-day thresholds due to the established tendency of a nontrivial proportion of U.S. retail exposures to "cure" or return to performing status after becoming 90 days past due and before becoming 120 or 180 days past due. Therefore, to prevent the incidence of a substantial number of "false" retail defaults, staff has retained the proposed retail definition of default without substantive change in the draft final rule.

As noted, the New Accord provides discretion for national supervisors to set retail default triggers between 90 and 180 days past due for different products, as appropriate to local conditions. Accordingly, banking organizations implementing the IRB approach in multiple jurisdictions may be subject to different retail definitions of default in their home and host jurisdictions. Staff believes that it could be costly and burdensome for a U.S. banking organization to track retail default data and estimate risk parameters based on both the U.S. retail definition of default and the definitions adopted in non-U.S. jurisdictions. Staff has therefore incorporated some flexibility into the draft final rule. Specifically, for a retail exposure held by a U.S. banking organization's non-U.S. subsidiary subject to an IRB approach consistent with the New Accord in a non-U.S. jurisdiction, the draft final rule allows the banking organization to use

[7] 65 FR 36903, June 12, 2000.

the definition of default in that non-U.S. jurisdiction, subject to prior approval by the banking organization's primary Federal supervisor.

Seasoning effects in the retail definition of PD

Some types of retail exposures typically display a seasoning pattern – the exposures have relatively low default rates in their first year, rising default rates in the next few years, and declining default rates for the remainder of their terms. Because the IRB framework typically looks to a one-year horizon, the proposed rule defined PD for a segment of non-defaulted retail exposures for which seasoning effects were material as the banking organization's empirically based best estimate of the annualized cumulative default rate over the expected remaining life of exposures in the segment, capturing the average default experience for exposures in the segment over a mix of economic conditions.

A number of commenters objected to this treatment of retail exposures with seasoning effects. They asserted that requiring the use of an annualized cumulative default rate was too prescriptive and would preclude other reasonable approaches. Staff believes that several commenters presented reasonable alternative approaches to recognizing the effects of seasoning in PD and, thus, staff has provided more flexibility for recognizing those effects in the draft final rule. The draft final rule generally defines PD for a segment of non-defaulted retail exposures as the banking organization's empirically based best estimate of the long-run average one-year default rate for the exposures in the segment, capturing the average default experience for exposures in the segment over a mix of economic conditions and adjusted upward as appropriate to reflect material seasoning effects. (See Attachment 1, draft final rule preamble section III.B.2.)

Issues related to both wholesale and retail exposures

LGD and ELGD

Under the proposal, a banking organization generally would be required to estimate both an ELGD and an LGD risk parameter for each wholesale exposure and for each segment of retail exposures. The proposal defined ELGD as the banking organization's empirically based best estimate of the default-weighted average economic loss per dollar of EAD that the banking organization expected to incur in the event that the exposure defaulted within a one-year horizon. ELGD was required to incorporate a mix of economic conditions (including economic downturn conditions). ELGD had four functions in the proposed rule: (i) as a component of the calculation of expected credit loss (ECL) in the numerator of the risk-based capital ratios; (ii) in the expected loss (EL) component of the IRB risk-based capital formulas; (iii) as a floor on the value of the LGD risk parameter for each exposure; and (iv) as an input into a supervisory mapping function (which enabled banking organizations that could not determine their own estimates of LGD to convert ELGD estimates into LGD estimates).

Many commenters objected to the proposed rule's requirement for banking organizations to estimate ELGD, noting that ELGD is not required under the New Accord. Commenters asserted that requiring ELGD estimation would create a competitive disadvantage by creating additional systems, compliance, calculation, and reporting burden for those banking organizations subject to the U.S. rule. They also maintained that inclusion of the ELGD risk parameter would decrease the comparability of U.S. banking organization capital requirements and public disclosures relative to those of foreign banking organizations applying the advanced approaches.

Staff generally agrees with these concerns and has not included the ELGD risk parameter in the draft final rule. Instead, consistent with the New Accord, a banking organization would use LGD for the calculation of ECL in the risk-based capital numerator and the EL component of the IRB risk-based capital formulas. Although staff has eliminated the ELGD risk parameter from the draft final rule, consistent with the New Accord, the LGD of a wholesale exposure or retail segment under the draft final rule must not be less than the banking organization's empirically based best estimate of the long-run default-weighted average economic loss, per dollar of EAD, the banking organization would expect to incur if the obligor were to default within a one-year horizon over a mix of economic conditions. (See Attachment 1, draft final rule preamble section III.B.3.)

Supervisory mapping function

The proposed rule included two ways for a banking organization to generate LGD estimates for wholesale exposures and retail segments. First, a banking organization could use its own estimates of LGD for a subcategory of exposures if the banking organization had prior written approval from its primary Federal supervisor to use its own estimates and the banking organization could demonstrate that its estimates of LGD were reliable and sufficiently reflective of economic downturn conditions. Second, the proposed rule contained a supervisory mapping function for converting ELGD into LGD for risk-based capital purposes. A banking organization that did not qualify to use its own estimates of LGD would instead compute LGD using the linear supervisory mapping function LGD = 0.08 + 0.92 x ELGD. The agencies proposed the supervisory mapping function because of concerns that banking organizations may find it difficult to produce sufficiently robust internal estimates of LGD. The supervisory mapping function provided a pragmatic methodology for banking organizations to use while refining their LGD estimation techniques.

In general, commenters viewed the supervisory mapping function as a significant departure from the New Accord that would add unwarranted prescriptiveness and regulatory burden to the U.S. rule. Commenters expressed concern that U.S. supervisors would employ an unreasonably high standard for allowing own estimates of LGD, thereby forcing banking organizations to use the supervisory mapping function for an extended period of time. Some commenters viewed the supervisory mapping function as crude and as overly punitive for exposure types with very low loss severities, effectively imposing an 8 percent floor on LGD. Commenters asserted that risk-based capital requirements would be increased at U.S. banking organizations relative to their foreign competitors, particularly for high-quality assets, putting U.S. banking organizations at a competitive disadvantage with respect to foreign banking organizations.

Staff continues to believe that the supervisory mapping function is a reasonable aid for dealing with difficulties in LGD estimation. However, staff also recognizes there may be several valid methodologies for addressing LGD estimation challenges. Therefore, the draft final rule does not require use of the supervisory mapping function. The preamble to the draft final rule notes that a banking organization's estimates of LGD must be reliable and sufficiently reflective of economic downturn conditions and states that a banking organization should have rigorous and well-documented policies and procedures for identifying economic downturn conditions for each exposure subcategory; identifying adverse relationships between the relevant risk drivers of default rates and loss rates given default; and incorporating identified relationships into LGD estimates. (See Attachment 1, draft final rule preamble section III.B.3.)

Portfolios with limited data or low numbers of defaults

Many commenters requested further clarity about the procedures that banking organizations should use to estimate risk parameters for portfolios characterized by a lack of internal data or by very little default experience. Several commenters asked the agencies to establish criteria for allowing banking organizations to apportion EL between LGD and PD for certain low risk portfolios rather than estimating each risk parameter separately. Other commenters suggested the agencies should consider allowing banking organizations to use the New Accord's standardized approach for credit risk for limited-data or low-default portfolios.

The draft final rule requires banking organizations to meet the qualification requirements for all of their portfolios. The preamble to the draft final rule notes that banking organizations that demonstrate appropriately rigorous processes and sufficient degrees of conservatism for portfolios with limited data or low numbers of defaults will be able to meet the qualification requirements. Specifically, under the final rule, a banking organization's risk parameter quantification process "must produce appropriately conservative risk parameter estimates where the banking organization has limited relevant data." Staff believes this requirement provides sufficient flexibility and incentives for banking organizations to develop and document sound practices for applying the IRB approach to portfolios with limited data. The preamble to the draft final rule discusses the use of external data, scenario analysis, and other techniques to support risk parameter estimation for limited-data or low-default portfolios. (See Attachment 1, draft final rule preamble section III.B.3.)

Securitization exposures

The proposal defined a securitization exposure as an on-balance sheet or off-balance sheet credit exposure that arises from a transaction in which (i) all or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties; (ii) the credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority; (iii) performance of the securitization exposure depends on the performance of the underlying exposures; and (iv) all or substantially all of the underlying exposures are financial exposures. Examples of financial exposures included loans, commitments, receivables, asset-backed securities, mortgage-backed securities, other debt securities, equity securities, or credit derivatives.

Commenters raised several objections to the proposed definition of securitization exposure, but most consistently expressed concern that the definition was too broad because it included all exposures involving the tranching of credit risk of underlying financial assets. In particular, commenters asserted that the definition captured many exposures that were not typically considered to be securitizations, including exposures to many hedge funds. Commenters requested flexibility to apply the wholesale or equity framework (depending on the exposure) rather than the securitization framework to these exposures.

Although the proposed definition of securitization exposure is generally consistent with the New Accord, staff agrees with commenters that the proposed definition is quite broad in some respects and would capture some exposures that would more appropriately be treated under the wholesale or equity frameworks. To restrict the scope of the IRB securitization framework, the draft final rule modifies the definition of a traditional securitization to make clear, for example, that exposures to operating companies are not securitization exposures (even if all or substantially all of the assets of the operating company are financial exposures). For this purpose, the preamble to the draft final rule notes that operating companies generally are companies that produce goods or services beyond the business of investing, reinvesting, holding, or trading in financial assets. Examples of such financial operating companies include depository institutions, bank holding companies, securities brokers and dealers, insurance companies and non-bank mortgage lenders. Accordingly, under the draft final rule, an equity investment in an operating company, such as a bank, generally would be an equity exposure and a debt investment in such an operating company generally would be a wholesale exposure.

Investment firms, which generally engage exclusively in the business of investing, reinvesting, holding, or trading in financial assets, would not be operating companies under the draft final rule and would not qualify for this general exclusion from the definition of traditional securitization. The draft final rule does provide, however, that the primary Federal supervisor of a banking organization may exclude from the definition of traditional securitization an investment firm that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance sheet transactions. This provision allows a primary Federal supervisor to distinguish structured finance vehicles, to which the IRB securitization framework was designed to apply, from more flexible investment firms (such as certain hedge funds and private equity funds), for which the IRB securitization framework was not directly intended. The preamble to the draft final rule notes that managed collateralized debt obligation vehicles, structured investment vehicles, and similar structures, which might allow considerable management discretion regarding asset composition but are subject to substantial restrictions regarding capital structure, would be treated as securitization exposures.

Staff remains concerned that the line between securitization exposures and non-securitization exposures may be difficult to draw in some circumstances. Thus, in addition to the supervisory exclusion described above, the draft final rule contains a new component that expressly permits a banking organization's primary Federal supervisor to scope certain transactions into the IRB securitization framework if justified by the economics of the transaction. The draft final rule notes the agencies will consider a number of factors when assessing the economic substance of a transaction, including, for example, the amount of equity in the structure, overall leverage (whether on- or off-balance sheet), whether redemption rights attach to the equity investor, and the ability of junior tranches to absorb losses without interrupting contractual payments to more senior tranches. (See Attachment 1, draft final rule preamble section V.A.3.)

Equity exposures

Under the New Accord, national supervisors have the option to provide a grandfathering period for equity exposures – whereby for a maximum of ten years supervisors could permit banking organizations to exempt from the IRB treatment equity investments held at the time of publication of the New Accord. The proposal did not include such a grandfathering provision. A number of commenters asserted that the proposal was inconsistent with the New Accord and would subject U.S. banking organizations using the advanced approaches to significant competitive inequity vis-à-vis foreign banks.

Staff continues to believe that it is not necessary to incorporate the optional grandfathering period for equity exposures. The grandfathering concept would reduce the risk sensitivity of the equity treatment. Moreover, the advanced approaches do not provide grandfathering for other types of exposures. Finally, staff believes that overall the draft final rule approach to equity exposures sufficiently mitigates potential competitive issues. Accordingly, the draft final rule does not provide a grandfathering period for equity exposures.

As discussed earlier under the securitization section of this memorandum, the draft final rule provides discretion to a banking organization's primary Federal supervisor to exclude from the IRB securitization framework equity investments in certain investment firms. The draft final rule has been modified to generally apply a 600 percent risk weight under the SRWA to equity exposures to such firms that have greater than immaterial leverage. (See Attachment 1, draft final rule preamble section V.F.)

Operational risk

A number of commenters raised issues related to operational risk. The proposal explicitly authorized banking organizations to take into account eligible operational risk offsets but clarified that the only eligible operational risk offsets at the present time appeared to be those relating to credit card fraud and securities processing. Several commenters noted that activities besides securities processing and credit card fraud should be considered for operational risk offsets. Staff believes that the proposed definition of eligible operational risk offsets allows for the consideration of other activities in a flexible and prudent manner and, thus, are retaining the proposed definition in the draft final rule.

Commenters also noted that the proposal appeared to place excessively strict limits on the use of operational risk mitigants other than insurance. Staff has provided flexibility in this regard and under the draft final rule will take into consideration whether a particular operational risk mitigant covers potential operational losses in a manner equivalent to holding regulatory capital. (See Attachment 1, draft final rule preamble sections III.B. and III.V.)

Public disclosures

Many commenters expressed concern that the proposed public disclosures were excessive and would hinder, rather than facilitate, market discipline by requiring banking organizations to disclose information that would not be well understood by or useful to the market. Commenters also expressed concern about possible disclosure of proprietary information. Staff believes it is important to retain the vast majority of the proposed disclosures, which are consistent with the New Accord. These disclosures should enable market participants to gain key insights regarding a banking organization's capital structure, risk exposures, risk assessment processes, and ultimately capital adequacy. Staff has modified the draft final rule to provide flexibility regarding proprietary information.

RECOMMENDATION:

For the reasons set forth above, staff recommends that the Board approve the issuance of the attached draft final rule.

Attachments

List of Acronyms

AMA	Advanced Measurement Approaches (for operational risk)
BHC	Bank Holding Company
DI	Depository Institution
DIP	Debtor-in-Possession
EAD	Exposure at Default
ECL	Expected Credit Loss
EL	Expected Loss
ELGD	Expected Loss Given Default
IAA	Internal Assessment Approach (for securitization exposures)
IMA	Internal Models Approach (for equity exposures)
IRB	Internal Ratings-Based
LGD	Loss Given Default
M	Maturity
OTC	Over-the-Counter
PD	Probability of Default
QIS5	Fifth Quantitative Impact Study
QRE	Qualifying Revolving Exposure
RBA	Ratings-Based Approach (for securitization exposures)
SFA	Supervisory Formula Approach (for securitization exposures)
SME	Small- to Medium-Size Enterprise
SWRA	Simple Risk Weight Approach (for equity exposures)