REPORT OF THE WORKING GROUP ON CAPITAL ADEQUACY

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INTRODUCTION

In March 1998, the Institute's Working Group on Capital Adequacy ("WGCA") issued a report asking the Basel Committee to update the regulatory capital rules for credit risk.[1] The WGCA is composed of those senior credit risk managers with responsibility for managing credit risk in IIF member banks. In June 1999, the Basel Committee on Banking Supervision (the "Basel Committee") released a consultative document (*A New Capital Adequacy Framework*) containing proposals to revise the regulatory capital framework for banks. This report constitutes the response of the WGCA. A current list of working group members appears as Appendix A to this report.

To respond to the reform proposals, the Institute of International Finance ("IIF") established a Steering Committee on Regulatory Capital (the "Steering Committee") in 1999 to guide the Institute's efforts and to provide the perspective of chief executive officers and chief risk officers on the reform proposals. The Steering Committee also created two new working groups to address specific issues raised in the commentary process: the Working Group on Country Risk ("WGCR") and the Working Group on Operational Risk ("WGOR"). The WGOR is issuing a separate report focused on operational risk issues. The WGCR, however, combined its efforts this year to respond jointly with the WGCA on the Basel Committee's second consultative proposal, *The New Basel Accord*, released by the Basel Committee in January 2001 (the "Consultative Proposal"). The WGCR is chaired by Mr. William Rhodes, Vice Chairman of Citigroup/Citibank. The WGCR is not issuing a separate report in connection with the current consultative proposals.

The Steering Committee reviews and approves all working group reports, in addition to issuing its own report. A list of Steering Committee members is attached to this report as Appendix B. A list of the IIF Board of Directors, which reviews and approves all IIF submissions to the Basel Committee in response to consultative documents, is attached to this report as Appendix C.

In March 2000, the WGCA, WGCR, and the Steering Committee issued reports welcoming the Basel Committee's proposed three pillars of the regulatory capital framework (i.e., quantitative minimum capital requirements, qualitative oversight and supervisory judgment, and market discipline through enhanced public disclosure) in June 1999.[2] The IIF appreciates that many of the recommendations made in response to the 1999 proposal have been incorporated into the Consultative Proposal. In particular, the Basel Committee's adoption of a modified "Spectrum Approach" for constructing an internal ratings-based approach ("IRB Approach") to regulatory capital as recommended by the IIF last year is particularly welcomed and represents a very substantial step in the right direction of developing a risk-based regulatory capital framework.

However, many technical details still need to be either modified or more fully developed before the regulatory capital framework is finalized. This is especially true for those issues that were raised for the first time in the Consultative Proposal, particularly the treatment of equity, project finance, and maturity.

The IIF also created four emerging market regional working groups to examine the implications of the regulatory capital reform proposals on local banking markets. The four working groups covered

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1 *Recommendations for Revising the Regulatory Capital Rules for Credit Risk*, Report of the Working Group on Capital Adequacy (March 1998) [*hereinafter*, "WGCA 1998"].

2 *Report of the Steering Committee on Regulatory Capital* (March 2000) [*hereinafter*, "SCRC 2000"]. *Report of the Working Group on Capital Adequacy* (March 2000) [*hereinafter*, "WGCA 2000"]. *Report of the Working Group on Country Risk* (September 2000) [*hereinafter*, "WGCR 2000"].

the major emerging market regions of the world: Central/Eastern Europe, Middle East/North Africa, Asia, and Latin America. During the current consultative period, meetings were held in each of the four regions of the world to undertake a detailed discussion of the Consultative Proposals. This report reflects the views articulated in those meetings, which occurred over a four-week period between January 31 and March 2. Given the high degree of consensus among G-10 and emerging market banks on key aspects of the Consultative Paper, members of the emerging market regional groups are listed as members of the Working Group on Capital Adequacy in Appendix A. Where specific regional views should be distinguished from the G-10 views, the text reflects those differences.

This report therefore provides the views of the WGCA, the WGCR, and a cross section of leading emerging market banks on a variety of issues raised by the Consultative Proposal. The companion Steering Committee report articulates the views of chief risk officers and chief executive officers on some aspects of the Consultative Proposal, including broader issues related to the reform of the regulatory capital framework.

The IIF is pleased to continue its dialogue with the Basel Committee in this fundamental reform of the regulatory capital framework. The IIF also believes that the joint efforts of the industry and the supervisory community are leading to the development of a regulatory capital framework that creates real incentives for banks worldwide to implement sound risk management practices going forward.

BACKGROUND/SUMMARY OF PROPOSALS

The proposals presented by the Basel Committee in January 2001 seek to increase the risk sensitivity and longevity of the capital framework significantly. They also seek to address a broader range of banking activities than at any point in the past. This section outlines briefly the key Basel Committee proposals to facilitate understanding of the positions contained in this WGCA report.

Banks currently are required to hold capital amounting to 8 percent of risk-weighted assets to cover the credit risk associated with those assets.[3] Assets are assigned to a fixed set of risk weights (0%, 20%, 50%, and 100%) based largely on the type of obligor (sovereign or corporate) and the location of the obligor (inside or outside the countries that comprise the Organization for Economic Cooperation and Development [the OECD]). As such, the current Basel Accord is exclusively a set of minimum quantitative capital guidelines.

The Basel Committee is proposing to replace this single capital standard with an integrated approach consisting of three pillars. Pillar One will establish quantitative capital guidelines for all bank assets that attract credit risk. Pillar Two will prescribe a specific role for banking supervision in the capital calculation process, empowering those supervisors who implement the guidelines to adjust upwards an individual bank's minimum capital requirement based on the supervisor's review of the bank's internal management and control processes. Pillar Three will mandate specific public disclosures by banks to ensure that market discipline supplements the supervisory process and creates incentives for banks to improve their risk management systems.

The Pillar One capital charge is assessed using two broad systems (the Standard Approach and the Internal Ratings-Based Approach [IRB]) across a variety of obligors (corporates, retail borrowers, sovereigns) and financing vehicles (project finance and equity). In the Standard Approach, a fixed set of risk weights (0%, 20%, 50%, 100%, and 150%) are assigned to obligors based on an assessment of credit quality made by external rating agencies. Unrated obligors are automatically assigned a risk weight of 100%. Distressed or defaulted assets are automatically assigned a risk weight of 150%. *Short-term lending* is defined as lending with an effective maturity of no more than three months, without rollovers. Short-term interbank lending may generally receive a risk weight one category more favorable than that normally assigned to the obligor bank, except that no such short-term credit can receive a risk weight better than the sovereign of the bank's incorporation.

It is expected that the majority of borrowers at banks using the Standard Approach will be unrated and therefore the average amount of capital assessed using the Standard Approach will not change since the effective risk weight on most borrowers will remain the same as under the current framework. This reasoning applies only to what is defined as corporate exposures in the consultative document. Public Sector Entities in OECD countries are generally applied a 20% risk weight under the current capital accord, but in many cases they are not externally rated. Apart from that, there may be OECD sovereigns rated less than AA- (meaning their risk weights will be 20% or higher under the new accord). The same applies to banks seated in OECD countries that are rated less than AA-.

The IRB Approach would permit banks to use their internal data to set regulatory capital requirements. Risk weights for each default probability grade will be derived using a single continuous risk function, with the number of weights determined by the number of rating grades used by the bank. The product of this formula in each identified portfolio will be adjusted to reflect the maturity structure of

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3 The Basel Accord also sets out standards for assessing regulatory capital to cover market risk. However, since those standards are not subject to the current reform effort, this report will not address those rules and will instead focus on the credit risk rules.

the exposures in the portfolio (the "maturity adjustment factor") and to reflect portfolio concentration (the "Granularity Index"). In addition, the risk weights themselves are subject to a variety of adjustment factors to ensure that the capital requirement (a) covers both unexpected losses and (b) is sufficiently conservative. The IRB Approach has been calibrated using a single-factor credit risk model and assuming an evenly diversified portfolio.

The IRB Approach is divided into two sections: Foundation and Advanced. In the Foundation Approach, a bank may use internal estimates to set the PD values.[4] In the Advanced Approach, a bank may use internal estimates additionally to establish values for LGD and EAD. In neither approach may a bank use a multistate model that assesses the impact of correlation and diversification to set regulatory capital requirements, although it is generally acknowledged that this step will be taken by banks and regulators in the foreseeable future. Significantly detailed quantitative and qualitative standards for validating each component of the capital calculation constitute a major part of the length of the Basel Proposal.

The Basel Committee additionally has proposed to expand the recognition of the risk-mitigating impact associated with a variety of instruments. Currently, only sovereign and bank guarantees are recognized as instruments that can reduce risk weights. The Basel Proposal would expand the recognition of collateral to a broader range of financial instruments in both the Standard and IRB Approaches. Physical collateral, with the exception of residential and commercial mortgages, would not be recognized under the Consultative Proposal.

The Basel Committee has indicated in addition that only the Advanced IRB would apply to the retail exposures. The definitions and capital calculation methods in these areas are not clearly delineated in the Consultative Proposal, and the Basel Committee requests advice on how best to proceed. Finally, the revised capital framework, including all validation requirements, would apply on a globally consolidated basis to internationally active banks at least initially in the Group of Ten countries and possibly more broadly.

The Basel Proposals also make recommendations for the establishment of a capital charge under Pillar Two for banks that run excessive interest rate risk. Pillar One capital guidelines for a relatively new risk class (operational risk) are also suggested. As noted in the Introduction, the operational risk proposals are addressed in a separate report issued by the IIF Working Group on Operational Risk.

Comments on the Consultative Proposal are formally requested by 31 May 2001. It is expected that banks and regulators will continue to work together intensively during the summer to finalize key definitional and calculation issues. The Basel Committee has indicated its intent to publish final guidelines by December 2001 or January 2002, so that implementation can begin in 2004.

[4] Consultative Proposal para. 180 does set a floor on the internal PD estimates of a bank: "The PD of an exposure is the greater of the one-year PD associated with the internal borrower grade to which that exposure is assigned, or 0.03%."

EXECUTIVE SUMMARY

The Basel Committee has made significant strides to create an incentive-compatible capital framework that responds to the changes observed in the credit risk intermediation process. WGCA members welcome the proposals to establish a risk-weighting structure aligned to credit quality as expressed through ratings and a structure that recognizes differences in risk profiles across a broader range of credit activities. A capital framework that requires banks to hold more capital for lower-quality assets, when coupled with recognition of credit risk mitigation, supervisory assessments, and increased disclosure, benefits all market participants by creating a self-reinforcing and dynamic process among banks, supervisors, and shareholders that rewards improvements in internal risk management processes.

There is much to like in the new Basel proposals. The new framework will emphasize the importance of portfolio construction and recognize that maturity can have an impact on portfolio-level credit quality. Portfolio construction is not recognized in full, because correlation effects are hardly taken into account. The proposed validation requirements, while voluminous, are largely consistent with good risk management practice at leading global banks. They should also provide some consistency in implementation as well as a roadmap for banks and supervisors that want to improve risk management standards.

These proposals have been crafted over the course of a few years, using a highly interactive dialogue process among banks and their supervisors that is unprecedented. The result, it is hoped, will be a capital framework that reflects modern risk management practices and could establish strong standards for the protection of financial system resilience by fostering robust risk analysis at each bank. Bankers participating in the WGCA appreciate the opportunities to discuss detailed regulatory and risk management issues with the various Basel Committee groups responsible for drafting the proposals. They also appreciate the proactive approach taken by the regulators and the efforts to ensure that well-reasoned and statistically proven arguments are reflected in the new framework.

Banks worldwide welcome in principle the structure and many of the details of the new capital framework. However, not all aspects of the proposal are viewed as fostering the Basel Committee's goals of improving the regulatory capital framework. This Executive Summary concludes with a list of recommendations. The WGCA's concerns and recommendations can be broadly divided into two groups: conceptual, overarching issues and adjustment/detail issues. The remainder of this report will focus on these ideas in the hopes that the final framework can be fine-tuned and tailored to remedy the shortfalls.

With respect to the conceptual issues, the WGCA would like to highlight four key issues that require urgent correction if the new capital framework is to operate in the manner intended. All four issues share the same fundamental flaw: they demonstrate the Basel Committee's recognition that some important issues remain to be resolved (e.g., use of portfolio credit models, addressing the role of provisions to absorb loss, and legal certainty and enforceability). The WGCA suggests that attempts to address these issues only in part will only create distortions in the credit process and undermine the ability of the new capital framework to generate a risk-sensitive approach. Therefore, changes in the following four areas require immediate attention:

1. Capital Cover for Both Expected and Unexpected Losses: The new capital framework is structured so as to create a capital cushion to cover both expected loss (EL) and unexpected loss (UL). The WGCA fundamentally objects to the notion that capital (regulatory or economic) should cover EL because EL tends to be covered by a combination of pricing at the front end of a transaction and general provisioning. The WGCA believes that the Basel Committee's choice is based mostly on a practical desire to finalize the framework without waiting for compatible changes in tax and accounting

rules. Some Basel Committee members may also believe that the current capital framework implicitly covers EL. For banks that will look to the regulatory capital framework as a blueprint for establishing internal risk management systems, this choice will result in an encouragement to measure inappropriately and manage inadequately credit risk. A good example of this anomalous situation is the treatment of distressed debt, which attracts a capital charge under both the Standardized and IRB Approaches despite the existence of specific provisions. The WGCA recommends that regulatory capital should be seen as covering only UL, with capital charges calibrated accordingly. At a minimum, the Basel Committee should clearly designate which portion of each bank's capital requirement applies to EL and which applies to UL and apply adjustment factors (e.g., the maturity adjustment) only to the UL portion of the capital charge.

2. Granularity Index/Credit Risk Models: The WGCA welcomes the Basel Committee's recognition that portfolio concentration matters when assessing the portfolio's risk profile. However, the proposed Granularity Index assesses a capital charge for a concentration of large exposures without evaluating whether the risk of default from the borrowers in the portfolio is in any way correlated or diversified across country or industry sectors. This could result in a significant miscalculation of risk. Assembling the data necessary to operate the Granularity Index also will be extremely costly for all banks, without materially improving insights into risk. Thus, the WGCA does not believe that the Granularity Index can be justified on the basis of a cost/benefit analysis. The WGCA therefore believes that it would be better to wait for recognition of credit risk models to reflect portfolio risks rather than accept an interim solution that could cloud judgment concerning portfolio composition in the near term and with little improvement in the accuracy of the capital calculation.

3. The *w* Factor/Enforceability: The proposed expanded role for collateral in the capital framework provides only partial recognition of its risk-mitigating value at the individual level and, consequently, at the portfolio level. In addition to discounting very conservatively the value of the mitigation in relation to the collateral's perceived liquidity (the more liquid, the more recognition), almost all major forms of collateral will be subject to an additional 15% discounting *w* factor ostensibly to cover residual risks. The stated goals of the factor are to ensure that the capital charge remains a function of obligor credit risk and to ensure that possible losses associated with difficulties in collecting the collateral are covered by capital in the case of obligor default. The cumulative effect of these layers of conservatism is to overstate significantly portfolio-level capital, in addition to ignoring the impact of overcollateralization. The Basel Committee's proposed approach in effect assumes implicitly that one in seven collateral transactions will fail, resulting in a bank loss. Only gradual strengthening of legal frameworks can seek to provide certainty of recovery across the board. Creating an arbitrary, individualized, across-the-board factor to penalize all transactions for this risk is an excessively and unrealistic conservative answer that will create disincentives for banks to seek risk mitigation alternatives. It could also potentially decrease access to credit at fair prices for at least some small and medium-sized enterprises (SMEs) since loans to these entities are most often collateralized with instruments that would not receive recognition under the new framework. Therefore, the WGCA strongly recommends that the *w* factor be eliminated.

4. Capital Markets Emphasis: The proposed framework emphasizes consistently the role of capital markets in the credit intermediation function. The framework favors recognition only of capital markets instruments as collateral and then discounts their value in relation

to their price volatility. The framework favors a mark-to-market maturity adjustment function. The framework calibrates all capital charges using systems and assumptions taken from the corporate portfolio, where many credits are liquid instruments or, through credit derivatives, can become liquid instruments. The framework does not recognize physical collateral (except for residential mortgages), in part due to the lack of secondary market values for such collateral. The framework seeks to create special capital rules to cover project finance, because the lending is characterized by highly idiosyncratic structures and high correlations between borrower and collateral. The framework, in summary, overlooks the macroeconomic importance of banks' lending to small and medium-sized companies, which are the engines of growth in any economy and whose lending is often collateralized by physical collateral.

Correcting these problems will go a long way toward ensuring that the new capital framework establishes appropriate incentives and enhances risk management processes in the near and medium-term future. In addition to these major recommendations, the WGCA also has the following detailed recommendations.

1. Consolidation Rules and Scope of Capital Framework: The WGCA supports the requirement that banks provide their Home country supervisors with confidential descriptions regarding the intentions of a bank to apply the IRB Approach in the short, medium, and long term across the bank. The WGCA believes that such plans must remain confidential with supervisors but that banks should publicly disclose which business entities and/or portfolios are using which approaches. The WGCA assumes that the Basel Committee *de minimis* exemption that would allow banks to use the Standardized Approach for portfolios that are deemed "non-significant and immaterial in terms of size and perceived risk profile" would apply to business units as well. This will help ensure that the regulatory capital framework is not overly burdensome. In addition, the WGCA would like to underscore the importance of "rules or reason" to apply during the implementation stage of the new Basel Accord.

2. Calibration of IRB Risk Weight Function: The WGCA recommends that any adjustment factor to cover PD estimation error should be addressed under Pillar Two on a bilateral basis with individual banks rather than through the risk weight function under Pillar One. The WGCA also believes that it is inappropriate to include an implicit adjustment in the risk weight function reflecting concerns about the quality of Tier Two capital. The WGCA strongly urges the Basel Committee to forestall final decisions on calibration of the risk weight function until after the Quantitative Impact Study (QIS) has been completed. As currently calibrated, there is a clear capital penalty when moving from the Standardized Approach to the IRB Foundation Approach for exposures rated below BB. This would provide disincentives for banks to use the IRB Approach.

3. Lack of Recognition of Most Collateral: The WGCA believes that additional forms of collateral should be recognized in the LGD framework under the Standardized and the IRB Foundation Approaches. The WGCA recommends standard haircuts for as many collateral types as possible to ensure that banks without internal LGD data still have an incentive to mitigate risk by taking collateral. Standard LGD factors should be set based on a combination of external and internal valuation sources and could be determined as averages generated from the recovery experience of a cross section of internationally active banks. The WGCA is undertaking a data-gathering exercise to attempt to recommend average LGD rates for a range of collateral types. In addition, there may be a need for some "rules of reason" for the implementation of the collateral provisions in

some emerging markets. The collateral types most under consideration are physical collateral, third-party guarantees, and accounts receivable.

4. Maturity Effects: In the IRB Approach, a consistent maturity adjustment should be applied in both the Foundation and the Advanced Approach. This adjustment should not be based on a standard three-year maturity period assumption and should recognize effective maturity where banks can calculate it. The WGCA does believe that the seven-year ceiling on the maturity adjustment should remain. The WGCA currently recommends reliance on the Basel Committee's proposed default mode maturity adjustment, at least until such time as banks can use credit risk models to assess regulatory capital. For maturity periods less than one year and greater than one month, the WGCA recommends a continuous maturity adjustment function. The WGCA would be pleased to work with the Basel Committee this summer on a project to develop such a function. In the Standardized Approach, the WGCA does not propose a standard maturity adjustment function because of concerns that it would complicate the regulatory capital framework. However, the WGCA has serious concerns about the limitation of short-term credits (and the resulting favorable capital treatment) to three months. The WGCA may be willing to devote resources to developing alternative proposals on the treatment of short-term exposures in the Standardized Approach.

5. Standardized Approach: The WGCA recommends the addition of a 75% risk weight to introduce additional granularity into the risk weights. The WGCA is concerned that the application of the 100% risk weight to retail exposures would result in inappropriately high capital charges for retail and small business lending. The WGCR recommends that local currency ratings be recognized for purposes of setting regulatory capital requirements for obligations in local currency.

6. IRB Approach: With respect to validation requirements, the WGCA questions where the requirement to use pooled data and whether the requirement that no more than 30% of gross exposures fall in any one borrower grade are appropriate. The WGCA believes that the IRB Foundation Approach should contain a "partial-use" rule for each bank's own estimates of LGD that would allow such estimates to be used on a collateral type-by-collateral type basis rather than on an "all-or-nothing" basis once a bank has qualified for the IRB Advanced Approach. The existing credit conversion factors should be retained and the newly proposed factors should be set at the level proposed for the Standardized Approach to maintain as much consistency between the Standardized and IRB Approaches as possible.

7. Retail Exposures: The WGCA believes that significant work is necessary to develop an appropriate regulatory capital framework for retail exposures. While each bank should be able to determine its own segmentation in the retail portfolio, banks should be required to be capable of mapping each segment to a PD, LGD, and EAD estimate (either for each component individual or as "backed out" from an EL estimate) for the purpose of determining a regulatory capital requirement. The definition of default may need to vary from that used for corporate exposures, and the data validation requirements also may need to vary, particularly with respect to the number of years of data history required. It will be important to avoid generating overly prescriptive minimum regulatory capital and validation standards because this may preclude the development of future risk management systems. The WGCA would be pleased to work with the Basel Committee to develop an appropriate retail regulatory capital framework.

8. Equity Exposures: The WGCA recommends a distinction between equity holdings that are held for trading purposes (for which a stress-testing approach is recommended) and those that are not traded. These latter holdings should be treated using a framework comparable to that used for other banking book exposures with a few modifications to avoid confusion since such holdings are not properly subject to default risk. Thus, the term *PD* should be replaced by the term *probability of loss (PL)*, which should be determined as the probability that the company in which the bank has the investment will experience a default event in any senior debt instrument held by the bank. The term *LGD* should be replaced by the term *loss (L)* and should be set at 100% because of the assumption that a bank will suffer a complete loss on its investment at the time of the credit default event. Finally, such holdings should be treated as being undated and therefore maturity adjustments should not be applied.

9. Project Finance: The WGCA accepts the general definition of project finance contained in the Consultative Proposal. However, the WGCA believes that a distinction is required between cash flow finance (i.e., "infrastructure projects") and the financing of the construction and leasing of movables and commercial real estate of a similar risk profile (i.e., "asset-based finance"). The WGCA believes that the general corporate framework should be used for all project finance exposures. Given the unique characteristics of project finance, it may not be possible to meet the existing corporate exposure validation requirements for each of the required components (i.e., PD, LGD, and EAD). Nevertheless, the WGCA believes that best-practice techniques for estimating EL or its components can be identified. Thus, the WGCA will work to develop a set of recommended best practices and oversight standards for validation of banks' project finance rating and risk management systems.

10. Securitization: The WGCA believes that the Consultative Proposal's recommended treatment of securitization activities is too stringent and risks disrupting the valuable aspects of existing activities. The WGCA has a number of recommendations on how the negative effects of the proposals may be ameliorated. In addition, the WGCA believes that those securitization vehicles created prior to the implementation date for the new Basel Accord should be "grandfathered" from certain elements of the proposed rules.

11. Small and Medium-Sized Enterprises (SMEs): The WGCA has identified a concern that the Consultative Proposal will have a harsh effect on SMEs. It is extremely important that implementation of the new Basel Accord does not have any unintended negative consequences on lending to this important sector of the economy.

12. Pillar Two: Given the rigor of the validation requirements for the IRB Approach, most WGCA banks do not expect that there will be additional minimum capital requirements applied under Pillar Two. The Basel Committee should carefully consider how to limit supervisory discretion under Pillar Two to help ensure a level playing field. The WGCA is pleased to see the identification of banking book interest rate risk as a distinct risk type and approves of the outlier approach proposed by the Basel Committee.

13. Pillar Three: The WGCA believes that the proposed Pillar Three disclosure requirements contained in the Consultative Proposal are much too detailed and do not provide information that will be useful to market participants in evaluating the risk management practices of banks. The WGCA has proposed an alternative set of disclosures that it believes will be useful in further educating the public as to the risk profiles of banks.

CHAPTER ONE: GOALS, DEFINITION, AND SCOPE OF CREDIT RISK REGULATORY CAPITAL CHARGE

The Consultative Proposal is unprecedented in its length and level of detail. Most Working Group members appreciate the great degree of transparency provided by the Basel Committee in the Consultative Proposals because it provides the basis for a dialogue on a number of key issues that could not be addressed in the earlier 1999 proposals: definition of capital, scope of the credit risk capital charge, and calibration of the credit risk capital charge. Without clarity, consistency, and conceptual symmetry on these three issues, the regulatory capital framework will not be able to achieve its goals. This chapter will comment on the goals, definition, and scope of the regulatory capital charge for credit.

A. Goals

The Basel Committee has articulated the following specific objectives that the new regulatory capital framework seeks to meet:

- The Accord should continue to promote safety and soundness in the financial system and, as such, the new framework should at least maintain the current overall level of capital in the system.
- The Accord should continue to enhance competitive equality.
- The Accord should constitute a more comprehensive approach to addressing risks.
- The Accord should contain approaches to capital adequacy that are appropriately sensitive to the degree of risk involved in a bank's positions and activities.
- The Accord should focus on internationally active banks, although its underlying principles should be suitable for application to banks of varying levels of complexity and sophistication.[5]

The Basel Committee also has stated that depositor protection is one of the main goals of banking supervision.[6] These objectives will serve as the touchstone for analysis in each section of this report.

Banks from around the world share a commitment to these same goals. The WGCA in particular is pleased to see that the Basel Committee's explicit goals for the first time establish as priorities the need (a) to encourage good risk management practices such that regulatory and internal economic processes are aligned with each other and (b) to enhance competitive equality. These were goals that the WGCA recommended should be included in the Accord in 1998.[7]

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5 *Overview of the New Basel Capital Accord*, Consultative Document issued by the Basel Committee on Banking Supervision, para. 29 [*hereinafter*, "Overview Document"].

6 Id., p. 1.

7 WGCA 1998, p. 30 ("Working Group members believe that the regulatory capital framework should seek principally to encourage good risk management practices by bank management. This can be accomplished by ensuring that the framework is aligned as closely as possible with the economic capital decisions made by management in well-run banks. It should also seek to generate capital requirements that are highly correlated to a bank's risk profile.") and p. 32 ("Adoption of the Working Group's recommendations could also create a more level playing field among banks because all participants would be encouraged to excel and upgrade their internal capabilities… The playing field would be level in that all banks would have an equal opportunity to compete for recognition of their internal models for capital adequacy purposes. The Working Group therefore believes that equality of treatment under the current capital rules can create counterproductive inequalities in competitive opportunities by denying banks the option of being judged on the basis of their risk profiles.")

It should be noted that achievement of the final goal (a focus on "internationally active" banks) presents a number of conceptual challenges for both banks and regulators. The emphasis on internationally active banks has been in the Basel Accord since the late 1980s, when the number of such entities could be more easily identified. Modern telecommunications and computing capabilities have significantly expanded the number of internationally active institutions. Generally benign economic conditions combined with the elimination of the Soviet bloc have significantly expanded the number of banks that operate internationally but largely only within their economic region and perhaps small operations in one or two major financial centers (e.g., London, New York, Tokyo, Hong Kong, Singapore). The multilateral financial institutions and rating agencies, as well as domestic policymakers, have adopted the Basel Committee's capital framework as the minimum standard and look to the new capital framework also to provide a set of guidelines that can be used within a broader range of countries and capital markets than was originally intended. The Basel Committee, at the same time, must craft a regulatory capital framework that responds to rapid advances in financial innovation and can serve as a flexible minimum standard for many years without becoming obsolete.

This context demonstrates the significant burden placed on any effort to reform and update the regulatory capital framework. Banks active in the Institute's working groups understand the sometimes conflicting policy priorities implied by the focus on "internationally active" banks in modern credit markets. They also understand the competitive implications of complying with the new Basel standards when other nonbank credit providers operate without such restrictions. The Steering Committee report highlights a number of areas where these conflicts can and should be resolved quickly. This Working Group report will instead focus on some specific areas with respect to credit risk portfolios where conflicting priorities or ambiguities could undermine the effective implementation of the new capital framework.

B. Definition of Capital and Provisioning

The WGCA begins its analysis with the proposition that "regulatory and economic capital seek to cover the unexpected losses (UL) in a bank's portfolio. Capital serves as a cushion to ensure that unanticipated market situations or deterioration in borrower credit quality do not present catastrophic challenges to any given bank's solvency. Capital does not, however, seek to ensure that banks will be immune from failure."[8] Recognizing that portfolio-level assessments for UL would require regulatory recognition of credit risk models, and recognizing that such recognition would not be part of the current round of revisions, the WGCA in 2000 recommended that "regulatory risk weights should be assigned to ranges of EL, with a scaling factor to reflect" volatility of the EL (i.e., the value of UL).[9] The WGCA then proposed a standard formula for arriving at EL values (PD * LGD * EAD = EL). Finally, it is important to note that in 1998 the WGCA requested that the Basel Committee revise its treatment of general loan loss reserves and its definition of Tier Two capital to recognize that modern risk management processes (particularly dynamic provisioning) might require a reassessment of the scope and function of Tier Two capital.

The Basel Committee instead has chosen to revise the asset side of the capital framework without opening a dialogue on the definition of capital (i.e., the liability side of the framework). Specifically, the Basel Committee has noted that for the corporate portfolio "the proposed risk weights are based on calibration to assessments of EL plus UL. The effect of setting weights in this manner will vary depending on national definitions of provisions and loan loss reserves and on the extent to which banks have general provisions that are greater or less than the limit of 1.25% of risk-weighted assets that apply to the inclusion of general provisions in supervisory capital. The Committee welcomes comment on this

8 WGCA 2000, p. 2.

9 Id., at p. 22.

specific issue as well as on the broader issue of how to ensure adequate coverage of both EL and UL within the context of regulatory definitions."[10] This risk weight function would also apply to sovereign and bank exposures (with variations for LGD values in the Foundation IRB). Retail exposures would also be subject to the risk-weighting function, but the portfolio would only attract half the capital required by the function.

The WGCA believes that this approach creates a number of distortions. The most important distortion is that the proposed risk weights cover not only changes in PD values (such that higher PDs carry a higher capital charge) but also additional regulatory concerns: consistent estimation errors in the PD function and imperfect loss absorption capacity of Tier Two capital. Finally, the risk weights are based on a maturity-dependent total loss amount, which fails to account for income and, therefore, results in a much higher capital figure than would result from the use of a default-mode maturity adjustment. This results in a regulatory capital framework that sets capital requirements to cover both EL and UL without differentiating between the two. The risk-weighting function therefore systematically overestimates the risk associated with each PD band and, thus, misprices the risk from a regulatory capital as well as a risk management perspective.

This approach might be appropriate, given the inclusion of general allowances in Tier Two capital. However, some national accounting regimes do not permit banks to hold general allowances. Many banks cover expected losses through product pricing, business revenues, provisions, and dynamic reserves. Requiring banks additionally to hold minimum regulatory capital to cover EL also results in some double-counting, especially for banks that hold general loan loss reserves to cover the aggregate possible losses associated with all credits. The result is a systematic overstatement of risk and capital, despite the fact that a capital charge linked to default probability should make it marginally easier to recognize the risk-reducing effects of risk mitigation.

This approach is particularly harsh on retail assets, which have comparatively high, but fairly stable, expected losses. The high margins available on these assets act as a buffer against losses, before recourse to general provisions.

The WGCA therefore believes that it is inappropriate to require regulatory capital to cover expected loss (EL) and that the regulatory capital charge should only address unexpected loss (i.e., EL volatility). Additionally, there is no need for the regulatory capital charge to cover EL if banks disclose EL amounts publicly. As will be seen in the WGCA recommendations on Pillar Three, the WGCA does believe that any disclosure framework should require banks using the IRB Approach to disclose EL amounts.

The WGCA believes that the Basel Committee's efforts to structure a capital framework around both EL and UL are based mostly on a practical desire to finalize the framework without waiting for compatible changes in tax and accounting rules, particularly related to provisioning. Most WGCA members are concerned about the relationship between the accounting and regulatory capital frameworks. They note that the regulatory capital framework will be fundamentally affected by how loan value is recorded in bank balance sheets. In Europe, recognition is governed by the International Accounting Standards Committee (IAS 30). Currently, that standard is under review. The comment period for the contemplated changes (which, among other things, could require banks to use full fair values on their balance sheet assets) is two years, creating the situation in which the new capital framework would be implemented in an environment where accounting rules could be fundamentally different than present rules.

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10 *The Internal Ratings Based Approach*, para. 259 [*hereinafter*, "IRB Proposal"].

Changes in accounting rules would necessarily have implications for provisioning policies and practices as well as the definition of capital since the Basel Accord currently permits Tier Two capital to include some general loan loss reserves. No members of the IIF working groups have an interest in delaying completion of the capital framework until the accounting rules have been finalized. Capital market participants require certainty, and many aspects of the proposal can be finalized this year if the conceptual basis is correct.

The conceptual basis for establishing regulatory capital based on EL and UL together is not, however, correct. Confusing the two could create significant arbitrage opportunities, especially for those banks that have moved into pricing capital at the transaction level. It would also undermine the informational content of spreads and create uncertainty among analysts and bank counterparts since a combined capital amount would obscure which portion of the capital charge covered EL and which portion covered the volatility of that EL estimate. This could create distortions in the market since the key variable to consider when evaluating the relative riskiness of different banking institutions is the volatility of EL estimates.

Bankers around the world share this analysis. They are also practical, however. IIF members therefore recommend that if the Basel Committee does not want to enter into a discussion on the definition of capital at the current time, then at a very minimum the following structural adjustments to the regulatory capital framework should be made:

- In the IRB Approach, the credit risk capital charge should be clearly disaggregated between the amount of regulatory capital allocated to EL and the amount of minimum regulatory capital to cover volatility of the EL estimate (i.e., to cover UL). The different amounts of a bank's regulatory capital allocated to those components should be disclosed separately. Such transparency would create a mechanism whereby banks with good risk management practices for managing EL and UL would receive a benefit because it would be transparent to the markets and reflected in the capital requirement.

- Also in the IRB Approach, the maturity adjustments and the Granularity Index should not be applied to the EL calculation since these adjustments are more properly related to UL.

- In the Standard Approach, banks should not be required to apply a 150% risk weight against extremely low quality loans that have already been subject to provisioning and, thus, are already covered by a cushion. The same is true regarding extremely low quality loans in the IRB Approach.

- Finally, if EL is included with the definition of capital, then 100% of general loan loss reserves should be recognized as part of Tier Two capital.

WGCA members recognize that these recommendations represent a pragmatic approach to challenging double-counting and definitional issues in the short term. These recommendations would not, however, address the underlying definition of capital directly. Both the definition of capital and the IIF recommendations are likely to need revision depending on the outcome of the accounting debate. **The WGCA would therefore welcome the opportunity to engage the Basel Committee in a debate on the definition of capital after the regulatory capital framework has been finalized this year so that banks and their regulators are prepared for changes related to the accounting framework and so that all parties are prepared for implementation.**

C. Scope of Credit Risk Regulatory Capital Charge

Irrespective of the resolution of the definitional issues, the Consultative Proposal suggests a capital framework in which a number of elements overlap. Failure to remedy this situation will result in excessive double-counting of risks and, therefore, excessively high capital charges. Perhaps more important, these overlaps create the possibility for banks to misprice their risk and create problematic risk management incentives. One set of key overlaps relates to the quantitative calculation of capital charges (by failing to coordinate with other elements of the proposed framework); another set of key overlaps relates to the application of the proposed consolidation standards. Each will be discussed in turn.

1. Double-Counting

It is expected that the majority of banks in the world will use the Standard Approach to calculate their regulatory capital. This would include, at a minimum, banks in emerging market economies as well as banks in economies experiencing market downturns. Few banks deliberately lend into the lowest credit grades. However, during market downturns, it can be expected that the number of borrowers that become "doubtful" will increase. Requiring banks to hold capital cushions for those credits, in addition to the provisions and loan loss reserves created while individual borrowers' ratings are migrating downward, would increase capital requirements unnecessarily. The WGCA also notes that monitoring compliance with provisioning policies is the response not only of management and stockholders but also of regulators under Pillar Two supervision. It would also restrict the amount of credit available for use within a financial system at precisely that point in time when policymakers might wish to keep credit lines open to forestall a broader economic problem. Eliminating the need to assess a 150% risk weight against doubtful credits *where provisions have already been taken* would therefore eliminate some of the procyclicality that accompanies use of this risk weight.

In addition, establishing a portfolio-level capital charge against exposures that are already recognized as in distress and subject to specific provisions is flawed conceptually. The calibration and parameterization of the risk weight assumes a portfolio of performing assets. A poorly rated asset may be more likely to default than other assets, but it is not already doubtful or distressed.

The WGCA notes that with respect to the capital cover for defaulted loans, the Basel Committee has already recognized the problematic incentives created by such an approach. The Committee has made the following observation: "One possible treatment is to measure exposures as loans net of charge-offs and specific provisions and to apply the IRB risk weight which is not affected by charge-offs and specific provisions. In this case, however, for each dollar of charge-off taken, the bank's total capital declines dollar for dollar, but IRB capital requirements for that loan decline only by a significantly lesser amount. This creates incentives for banks not to charge-off loans in a timely fashion. The Committee invites comment on this issue."[11]

By removing defaulted loans from the category of assets that attract regulatory capital charges, this element of double-counting is largely removed. The Basel Committee is rightly concerned about the incentives to avoid loss provisioning if the capital charge is excessively conservative regarding these assets.

2. Consolidation

The Consultative Proposal indicates that the new capital framework would apply "on a consolidated basis to internationally active banks," including holding companies that are parents of

[11] IRB Proposal, para. 260.

banking groups and "majority-owned or -controlled banking entities, securities entities (where subject to broadly similar regulation or where securities activities are deemed banking activities) and other financial entities (e.g., those involved in financial leasing, issuing credit cards, portfolio management, investment advisory, custodial and safekeeping services and other similar activities that are ancillary to the business of banking)."[12] Investments in unconsolidated entities as well as insurance subsidiaries will be fully deducted from capital.[13]

In addition, "a banking group that has met the requisite minimum requirements and is using the IRB approach for some of its exposures must adopt the IRB approach across (a) all exposure classes … and (b) across all significant business units (groups, subsidiaries and branches) within a reasonably short period of time. Banks must agree to an aggressive, articulated plan to adopt the IRB approach across all exposure classes and business units with the home supervisor. Within this period, no capital relief will be granted for intra-group transactions between the IRB bank and a business unit on the standardized approach. This includes asset sales or cross guarantees."[14] Concern exists that, among other things, these provisions will create an anomalous situation in which banks will be required to assess capital and internal ratings on internal transactions.

The WGCA understands that the new capital framework must contain incentives for banks to undertake the labor-intensive effort of collecting data and implementing internal control systems for purposes of implementing the IRB approach consistently within each banking group. It is recognized that failure to undertake a coordinated and comprehensive approach across business entities and portfolios could create arbitrage opportunities within the capital framework and could encourage some banks to keep using the Standardized Approach rather than undertake the capital investment associated with qualifying to use the IRB Approach.

However, it should be remembered that no recognition of diversification exists within the new proposed framework. This increases the importance of proper calibration because the only process for achieving capital relief would be to proceed along the spectrum rather than adjust portfolio composition. Proper calibration will then ensure banks' incentives for implementing IRB compliance plans without resorting to regulator-mandated schedules.

The WGCA appreciates the Basel Committee's recognition that implementation of the IRB approach within a globally active bank could take some time and, thus, supports the concept of requiring banks to agree on a reasonably "aggressive" implementation plan with their Home country supervisors. Participants also underscore here that if the new capital framework is crafted well, banks will be quite motivated to implement the IRB Approach as quickly as possible without this requirement as it will be in their best interest to do so. **The WGCA also appreciates the *de minimis* exception provided by the Basel Committee, which states that "some exposures in non-significant business units that are immaterial in terms of size and perceived risk profile may be exempt … subject to national discretion."[15]**

The WGCA assumes that the Basel Committee intends for this exception to apply to portions of portfolios that are deemed "non-significant and immaterial in terms of size and perceived risk profile" as well as business units that satisfy this requirement. Such a *de minimis* rule will go a long way toward ensuring that the regulatory capital framework is not overly burdensome.

12 Consultative Proposal, para. 1-5.

13 Id., para. 7 and 9.

14 Id., para. 160.

15 Id.

While WGCA banks support the policy underlying the proposed consolidation standards, serious concerns exist regarding its implementation. One practical effect of the proposals would be to require each bank to subject its own subsidiaries to the bank's internal rating process. Some "rules of reason" must be crafted to govern implementation, otherwise banks will be held back unduly from qualifying to use the IRB approach. The proposed consolidation standards do not contemplate situations in which local/host authorities may not be able or willing to implement the IRB approach, thus rendering any efforts at global implementation impossible.

The proposed consolidation standards also do not contemplate situations in which the necessary data to validate internal ratings in a specific country or portfolio may take years to develop because the local capital markets are not sufficiently developed or because loss given default statistics may be impossible to collect (e.g., sovereign obligations). The proposed rules do not contemplate situations in which a foreign subsidiary operating in a major financial center (e.g., London or New York) may have self-contained risk management systems and data that may be significantly more advanced than those available at the Home country level. Finally, the proposed consolidation rules are silent on how to address implementation in the case of a major acquisition.

These concerns are not limited to the credit risk arena. In addition, the competitive implications associated with this situation are also significant. Both will be addressed in the Steering Committee report. **With respect to the credit risk aspects of the consolidation proposals, however, the WGCA would like to underscore its support of the requirement that banks provide their Home supervisors with a confidential description of its intentions for applying the IRB Approach in the short, medium, and long term.** This description would include a listing of those portfolios and legal entities considered "non-significant and immaterial" and for which the Standardized Approach is appropriate under the *de minimis* exception. The WGCA believes that such plans should remain confidential with supervisors because they may contain information about or provide indications of future business decisions. **At the same time, the WGCA agrees that a bank should disclose publicly which business entities and/or portfolios are using which regulatory capital calculation methodologies (i.e., Standardized, IRB Foundation, IRB Advanced).**

The WGCA would also like to underscore the importance of regulatory communication and coordination and the necessity for "rules of reason" to apply in the implementation stage. For example, regulatory recognition of a bank's IRB Approach should not be withheld because a local regulator cannot or will not implement the IRB Approach. Failure to implement can occur for a number of reasons ranging from the unintentional (a country in economic crisis cannot devote regulatory resources to implementing the IRB Approach until the country is on stable footing again) to the deliberate (a country can choose to forbid implementation of the IRB Approach domestically if locally incorporated banks are not in a position to implement it). Regardless of the motivation, such situations would unfairly penalize both local and foreign banks from using more advanced and accurate risk management systems to measure their capital requirement.

CHAPTER TWO: CALIBRATION OF THE CREDIT RISK REGULATORY CAPITAL CHARGE

The WGCA has long recognized that no regulatory capital framework will ever be completely co-extensive with internal economic capital requirements for the simple reason that regulators will always require a minimum cushion to protect the financial system and those banks in the financial system. That cushion is established through calibration, whereby the outline of banks' internal risk measurement methodologies are adjusted to take into account regulatory priorities. This is the cost of doing business under a banking charter. The issue here is not whether such calibrations will occur but, rather, whether they have been assessed and implemented appropriately. The key inquiry is whether calibrations will excessively distort pricing and risk management decisions such that the regulatory capital framework cannot meet its goals of providing incentives for prudent risk taking by regulated institutions.[16]

The WGCA's analysis begins with the proposition that clarity is needed from the Basel Committee on exactly how the new capital framework would be calibrated to the former 8% risk-weighted standard and how the capital charges should be allocated across EL and UL. As stated previously, the WGCA strongly objects to a capital framework based on a combination of EL and UL, especially if the relationship between the two is not transparently identified in the new capital framework. Similarly, the building blocks for calibration must be spelled out clearly. Finally, it is important that prudential factors to cover a wide range of supervisory interests should be disaggregated from risk measurement factors (e.g., PD and LGD and EAD) to ensure that the information value of these factors is not clouded by regulatory adjustment factors.

The WGCA believes that the Consultative Proposal incorporates a variety of elements that, taken together, appear excessively conservative and seem to result in a systematic overestimation of regulatory capital. In particular, the WGCA is concerned about the following elements: IRB risk weight function, the *w* factor, lack of recognition of the full range of financial collateral and physical collateral, treatment of maturity, and validation requirements for distribution of exposures across rating grades. Each of these will be discussed below.

A. IRB Risk Weight Function

The WGCA welcomes the use by the Basel Committee of a credit risk model to calibrate the risk weights[17] and the decision to adopt a single continuous risk-weighting function, as recommended in the WGCA's report last year.

While it is the global consensus of senior risk managers from around the world that the proposed regulatory capital framework is directionally correct in general, some concerns about the details of the risk-weighting function exist. The WGCA in particular questions the use of a single-factor model for calibration and the lack of transparency concerning how the parameters have been estimated. Such a

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[16] WGCA 1998, p. 7 ("The Working Group recognizes that it is the responsibility of regulatory authorities to determine the appropriate overall level of capital needed in the banking system. It also recognizes that, in some instances, the proposed internal models approach to regulatory capital for credit may increase the amount of capital required for some assets. Nonetheless, a regulatory capital system that reflects true credit risks in the financial system would be preferable to the current system that can distort pricing and portfolio construction.")

[17] IRB Proposal, para. 165 (The calibration of the risk weights under the IRB approach is "based on the same credit risk modelling framework underpinning the economic capital systems of other most sophisticated banks, but modified so as to ensure coverage of both expected and unexpected losses. Under this framework, risk weights are implicitly calibrated so that with a specified minimum probability (the target solvency probability) capital will cover total credit losses. Implicitly or explicitly, the calibration of risk weights involves (a) estimating the volatility of uncertainty in portfolio credit losses over a time horizon taken to be one year and (2) given this estimated volatility, determining the level of capital needed to achieve possible target solvency probabilities.")

model could inadvertently create competitive disadvantages for internationally active banks relative to more concentrated local banks, because the majority of diversification benefits would not be reflected in a single-factor model and could render the regulatory capital framework seriously inconsistent with internal economic capital processes, especially in combination with the portfolio distribution requirements and the application of the Granularity Index.

It is also unclear whether the model proposed for the risk-weighting function has been subject to testing either using simulated or real data. However, recognizing that a dialogue on credit risk modeling will be conducted after the capital framework has been finalized, the WGCA instead would like to focus its comments on a series of parameters and assumptions used in the regulatory model which, taken together, create the risk that the regulatory capital framework will not achieve the goal of being risk sensitive and of establishing appropriate risk management incentives.

Three specific components of the risk weight function merit special attention since these components generate a skewed and excessively conservative calibration. The first is an adjustment factor for probability of default (PD) estimation error. The second is an adjustment factor for uncertainty concerning the absorptive capacity of Tier Two capital. The third assesses the assumptions and parameters chosen for calibration and compares the incentive structures for the IRB Approach relative to the Standard Approach.

1. PD Estimation Error

The risk-weighting function contains an adjustment to reflect a concern by regulators that PD estimates may be systematically wrong, resulting in incorrect pricing and incorrect (probably excessively optimistic) capital requirements. The function applies to all banks using the IRB Approach at all times, regardless of the caliber of the bank's internal ratings process and regardless of whether the internal ratings over time have proved to be generally consistent with loss experience. In other words, the PD estimation error adjustment assumes that all banks are consistently wrong and excessively optimistic about their credit risk *and* that these biases are reflected in their internal ratings *and* that loss experience does not provide a "reality check" that forces the bank to change its perspective and its rating system. It should be noted that no similar PD estimation error factor is incorporated into the risk-weighting function under the Standard Approach, implying that no risk of estimation error exists at external rating agencies.

The WGCA has serious concerns about the wisdom and structure of the PD estimation error factor as applied in the risk-weighting structure. Banks in the WGCA observe that systematic errors in estimating defaults are likely to generate observable losses over a fairly short period. Most bank risk managers participating in the WGCA have indicated that if their internal rating system were incorrect by one step systematically, they would reject the model before it were even used for economic capital allocation. It is worth noting here that if a bank systematically benchmarked its internal ratings to external agency ratings, it might not even be subject to this perceived risk.

In addition, market discipline (even without the expanded disclosure requirements contemplated under the proposed Pillar Three transparency standards) will require management to answer difficult questions from key shareholders and analysts concerning the state of the internal rating system. Failure to provide acceptable answers or to initiate review and adjustment of the internal rating system is likely to create significant concerns with the caliber of management and consequent pressure on the bank's bonds and equity. Banks that in bad faith are systematically seeking to understate losses through an excessively optimistic or aggressive rating system are most likely to need to answer questions from their regulator concerning the rating system's failure to reconcile with experienced losses. In both cases, the banks would have to be considered badly managed and would not likely be eligible for recognition of their internal ratings.

Designating highly rated defaults as ratings mistakes would also generate a number of undesirable results. First, publicly available default histories from all external rating agencies would likely become invalid. Second, defining precisely which event types constitute a "mistake" and which should be included in PD histories would erode the information content of those histories over time due to unavoidable differences in characterization due to human judgment. Finally, excluding all highly rated defaults would mean that PDs no longer reflect the true risk in a credit portfolio.

Applying a PD estimation error factor to the calculation of each risk weight on a continuous basis magnifies the capital requirement far out of proportion to the real risk of good faith errors. It penalizes unfairly all banks for the possibility of bad faith on the part of what is likely to be only a small number of banks. Finally, it also creates disincentives for banks to develop more sophisticated risk management systems since such a large capital cushion would be created to muffle errors across the industry rather than at any specific bank. It is, in summary, an overly broad solution to a simple problem. One WGCA bank has estimated the amount of measurement errors as follows:

Unadjusted PD	Implied Measurement Error	PD Adjusted for Measurement Error
0.03	36%	0.041
0.05	35%	0.068
0.1	34%	0.13
0.2	34%	0.27
0.5	33%	0.67
0.7	33%	0.93
1	34%	1.34
2	35%	2.70
3	36%	4.09
5	39%	6.94
10	45%	14.50
15	52%	22.83
20	61%	32.24

These estimates were created as follows. Without the PD estimation error multiplier, the Benchmark Risk Weight (BRW) formula would have been: $813.75 \times N[1.118 \times G(PD) + 1.288] \times [1 + .0470 \times (1-PD)/PD^{0.44}]$. This is because 976.5 / 1.2 = 813.75. Using this formula, a 0.934% PD is needed to obtain a risk weight of 100% instead of a 0.7% PD in the BRW formula. Therefore, the implied measurement error for a 0.7% PD could be calculated as 33% (0.934% / 0.7% = 1.334). In other words, to increase the risk weight of a 0.7% PD by 20%, you would need to increase the PD by 33%. Comparable calculations were made for all other PD values to complete the table and solve for the PD estimation error.

Two main observations can be drawn from this estimation. First, there is a systematic adjustment factor that distorts the PD estimate. The estimation error function should be inverted since the likelihood of mistakes is higher for good-quality credits where few defaults are generally observed. Second, the slope of the adjustment factor is excessively steep, increasing exponentially as credit quality deteriorates. In any event, it is worth noting that PD estimates are *estimates*, not certain predictions. The issue is not whether the estimates are precisely correct but rather whether realized losses are generally within reasonable bands around the estimate.

The regulatory capital framework should not artificially inflate all banks' capital to cover mistakes by badly managed banks that, in all likelihood, would not qualify to use the IRB Approach given the robust validation standards in Pillar One and the oversight study in Pillar Two. It is critically

important for the credibility of the regulatory capital framework that the same PDs be used in both the economic and regulatory capital allocation processes.

The implicit adjustment for PD estimation error also has the perverse effect of making the regulatory capital framework more procyclical. The reason for this is that it magnifies substantially the amount of capital required for lower-quality credit ratings, where borrowers will tend to migrate during hard times. As a practical matter, if any kind of PD estimation error is likely to exist at all, it will most likely occur in the higher-quality credit ratings, where defaults are not expected.

The Working Group appreciates that supervisors have a responsibility to cover risks for the banking system as a whole and may be more conservative than the private sector might believe is justified. However, treating all banks as if they were systematically misestimating default probabilities without determining first whether such problems in fact exist at individual institutions would grossly overstate the magnitude of the risk associated with misestimation while simultaneously creating major distortions in risk measurement and pricing. **Therefore, the WGCA recommends that if the Basel Committee is committed to assessing a regulatory capital charge in the credit risk portion of the capital framework to cover PD estimation error, then any such adjustments should be assessed under Pillar Two on a bilateral basis since systematic errors in estimating PDs must be judged and corrected at the individual bank level.** It is important to note here that deliberate or inadvertent errors in PD estimation likely will require remedial measures targeted to correcting the PD estimation process and the risk management structure.

Such a system could operate in the same manner as that which applies in the market risk context. Namely, a specified number of exceptions (i.e., realized losses incompatible with the bank's internal rating system) would generate a Pillar Two review and adjustment process, which would disappear in future periods if changes in the internal rating system resulted in subsequent loss experiences that were more consistent with expectations. The Working Group would be pleased to make more specific recommendations on how this Pillar Two process could be used to replace the Pillar One PD estimation error factor, if the Basel Committee would be amenable to such a proposition.

2. Adjustment for Absorptive Capacity of Tier Two Capital

The risk-weighting function also contains an adjustment factor probably best described as an "insurance policy" to cover an event in which a bank's Tier Two capital is insufficiently robust to absorb expected losses. The actual formula used to achieve this adjustment is not clear. It is clear, however, that this adjustment factor (especially in combination with the PD estimation error discussed above) inflates PD risk weights excessively.

The WGCA believes that adjusting risk weights to take into account the quality of capital is neither appropriate nor advisable. The quality of Tier Two capital does not affect obligor default probabilities. Skewing the risk weights to address concerns with the quality of Tier Two capital will generate inappropriate and inaccurate estimates of risk, which will distort decision making within risk management processes. Thus, it should not be used as a justification for generating across-the-board changes in PD values, and therefore risk weights, for the entire industry. If concerns exist with respect to the definition of capital and which instruments should be included in capital, then the Working Group believes that these issues should be addressed directly in a manner that does not undermine the risk measurement process.

It is also important to note that, with the exception of systemic collapses, all loans do not experience problems simultaneously. Tier Two capital helps banks manage liquidity problems before they become insolvency problems that warrant regulatory attention. It is also unfair to require a standard

factor to address this concern. **In summary, the WGCA agrees that it is inappropriate to include an implicit adjustment to default probabilities that reflect concerns with the quality of Tier Two capital.**

3. Parameter Choices/Incentives

The risk-weighting function also contains a series of explicit assumptions that, taken together, craft an excessively conservative capital requirement. The general formula would seem to assume an asset correlation value of 0.2 and a confidence interval of 99.5%, with an average maturity of 3 years, an LGD value of 50%, and a PD value of 0.7%. In the Consultative Proposal, the risk weights are anchored at 976.5 to ensure that exposures at a PD value of 0.7 receive the equivalent of a 100% risk weight. In addition, the calibration assumes a perfectly distributed and infinitely granular portfolio. Finally, the Consultative Proposal calculates aggregate capital requirements as the sum of homogenous portfolio risks, in the process completely ignoring the diversification benefits associated with being active in more than one line of business. The maturity issues will be addressed separately.

The WGCA notes that the Consultative Proposal would require banks to use PD estimates that represent a long-term average based on the last five years of data. **WGCA members question whether the use of pooled data is an appropriate validation standard.** This is in part because credit cycles typically are longer than five years, so use of a pooled PD standard would not eliminate the potentially procyclical impact of the new capital framework. While banks with longer runs of historical data would be required to use this data in estimating their PDs,[18] it is possible that banks with shorter data series might accrue a competitive advantage since their PD estimates would incorporate only a fairly benign economic environment relative to longer time series.

A number of WGCA members query whether a limit should be extended on the length of the time series used as well, since data may become stale or may incorporate rating systems that are now obsolete or no longer used by the bank. On the other end of the spectrum, it should be noted that banks using market spreads to estimate PDs will not have had five years of history with which to form a pooled average. In theory, a perfect point-in-time rating could be calibrated with a one-year history, but this might generate excessively procyclical capital requirements because during business downturns obligors would be downgraded to lower ratings and attract more capital. Some banks believe that this effect can be mitigated through use of through-the-cycle ratings. While this solution would decrease fluctuations in capital requirements, it would also mean that capital requirements remain more constant despite decreased portfolio credit quality.

If the regulatory capital framework were constructed properly, a capital incentive would exist *on average* for banks to move from the Standardized to the IRB Approaches for calculating regulatory capital. However, as can be seen in the chart below, it is clear that a capital penalty exists when moving from the Standardized Approach to the IRB Foundation Approach for exposures rated below BB. This may provide disincentives for banks to move to the IRB Approaches. The risk weights below might also induce some banks to adopt the Standardized Approach and then pick "bad risks" only, as their resulting capital requirements would then be lower than for banks going by the IRB Approach. Regulatory capital arbitrage might hence induce market segmentation.

The WGCA agrees that it is necessary and appropriate for some risk weights in the IRB Approach to be higher than those in the Standard Approach to have a more risk-sensitive capital framework. However, significant discontinuities such as those demonstrated below should be smoothed out to avoid creating inadvertently perverse incentives.

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18 IRB Proposal, para. 225.

Rating Grade	PD(%)[19]	Standardized RW	IRB Foundation RW[20]
AA-	.03	20 basis points	14 basis points
BBB	.20	100	45
BB	.70	100	100
BB-	1.0	100	125
B	5.0	150	331
B-	10	150	482

Other WGCA members would estimate the highest risk weight in the IRB Foundation Approach as 625.

The WGCA notes that the Basel Committee is conducting a worldwide Quantitative Impact Study ("QIS") to determine the impact that the proposals might have on capital requirements for a wide-ranging set of banks within the G-10 as well as within the emerging markets. The QIS will provide information regarding the actual impact of the risk weight function on bank's regulatory capital requirements given the composition of their loan portfolios. Thus, the QIS will provide important information regarding the effects of the risk weight function. The Institute strongly supports this effort and looks forward to working with the Basel Committee to determine the appropriate calibration for the overall capital charge, and any appropriate adjustments to the risk-weighting function, based on the outcome of that study. **The WGCA urges the Basel Committee to forestall final decisions on calibration until after the QIS has been completed this summer.**

B. *w* Factor

The Basel Committee has indicated that the *w* factor has two purposes: (a) to encourage banks to focus on and monitor the credit quality of the borrower in collateralized transactions and (b) to reflect the fact that, irrespective of the extent of overcollateralization, a collateralized transaction can never be totally without risk.[21] The *w* factor is set at zero for guarantees provided by sovereigns and banks and 0.15 for all other credit protection, including cash and recognized credit derivatives.[22] The *w* factor thus seeks to reduce the effect of credit risk mitigation activities on a bank's regulatory capital requirement. It is possible that it also may be used to cover risks that are included in the operational risk regulatory capital charge (e.g., legal risks).

The WGCA believes that the *w* factor should be eliminated because it was chosen arbitrarily and decreases incentives for banks to take on collateral. The logic of imposing a *w* factor is flawed in three main respects. First, while it is true that even collateralized transactions carry risk, this does not justify imposition of a standard penalty on all collateralized transactions. The proper analysis in this context is a focus on probability of loss. The possible risk of unenforceability should not be overstated. Most banks that operate in systems where legal enforceability is either uncertain or slow often will not base their risk assessments, pricing, and risk control processes on the availability of collateral. Even where enforceability is slow, the existence of collateral can provide a good source of leverage to provide incentives for better borrower behavior. Excessively high or broad capital charges applied indiscriminately will only discourage banks from attempting to exercise good risk management practice by securing collateral. It is worth noting in this context that losses due in part to faulty documentation or enforceability problems are already incorporated into credit risk default data that are

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19 Using S&P static pools average cumulative default rates from the S&P *Ratings Performance 1999* report.

20 Assuming an LGD = 50% as the Basel Committee stated that it used in its calibration of the risk weight function. Consultative Proposal, para. 174.

21 Overview Document, para. 88.

22 Id., para. 90.

used to estimate and manage PD, LGD, and EAD. Therefore, those types of losses are already covered in the capital framework without requiring an additional adjustment factor.

The second reason the use of the *w* factor is flawed is that banks already focus primarily on borrower credit quality for lending and rating purposes. The fact that banks transact on a collateralized basis confirms their risk assessment process and their unwillingness to take unsecured risk. Penalizing collateral recognition for regulatory capital purposes through the application of the *w* factor would provide a disincentive to this valuable risk management technique. Third, it is inappropriate to impose a harsh blanket charge for amorphous "residual risks" without defining and attempting to quantify the scope, frequency, and severity of those risks. This approach, by creating a misimpression of accuracy, will only create distortions in credit markets. For example, the WGCA notes that cash collateral would be subject to a *w* factor despite the fact that cash on deposit used to collateralize a loan does not risk losing its value that significantly. In addition, the *w* factor potentially presents opportunities for double-counting since it fundamentally reflects concerns about recovery rates and those concerns are more appropriately covered through LGD values. Applying a blanket *w* factor to all collateral without distinguishing across collateral types introduces inaccuracies and possible arbitrage opportunities when evaluating what kind of collateral to accept and how much value to ascribe to it within the capital framework.

Therefore, barring the complete elimination of the *w* factor (the WGCA's preferred alternative), the WGCA recommends that LGD values should be adjusted to account for any uncertainty in the recovery on any particular collateral type. This would allow for collateral-type specific adjustments rather than the application of a blanket *w* factor to all transactions. The WGCA would further recommend that the *w* factor should be adjusted as follows:

- Cash deposits should receive a *w* factor value of zero as there is no uncertainty regarding the mitigation value of cash when taken as collateral.

- For guarantees, the *w* factor applied should take into account the double default effect. By applying the *w* factor to guarantees, the regulatory capital framework could create the inconsistent situation whereby a loan to a guarantor would require less regulatory capital than a loan to a different counterparty covered by a guarantee from the same guarantor. Thus, the *w* factor should be adjusted to account for the double default effect.

C. Lack of Recognition for the Full Range of Financial and Physical Collateral

The Basel Committee proposes to expand the recognition of collateral in the regulatory capital framework to include a variety of financial instruments. The amount of recognition will depend critically on the perceived liquidity associated with the instrument, such that more liquid instruments receive lower haircuts. Physical property (except for retail mortgages) is generally not recognized. Instead, lending secured by physical property is generally segregated to a "project finance" portfolio wherein the risk-weighting function remains unclear. Also, the treatment of small to medium-sized businesses remains unclear, and the recognition of risk mitigation for small business lending would be minimal at best.

The WGCA welcomes the expanded recognition of mitigation instruments in the Consultative Proposal, noting that this position represents a favorable response to the WGCA's recommendations last year. In particular, the WGCA specifically recommended "that the Basel Committee establish a schedule of haircuts or discount values based on industry averages … Such a system would facilitate the establishment of a level playing field by ensuring comparable cross-border treatment of risk mitigants

when setting recovery rate values."[23] **However, the range of eligible financial collateral is unduly restrictive, especially with respect to sovereign assets rated below BB and corporate assets that are deemed ineligible.** The markets for these asset types are generally liquid, so no good reason exists to discourage acceptance of these assets as credit risk mitigation tools, especially in markets where the majority of available financial instruments may be rated in this range. Although the haircut formulas seem convoluted, WGCA members generally agree that the processes seem fair and generally consistent with good risk management practice.

As currently drafted, the credit risk mitigation proposals also encompass financing transactions such as repurchase agreements ("repos"). Credit risk managers make active use of collateral in both financial and physical form to mitigate risk. Therefore, the proposal to expand the recognition of collateral in the regulatory capital rules is warmly welcomed. However, this process is very different from activity in the secured financing markets, where two halves of a trade form an indivisible whole. **Secured financing transactions with suitable documentation may therefore require separate treatment than that provided under the credit risk mitigation standards proposed for the new capital framework.**

The WGCA also is concerned that the Consultative Proposal focuses too strongly on financial collateral to the detriment of physical collateral. Banks in the Working Group from around the world note that the majority of lending, especially lending to small and medium-sized businesses, is secured using physical assets. Failure to address this problem could eliminate incentives both to use the Foundation IRB Approach and to lend to small and medium-sized businesses, especially since a number of banks may not be permitted by their national regulators to use the Standardized Approach. Bankers also note that the existence of physical collateral can provide significant bargaining power with recalcitrant obligors and can be a very useful credit risk management tool, even if no collection action is taken.

Implementation of the proposed standard without expansion to include at least some physical assets could also have the unintended effect of undermining the competitiveness of local banks in emerging markets. This is because those banks would be placed in the anomalous position of asking their corporate customers to post liquid bonds or equities as collateral rather than physical collateral to price credit competitively. Emerging market banks worry that foreign banks using their internal rating systems for regulatory capital purposes will be able to enter the local markets and offer cheaper uncollateralized credit (or credit using traditional physical collateral) to the same corporate customers, thus pricing the local banks out of the market for good corporate obligors.

Regardless of the resolution of these definitional issues, the WGCA believes that additional forms of physical collateral should be recognized in the loss given default (LGD) framework under the Standardized and IRB Foundation Approaches. The WGCA recognizes that to receive regulatory recognition, LGD estimates would need to be consistent and comparable across countries and standards for ensuring the accuracy of both the estimates and the asset valuations would need to exist.

For example, the WGCA would suggest a standard haircut for as many collateral types as possible. The goal in setting haircuts should be to ensure that banks without internal LGD data would still have an incentive to mitigate risk by taking collateral without eliminating the capital incentive to move to the Advanced IRB Approach. Thus, for illustrative purposes, one could construct a set of haircuts as follows:

Example: Loan to a corporation to finance purchase of a machine

1. LGD (uncollateralized): 50%

[23] WGCA 2000, p. 34

2. LGD Foundation IRB Approach (collateralized): 40%
3. LGD Advanced IRB Approach (collateralized): 30%

The WGCA believes that the standard LGD factors should be set based on a combination of external valuation sources (i.e., demonstrating market-based prices) and internal valuation sources (i.e., demonstrating consistency in recovery experience across institutions). External valuation sources provide an essential, third-party, objective evaluation of the resale value associated with a variety of physical assets for which secondary markets exist. Consistency in internal valuations could be judged in relation to these external sources as well as actual recovery experiences. Comparability across countries would be established through reliance on similar valuation sources as well as standard LGD factors in the Foundation Approach. The standard LGD factors could initially be compiled as averages generated from the recovery experiences of a cross section of internationally active banks.

The WGCA is undertaking a statistical exercise that seeks to establish recommended average LGD rates for a range of collateral types. This project is expected to be completed by August 2001.

Emerging market banks would also recommend that some "rules of reason" be established for implementation of the collateral provisions. In particular, the following suggested rules of reason were recommended to ensure that local regulators implemented the new framework with a minimum of disruption:

- Local regulators should specify which types of collateral will receive recognition in the domestic market.

- At the regional level, supervisors should agree to recognize securities issues by governments in the region as collateral.

- The definition of a "recognized exchange" for credit risk capital adequacy purposes should be guided by, and consistent with, the definition used for market risk capital adequacy purposes.

Many of these recommendations could also be helpful to smooth implementation in G-10 markets.

D. Treatment of Maturity

The WGCA welcomes the Basel Committee's explicit recognition of maturity as a factor affecting credit risk.[24] The WGCA recommendations last year noted that "clearly, credit risk contains a maturity component. Maturity affects credit risk across time, rather than just at the short-term end of the spectrum … Therefore, the Basel Committee should develop an appropriate approach for addressing maturity across the broad span of tenors, not just the short-term."[25] In addition, the higher the average credit quality of a portfolio, the more maturity plays a role in defining the credit risk profile.

The Basel Committee has responded to this request by generating two different approaches for assessing regulatory capital in relation to maturity in the IRB Approaches. It also has identified the key concerns that the Basel Committee holds with respect to both approaches. First, the Basel Committee is concerned that the additional cost of compliance associated with implementing the maturity adjustment would be excessive. Second, the Basel Committee is concerned that "errors in both the choice of the most

[24] IRB Proposal, para. 118 ("Maturity is a key factor affecting the credit risk of a bond or loan. Other things the same, the shorter the maturity of a loan, the less its underlying credit risk.")
[25] WGCA 2000, pp. 42-43.

appropriate framework for calibrating maturity adjustments and in the calibration itself under the IRB could render minimal any gains in risk sensitivity."[26] Third, the Basel Committee is concerned that explicit recognition of maturity could create incentives for banks to arbitrage their exposures "by restructuring a long-term exposure as a series of short-term contracts."[27]

Within the Standardized Approach, the Basel Committee proposes to retain the binary approach to maturity by imposing a special treatment on short-term credits only. The current regulatory capital framework assesses a preferential risk weight (20%) for interbank credits and loans with a residual maturity of up to one year guaranteed by banks incorporated outside the OECD. No special treatment addresses loans with maturities in excess of one year. The new capital framework would maintain special treatment of short-term maturities but would restrict the definition of "short-term" to effective maturities of three months or less that are not subject to rollover arrangements and would only make the treatment available to banks not captured within the 150% risk-weighting band.[28] No risk weight for these short-term credits may dip below 20%.[29]

Working Group members note that maturity is the essence of credit decision, although it has a second-order impact on actual credit risk. Effective maturity for credit is the time between a decision to commit to a credit risk and the time the exposure is either liquidated or a new, actionable credit decision is made. Actual maturities for credit exposure range from intraday to 25 years or more, at the extremes. The WGCA believes that the Basel Committee's concerns with the use of maturity in the capital framework can be met. Members support the addition of a maturity component to the regulatory capital charge in the IRB framework. Questions exist, however, about the proposals for incorporating a maturity component to the IRB Approach and for the treatment of short-term credit in the Standardized Approach.

Conceptually, WGCA members would like to highlight that discontinuities between the structure of the regulatory capital framework and economic capital allocation processes generate opportunities for arbitrage. The greater the disconnect between the two, the greater the potential arbitrage. The proposed framework creates major distinctions in the treatment of maturity among the Standardized, Foundation IRB, and Advanced IRB Approaches. These step functions are inconsistent with credit risk management processes that emphasize assessment of a credit's maturity whenever credit decisions are taken. The WGCA notes, for example, that the Basel Committee has taken specific measures with respect to the treatment of trade credits to ensure that the negligible risk associated with these instruments is not overstated due to their short-term duration.

A greater sensitivity to the true risk underlying an instrument, rather than only an emphasis on its maturity, is an approach that should permeate the capital framework. **Rather than create (or, in the case of the Standardized Approach, perpetuate) such step-wise functions, the WGCA believes it would be better to implement a more continuous or smooth approach to the treatment of maturity in the capital framework.** The remainder of this section will present recommendations for how to address the perceived shortcomings of the Basel proposal.

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26 IRB Proposal, para. 122.

27 Id.

28 *The Standardized Approach to Credit Risk*, Basel Committee on Banking Supervision (January 2001) [*hereinafter*, "Standardized Approach Proposal"], para. 26 and footnote 6. Locally denominated and locally funded short-term claims will also be eligible to receive a risk weighting lower than that of the local sovereign under certain circumstances, but only under certain conditions. Id., para. 28.

29 Id., para. 26.

1. Treatment of Long-Term Credits: The IRB Approach

Working Group members believe that the assumption of a standard three-year maturity period in the IRB Foundation Approach is inappropriate and unnecessary since most banks can access maturity information in their existing information technology systems fairly easily and the related cost of undertaking a maturity analysis for regulatory capital purposes would not be significant.

In applying the maturity adjustment, it is crucial that effective, as opposed to remaining, maturity can be used. Banks should be allowed to use remaining maturity, if unable to calculate effective maturity. This is particularly the case for mortgage and other asset-backed securities, where prepayments lead to the amortization of the structures well in advance of the legal contractual maturity date.

The WGCA would welcome the opportunity to work with the Basel Committee on methods for calculating effective maturity. Any solution to the calculation of effective maturity must, in particular, ensure that adequate treatment of revolving credits exists to prevent gaming. WGCA members believe this problem can be solved pragmatically for purposes of the regulatory capital framework, and attention should be devoted to this issue to prevent inappropriate treatment of all other short-term exposures in the new framework.

WGCA members believe that the proposed seven-year ceiling on the maturity adjustment should remain in place. This is because the linearity assumption, which is necessary for the adjustment factor, fails for longer periods. In addition, estimation errors increase with time, and moving beyond seven years could introduce unacceptable mistakes when estimating annualized long-term PDs.

However, the WGCA believes that the Consultative Proposal's mark-to-market maturity adjustment function suggested for the IRB Advanced Approach is inappropriate for a number of reasons. First, WGCA members have received information that the function used by the Basel Committee may have been based on a limited sample of data biased toward mark-to-market approaches.[30] Second, WGCA members also note that the vast majority of banks continue to lend funds to obligors through illiquid instruments in which maturities are significantly longer than the one-year time horizon normally implied by mark-to-market systems. Third, use of a mark-to-market maturity function requires use of a credit risk model to be accurate in assessing risks associated with portfolio term structure. **Consequently, the WGCA must recommend reliance on a default mode maturity adjustment, at least until such time as banks can use credit risk models to assess regulatory capital.**

The choice of any transition matrix used to generate the maturity adjustment will, of necessity, be arbitrary, as is application of a regulatory capital framework. Each transition matrix may generate different results when applied to the same portfolio. The WGCA reviewed a number of options before agreeing that the Basel Committee's proposed default mode maturity adjustment in the Foundation IRB Approach was preferable to the mark-to-market maturity function at this time. The choice was based primarily on a review of alternatives that suggested no material differences existed between the Basel proposal and other leading default mode matricies. In addition, the Basel proposed default mode

[30] The WGCA understands that the mark-to-market maturity adjustment function was created using data from a sample of banks that may have been as small as four in number. In addition, the majority of banks in this sample used processes that were highly biased toward mark-to-market risk assessment processes because they relied exclusively on bond spreads in a model that is sensitive to the impact of liquidity risk on credit portfolios. These characteristics make the process and outputs incompatible with most banks' portfolios, which are neither liquid nor subject to fair valuation.

adjustment factors seemed to be producing results most closely parallel to adjustment factors/maturity effects seen in most banks' portfolios.

It is important to note that maturity is a secondary, not a primary, driver of credit risk. In addition, migration matrices take time to develop stability as applied to a portfolio. As a consequence, it would not be appropriate to impose a full adjustment factor based on an external transition matrix. **The WGCA therefore recommends that a haircut function be applied to the maturity adjustment to ensure that the impact of maturity on credit quality is not overstated.** Methodological questions also exist about whether it would be more appropriate to apply the maturity adjustment factor to the output of the risk-weighting process or whether it would be better to adjust the risk-weighting function itself to incorporate a maturity component. **The WGCA looks forward to a dialogue with the Basel Committee this summer on how best to balance the need for simplicity in the regulatory capital framework with the need to reflect robustly maturity in the capital framework.**

2. Treatment of Short-Term Maturities

The WGCA believes that default probabilities for less than the credit horizon (i.e., less than one year) must have their own credit analysis, regardless of which approach (Standardized or IRB) used by the bank to calculate regulatory capital. Default probabilities for short maturities are bounded and measurable at the short end. It is inappropriate to extrapolate maturity adjustments for short-term credits from long-term credits because such an analysis must assume that short-term credits are automatically rolled over until at least a one-year effective maturity is achieved. This assumption is unrealistic because it ignores two related credit facts. First, credits that fail tend to deteriorate over time. Second, and related, deterioration itself takes time. Short maturities permit banks to limit the amount of time during which a credit decision is exposed to bad outcomes.

Consequently, some short-term credits will be less risky than some long-term credits. In addition, regardless of relative credit qualities among obligors, it is also true that intraday or one-month credits necessarily must attract a lower capital charge than one-year credits because these credits are not included within a bank's portfolio for very long and default experiences with such credits are very low. Although an overnight exposure that is unwound the next day will have a distinctly higher default probability than the intraday credit, that default probability will be lower than the one-month or one-year default probability. **Thus, the Basel Committee should provide explicit recognition to short-term maturities in both the IRB and Standardized Approaches.**

a. The IRB Approach

Consequently, the WGCA believes that the maturity adjustment function in the IRB Approach should recognize maturities below one year. Participants agree that it is inappropriate to assess short-term exposures as if they were one-year exposures. They also agree that failure to recognize short-term maturities in the IRB Approach would create an anomalous situation whereby such maturities were only recognized in the Standardized Approach through a penalty measure rather than creating a cohesive structure that recognizes the reduced credit profile of such maturities. **Instead, a continuous short-term maturity function should be created, and the WGCA would be pleased to work with the Basel Committee this summer on such a project.**

Relatedly, the WGCA also believes that the one-year limitation for maturity mismatches on mitigants should be eliminated. While the WGCA understands that one motivation for the limitation may be a desire to avoid balance sheet manipulation, members also believe that this limitation is arbitrary at best and may provide a disincentive to the use of mitigation techniques. Eliminating the one-year

limitation would also have the beneficial effect of removing some distortions in the short-term (less than 364-day) markets.

b. The Standardized Approach

The situation with respect to the Standardized Approach is more complex. Some bankers suggest a specific maturity adjustment across all maturity periods in the Standardized Approach. **However, the WGCA does not propose a specific maturity adjustment for the Standardized Approach due to a concern that its application could complicate the capital framework excessively.**

As noted, the Consultative Proposal recommends that the definition of "short-term" lending in the Standardized Approach be truncated to maturities of three months or less, without rollovers. However, "in order to maintain liquidity in interbank markets," the Basel Committee would permit national supervisors to assign a risk weight one step less favorable than that assigned to the sovereign for short-term interbank exposures that are locally funded in local currency but in no case could such a risk weight be less than 20%.[31]

Banks around the world have expressed significant concern with these proposals. In last year's report, the WGCA noted that "much short-term credit is documentary in nature and is secured by bills of lading or other shipping documentation that effectively mitigates credit risk on banks' books while providing a channel for international trade to function smoothly. It is far from clear that documentary credits pose any substantial credit risks to banks, regardless of their cancellation terms."[32]

The WGCA also noted that "short-term interbank lending serves an important role in assisting banks in their liability management … (and that) the importance of short-term interbank markets will tend to be higher in countries where an interbank swap market is not yet fully developed. The impact of reducing liquidity in short-term interbank markets would be felt by all banks … The additional cost likely would be passed along to borrowers through the 'term liquidity premium' in loan contracts, thus tightening credit terms."[33]

The WGCA's analysis and concerns have not changed. Faced with a shrinking definition of *short term*, banks are increasingly concerned that implementation of the new definition could have destabilizing effects. This is true both for the global WGCA and the emerging market working groups. All banks care about the impact of this proposed rule, whether or not they will be directly subject to it, because they will be operating in markets where the majority of banks will be subject to the rule and where volatility could increase as a result.

In this regard, many banks noted that the default risk of a three-month interbank credit (especially without rollovers) is negligible and that assigning a 20% risk weight under the base-case scenario significantly overstates the risk associated with such extensions of credit. Some of the Institute's emerging market banks have expressed a willingness to contribute resources to developing such an alternative proposal if the Basel Committee were willing to entertain it seriously.

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31 *The Standardized Approach to Credit Risk*, para. 14, 25, and 28 [*hereinafter*, "Standardized Approach Proposal"].

32 WGCA 2000, p. 41.

33 Id.

E. Exposure Distributions

The Consultative Proposal would require that banks using the IRB Approach have a "meaningful distribution of exposures across [rating] grades and … [that] no more than 30% of the gross exposures (before on balance sheet netting) should fall in any one borrower grade."[34] In effect, this requires banks to create artificially balanced portfolios.

Banks from around the world have expressed concern about the impact that this requirement could have, especially in combination with other requirements. For example, banks from emerging markets note that the number of highly rated borrowers in their markets is limited and their ability to attract as clients highly rated borrowers from other jurisdictions may be extremely limited. Most banks also observe that their boards of directors and shareholders might question seriously a concerted effort to lend to lower-quality borrowers solely for the purpose of meeting this diversification requirement. Finally, compliance with this standard would be virtually impossible for banks whose boards had approved a lending strategy targeted at middle-quality obligors.

In summary, the proposed requirement may create an inappropriate incentive for banks to lend into sectors or segments not otherwise recommended by the bank's internal risk management priorities. The WGCA is concerned that this requirement, in combination with the Granularity Index, imposes penalties for concentration without providing corresponding recognition for correlation. Therefore, the WGCA recommends its elimination.

[34] Consultative Proposal, para. 242.

CHAPTER THREE: THE STANDARDIZED APPROACH

The WGCA accepts the Basel Committee's reliance on external ratings to set risk weights in the Standardized Approach given the lack of viable alternatives. The WGCA therefore appreciates the expansion of the universe of potentially acceptable ratings to include those assigned by export credit agencies whose ratings and methodologies are publicly disclosed. However, the WGCA still has several concerns regarding the risk weights in the Standardized Approach. These concerns relate to the lack of granularity in the number of risk weights, the possible reliance on foreign currency rather than local currency ratings, and the treatment of short-term lending. Concerns with the relationship between the 150% risk weight and provisioning requirements as well as the treatment of short-term lending have been addressed separately.

A. Lack of Granularity/Number of Risk Weights

WGCA members believe that the number of risk weights in the proposed Standard Approach is insufficient. Last year, the WGCA recommended that the minimum number of risk weights in the Standardized Approach be at least eight for the corporate portfolio, with substantial increases (rather than step-wise increases) as credit quality deteriorates.[35] Emerging market banks, where the Standardized Approach is most likely to be applied broadly, are particularly worried that the Standardized Approach's five risk weights do little to help local banks prepare to implement an IRB Approach. They note that the move from a system that relies on five buckets for assessing credit risk to a system with a minimum of six to nine performing and two nonperforming grades is significant and costly, especially in areas where relationship banking remains the market norm. Increasing the number of risk weights in the Standardized Approach would not likely make the approach more attractive than the IRB Approach for banks looking to improve their internal risk management structures. Instead, it would ensure that banks were encouraged to apply more detailed analysis to obligors and develop a credit culture emphasizing credit quality. **Thus, the WGCA recommends that a 75% risk weight be added to the framework.**

B. Lack of Granularity/Treatment of Noncorporate Exposures

The proposed Standardized Approach would apply a 100% risk weight to all other assets (i.e., retail, equity, and project finance exposures) for which risk weights are not otherwise specified.[36] **The WGCA believes that this will result in inappropriately high capital charges, especially for retail and small business lending, which are critical sources of growth in many economies**.

C. Local versus Foreign Currency Ratings

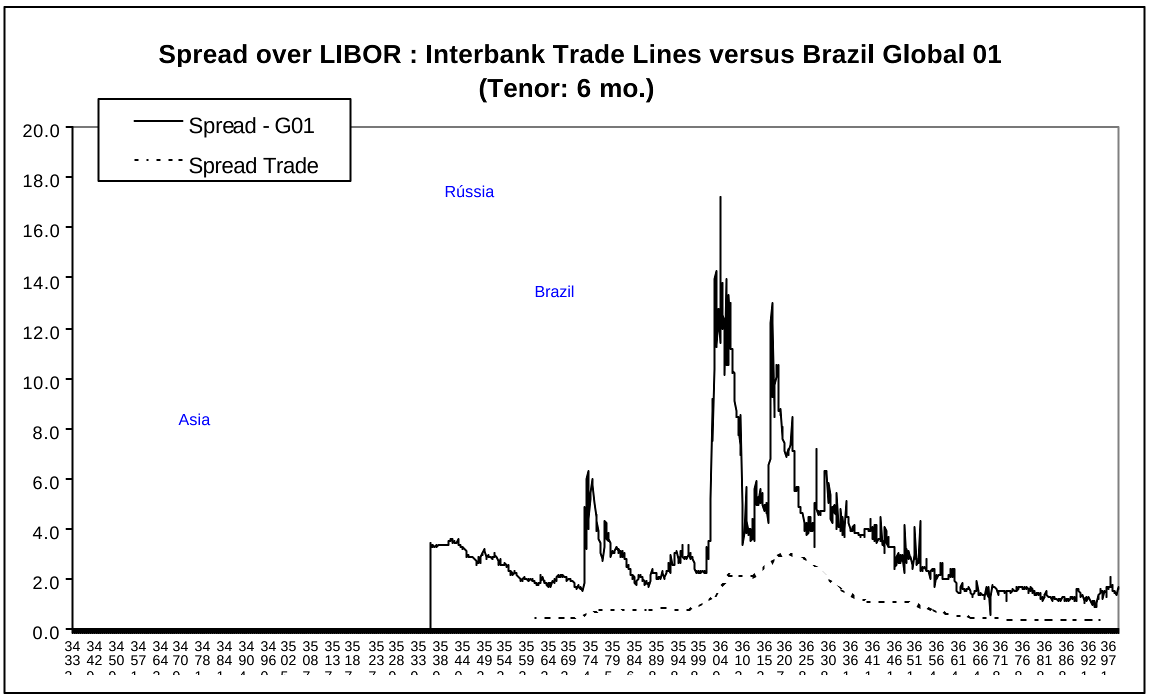
The Working Group on Country Risk (WGCR) notes and appreciates that no separate capital charge for country risk was created in the Standardized Approach. However, they note with concern the failure of the proposed framework to differentiate between foreign and local currency obligations to the private sector. They note that beneficial risk weights are applied to lending extended to local sovereigns using local currency and local funding. The logic underpinning this treatment also holds for similar obligations to private sector entities: transfer and currency risks are not present. In addition, default probabilities associated with lending to an obligor can be affected by whether or not an instrument is funded using foreign or local currency, a fact reflected by the growing use of differential rating structures for such instruments by independent rating agencies. Lending to local borrowers in local currency by definition is less risky than lending to such borrowers using foreign currency. **Consequently, the WGCR recommends that the new capital framework recognize local currency ratings in both the**

35 WGCA 2000, p. 4.

36 Consultative Proposal, para. 41.

Standardized and IRB Approaches for purposes of setting regulatory capital risk weights for obligations in local currency.

The WGCA would also recommend that local currency ratings be used for trade finance. Although such obligations are funded in foreign currencies, the transfer risk (i.e., the risk of default due to the imposition of foreign exchange controls by the local authority) is quite small. This can be seen from the fact that there are few historical losses associated with trade finance obligations; the fact that cash flows from trade are countercyclical; and the fact that the risk spread charged to these loans, even during periods of stress in emerging markets, is lower than that charged for different credit or debt instruments of the same maturity. As an example, the graph below shows the differences between the yield of trade-related lines of credit offered to Brazilian banks and the differences of yield offered on Brazilian Government Global 01 bonds. As seen in the graph below, the spread on the Brazilian Government bonds has been 100 basis points higher during relatively stable periods and up to 1500 basis points higher during crisis periods.



Thus, this shows that local banks that are raising money based on their trade finance credits may be deemed less risky than government instruments of the same maturity. **Given examples such as these, the WGCA recommends that local currency ratings be used for trade finance obligations even though these obligations are nominally funded in foreign currency.**

CHAPTER FOUR: THE IRB APPROACH—CORPORATE, BANK, AND SOVEREIGN EXPOSURES

The WGCA notes the very positive response of the Basel Committee to its March 2000 recommendations on the IRB Approach. In particular, the WGCA appreciates the development of a spectrum of options for calculating regulatory capital using internal systems, labeled the IRB Foundation and IRB Advanced Approaches. The new capital framework would set risk weights for corporate, bank, and sovereign exposures as a function of default probability (PD), loss given default (LGD), and exposure at default (EAD) while also taking into account maturity.

The WGCA notes that this approach will go a long way toward developing a risk-sensitive regulatory capital framework. However, there are some details that will require modification to achieve both industry and supervisory objectives. These recommendations should be viewed as "fine-tuning" a proposal whose outline is generally directionally correct with respect to corporate exposures.

A. Probability of Default (PD)

The WGCA believes that the validation requirement that would require banks to use a pooled average PD calculated over a five-year period requires more flexibility in approach. The WGCA appreciates the fact that pooled averages may reduce volatility in PD data and, therefore, may smooth the capital requirement. This approach may be reasonable for producing PDs based on historic frequencies. However, those banks that use PD values based on market information (e.g., bond spreads or equity prices) will not necessarily have five years of history from which they can form a pooled average.

Not all banks agree, however, that market-implied default rates (whether from bond spreads, external vendors, or other sources) are a proper source of PDs for regulatory capital purposes. Banks sharing this perspective note that market-implied default rates are not "pooled" PDs but, rather, are the result of statistical default models that should be validated. It is possible that these models may also produce point-in-time ratings that could increase the potential volatility of capital requirements. Banks relying on market-implied ratings, of course, believe that such ratings present a more accurate and appropriate information source than traditional methods.

Regardless of the methodology used by a bank, it is clear that the proposed requirement that banks use average pooled PDs could limit the data that some banks could use to estimate PD values.

It is possible that the five-year pooled PD requirement is proposed solely in an effort to eliminate a potential source of volatility in the capital framework. The WGCA appreciates the necessity to incorporate forward-looking elements of the credit cycle into the capital framework. However, banks in the WGCA believe that using a pooled PD requirement to achieve that goal is misguided and could have the unintended effect of undermining the value of many banks' internal rating systems. Efforts to combat possible procyclical elements in the capital framework should be more direct and transparent to avoid clouding the informational value of PDs. **Therefore, the WGCA believes that the proposed use of pooled data should be more flexible to preserve the diversity of risk management practices.**

B. Loss Given Default (LGD)

In addition to the expanded recognition of physical collateral discussed above, the WGCA believes that the regulatory capital framework should contain a "partial use" rule that would allow banks to use their own estimates of LGD in the IRB Foundation Approach on a collateral type-by-collateral type basis rather than on an "all-or-nothing" basis. This rule would allow banks to use their own estimates of LGD values associated with specific collateral types as soon as the bank is able to

validate historical recovery rates for that collateral type. This provides the maximum incentive for firms to collect the information necessary to analyze and validate the mitigation value provided by collateral.

C. Exposure at Default

The WGCA notes that there is an inconsistency in the credit conversion factors for undrawn commitments between the Standardized Approach and the IRB Foundation Approach. **The WGCA does not believe that there is a justification for this inconsistency and believes that the credit conversion factors should be set at the level prescribed for the Standardized Approach.** Therefore, commitments that are unconditionally cancelable should received a 0% credit conversion factor, commitments with a maturity less than one year should receive a 20% credit conversion factor, and commitments with a maturity of greater than or equal to one year should receive a 50% credit conversion factor. Finally, a credit conversion factor of 100% should be applied to lending of banks' securities or the posting of securities as collateral by banks.

In addition, the WGCA believes that the current credit conversion factors (noted below) should remain in the regulatory capital framework. These factors are as follows:

1. Direct credit substitutes (e.g., general guarantees of indebtedness) – 100%
2. Transaction-related contingent items (e.g., performance bonds, standby letters of credit) – 50%
3. Short term, self-liquidating trade credits – 20%
4. Sales and repurchase agreements and asset sales with recourse where credit risk remains with bank – 100%
5. Forward asset purchases, forward deposits, and partly paid shares and securities that represent commitments with certain drawdown – 100%
6. Note issuance facilities and revolving underwriting facilities – 50%

D. Granularity Index

The Basel Committee is additionally proposing to add an amount to overall capital based on a measure of portfolio distribution known as the "Granularity Index." This proposal attempts to capture the fact that portfolio composition can affect a bank's risk profile. This recognition, combined with the Basel Committee's explicit acknowledgment that implementation of the IRB Approach will facilitate recognition of internal models,[37] is welcomed in principle by the WGCA. The WGCA notes that the Granularity Index will not apply to retail portfolios, yet the retail risk-weighting function nevertheless incorporates a 4% charge for granularity. The WGCA therefore also is concerned about ambiguities regarding possible application of a Granularity Index to other portfolios.

Significant concerns with the construction of the proposed Granularity Index exist. While the Consultative Proposal recognizes that correlation across borrowers is important, it only recognizes a limited kind of correlation[38] and does not address the distribution of exposures across countries or industry sectors. The WGCA notes that when banks consider concentration in their portfolios they examine it on all three levels. In addition, banks also consider the effect of correlations, or lack thereof, that may mitigate the effect of any particular concentration. Given the lack of transparency and high degree of complexity associated with the Granularity Index, it could at the margin also undermine good

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37 IRB Proposal, para. 7, footnote 1.

38 Id., para. 437 ("As a guiding principle, if two borrowers have a strong corporate relationship and a high default correlation, they should be treated as a single obligor regardless of whether they have separate legal status." The document is silent on how correlation is to be assessed or validated.)

risk management practices by making it more difficult to communicate the true risk profile of a bank to senior management, loan officers, and regulators.

Given the inconsistency between the proposed Granularity Index and the manner in which banks actually examine concentration and correlation in their credit portfolios, many banks may need to develop additional information technology systems to perform the regulatory Granularity Index calculation. The WGCA questions whether the costs of developing these systems will be balanced by a correspondingly large benefit in terms of the accuracy of risk measurement or the achievement of regulatory objectives.

The WGCA also questions whether this mechanism presents the best tool for assessing credit concentration risk. The calculation and related data-gathering processes will be extremely cumbersome and expensive. Most regulatory agencies currently impose significant restrictions on credit concentrations via large exposures limits. It is far from clear whether the Granularity Index will lead banks to diversify their exposures. In fact, the complexity and cost associated with use of the Granularity Index mean that it will likely lead banks to avoid the IRB Approach, if possible. Finally, since the Granularity Index has not been tested by banks, it is far from clear whether it will result in any meaningful assessment of portfolio risk given its inability to measure correlations among exposures.

The WGCA therefore strongly recommends that the Granularity Index be eliminated. At the very least, the Granularity Index should be thoroughly investigated using real bank data as well as less costly methods for setting diversification incentives before such an overly broad tool is imposed on all banks globally.

E. Validation Requirements

General concern exists among a cross section of WGCA members around the world concerning the implementation of the proposed validation standards and their interaction with Pillar Two requirements across the banking group. While a number of these issues were addressed in relation to the consolidation standards, it is worthwhile to mention here that concern exists at some banks that disintermediation may increase in the short term as implementation of the validation standards may require borrowers to increase substantially the bureaucracy of satisfying banks' information and compliance requirements. For the best borrowers, directly accessing the capital markets may be easier than complying with bank information requests. Uneven implementation across jurisdictions also raises concerns. Increased supervisory coordination would mitigate the risk of major deviations in implementation standards internationally.

Among the validation requirements, the item that draws the most concern and the highest potential regulatory burden is the proposal that seven years of historical data be required for validation of internal LGD estimates to qualify for the Advanced IRB Approach. The WGCA assumes that the reason for requiring seven, rather than five, years is because LGD is perceived to be a lagging indicator of loss. However, the cost of implementing this validation requirement will be excessive and will delay until at best 2006 any bank's ability to apply for the Advanced IRB treatment. Moreover, it is far from clear whether two additional years of data are necessary to validate LGDs as distinct from PDs. **Consequently, the WGCA strongly recommends that the validation for LGDs for purposes of qualifying for the Advanced IRB Approach be set in a manner consistent with that for PDs (i.e., at five years).**

Despite these concerns, WGCA members worldwide generally view the validation standards as being consistent with good market practice. They also believe that providing the detail concerning which standards are important and how they should be met will decrease the possibility for significant and unfair regulatory discretion being exercised at the local level.

CHAPTER FIVE: THE IRB APPROACH—OTHER PORTFOLIOS

A. Retail Credits

In its report last year, the WGCA recommended that a process different from the corporate one be used to set regulatory capital requirements for retail portfolios, leaving open whether small business lending should be included in the portfolio. In particular, the WGCA report noted that "due to their unique structure (i.e., large number of obligors, relatively small size of individual exposures, and high but stable default frequencies relative to other portfolios), retail portfolios contain a critical mass of data that can support a 'top down' or behavioral scoring statistical approach to assessing credit risk, although some banks do assess credit risk in these portfolios on the obligor level." [39]

The WGCA appreciates the Basel Committee's efforts to segregate retail portfolios for a regulatory capital treatment distinct from corporate, bank, and sovereign exposures. The WGCA believes that this is fundamentally aligned with risk management practices as banks do treat retail exposures differently from these other exposure types. **However, the WGCA believes that significant work is necessary to develop an appropriate regulatory capital framework for retail exposures.** These issues are outlined below.

1. Definitions (Portfolio and Default)

A key definitional issue arises in the discussion of retail portfolios concerning the differences between different product subportfolios. The most common distinctions made by WGCA members are based on products, among residential mortgages (which may have specific collateral and maturity features that make this kind of secured lending perform differently than other types of consumer credit), credit card lending, and other personal finance. Some banks also create subportfolios for home equity lines of credit and automobile lending. In addition, some banks create a variety of residential mortgage subportfolios based on the terms of specific mortgage instruments.

Firms may engage in additional segmentation of retail exposures based on vintage, geographic location, credit scores, loan-to-value ratios, or delinquency status. Different parameters and assumptions may be applied to the same product portfolio based on these differences. Firms may also use behavioral scores or other methods to determine whether additional analysis at the individual obligor level may be necessary. **It will therefore be important to ensure that assumptions and validation standards relevant to the various subportfolios and segments are not erroneously applied to the other subportfolios and segments. As noted below, it remains unclear whether a product-based standard provides the best method for making segmentation choices.**

The definition of default should, as far as consistency allows, be driven by internal risk management requirements and mapped flexibly for capital purposes. In retail portfolios, default represents more of an analytical breakpoint than an economic event. In addition, the definition should recognize that retail is different from corporates (for example, since the concept of cross default does not apply well in the retail book).

2. Segmentation

The division of exposures into homogenous segments is an important part of the risk management of retail assets. Each segment should be as homogenous as possible with respect to the

[39] WGCA 2000, p. 25.

credit characteristics of the assets within it. However, each segment must also contain a sufficient number of assets to allow statistical estimation of default probability, severity, and exposure at default. Establishing the right balance between these elements is extremely important.

Banks tend to divide their retail portfolios into product segments in different ways. Most use buckets based on behavioral scores to generate an initial risk analysis, which can provide insight into whether additional analysis at the portfolio or individual obligor level may be necessary. Some of the standard portfolio segments used for additional analysis include product and/or geographic segmentation, obligor ratings, credit scores, or loan-to-value (LTV) or LGD ratios. An exception occurs for mortgages, where some firms do engage in further product-based segmentation. In addition, different parameters and assumptions can apply for the same product portfolio based on geographic origin of the credit exposure because different consumer practices can affect product behavior.

The suggested segmentation in the draft proposal may not be appropriate for all portfolios. The most ideal segmentation is likely to differ between products, jurisdictions, and even between banks within the same jurisdiction. Discussions concerning how best to segment the retail portfolio, which are continuing within the WGCA, indicated that choice of the wrong segmentation methodology could lead to a number of problems, including:

- The most appropriate variable to distinguish borrower quality may well change over time. For example, an application score may be appropriate for the initial few months, after which a behavioral score may be a better estimate of default probability.
- New techniques and products for assessing the risk of a portfolio are being continually developed. The proposals may not be sufficiently flexible to allow for these.
- A bank should optimize its choice of segments by using those that are most discriminating. However, if compulsory segments are set that are less discriminating, then banks will either have to use a suboptimal segmentation or have unduly small populations in some parts of the overall segmentation.
- The current proposal uses “product” as one of the segmentation factors. This does not fit with a single/whole customer-orientated risk management view.
- Assets that do not have the requisite attributes may lead to these assets being unfairly penalized. For example, assets originated prior to the introduction of scorecards may be unscored. However, because they are “old” assets they are likely to have performed for an extended period and therefore be of very high quality. A more flexible segmentation scheme, where it can be established (e.g., from delinquency rates) that these assets are of higher quality, would allow for them to be treated favorably.

The key point is that, while a bank should be free to choose its own segmentation, it must be capable of mapping each of these segments to a PD, LGD, and EAD. This mapping will ensure that capital levels are consistent over time, across products, across jurisdictions, and across individual banks.

Clearly it is important for an institution to be able to validate its estimates for probability of default, LGD, and EAD. However, due to the almost continuous improvement of retail scorecards, it would be unreasonable to expect that the entire portfolio should be rescored. **The use of samples rather than the entire portfolio should sensibly be accommodated.**

3. Risk Evaluation

WGCA members assess the risk of retail exposures using a framework based on the same elements—probability of default (PD), loss given default (LGD), and exposure at default (EAD)—used in other portfolios. However, in the retail context, the EL component can be the starting point from which PD/LGD/EAD components may be backed out (often using historical analysis), or the EL component can be the product of these risk drivers (in which case the individual risk component estimates are "bucketed up" to generate EL values). In addition, some common traits among credit risk measurement and capital allocation processes in the retail portfolio can be identified across banks' internal processes for assessing economic capital for retail portfolios. These are addressed in detail in the remainder of this section.

Economic capital allocations in the retail portfolio are determined using a framework that involves calculations of EL and UL. To generate individual obligor PD and LGD values within retail credit portfolios for regulatory capital purposes, EL estimates would need to be deconstructed into their component parts. However, it is unclear whether such disaggregation adds value since few banks use these disaggregated components for risk management purposes.

The most frequently used timeframe for evaluating the credit risk of retail portfolio exposures is over a one-year horizon. The high degree of convergence around one-year time horizons and traditional valuation methods in the retail/consumer finance portfolios is likely due to specific portfolio characteristics, particularly the shorter periods in which consumer credit is held by the obligor and the lack of traded markets for many consumer loans globally. This situation is therefore distinct from the situation in wholesale corporate portfolios, where longer maturities tend to be the norm. Therefore, requiring five years of historical data to validate retail EL values might not be appropriate since banks change their internal scoring systems frequently to improve predictability and performance. **A validation standard on the order of two to three years might be more appropriate in the retail context.** In addition, the predictive power of application scores tends to be limited to about 18 months.

Banks tend to use a variety of definitions of default, LGD assumptions, collateral haircuts, and methods for determining the EAD amount in various retail portfolios. Despite this variety across firms, parameters and assumptions are used consistently within each bank's subportfolios. Such internal consistency is the key to ensuring robust results in retail as well as other portfolios. Internal consistency does not, however, mean that the same parameters are used across all consumer finance subportfolios, nor does it mean that the same methodology is used to estimate economic capital across all consumer finance subportfolios. Banks continue to explore the potential applicability of a variety of scoring and modeling systems for estimating economic capital in the consumer finance portfolios. For this reason, it will be important to avoid generating overly prescriptive minimum regulatory capital and validation standards based on one specific model or scoring system type because such an approach might exclude viable risk measurement systems too early in the process.

Banks also tend to use a variety of loss distributions to calibrate their economic capital requirements in the retail portfolio. Few WGCA banks assume a constant relationship between EL and UL in the retail portfolio. A significant number of WGCA members note that the relationship between EL and UL in their retail portfolios varies by PD and LGD ranges. Moreover, most banks do not adjust their calculations to address possible maturity and geographic concentration factors, although many indicate that these factors are implicitly addressed by their current risk measurement methodology. Some banks do, however, estimate portfolio correlations in determining their capital requirement for their retail portfolios.

Given the variety of approaches taken by banks to estimate economic capital in consumer credit portfolios, it will be important that the regulatory capital framework avoid making implicit

decisions about parameters, risk drivers, and assumptions at present. This is because early decisions could impede market development of more advanced approaches.

4. Risk Weights

Retail credits are substantially different from corporate credits, especially with respect to the relationship between EL and UL. A regulatory capital framework for retail credits premised only on the notion that the regulatory capital for these credits should be half of that for corporate credits fundamentally fails to reflect the shape of the loss distribution in the retail portfolio. Consequently, such an approach fails to establish a risk-sensitive regulatory capital framework that provides incentives for good risk management practices. Such a premise also imports into the retail area all of the problematic and excessively conservative prudential factors used to adjust the risk-weighting function in the corporate portfolio.

It is a well-established fact that annual expected loss rates in retail portfolios tend to be quite high relative to corporate portfolios. However, the volatility of those loss rates tends to be comparatively low, due to the large number of exposures in retail portfolios. This makes EL estimates very reliable tools for pricing and veering the risks associated with this type of lending. Calibrating the risk weights based on the corporate EL/UL relationship therefore significantly overstates the risk involved while simultaneously creating double-counting problems because the risk-weighting function fails to take into account the fact that EL in the retail portfolio is often mostly covered by margin interest.

The Basel Proposal therefore is incompatible with good risk management incentives and creates the risk that retail credits will be seriously overpriced from a regulatory capital perspective. This could generate a reluctance to continue extending retail credits based solely on an evaluation of obligor risk and could result in passing along regulatory costs to consumers. It is possible that an abrupt shift along these lines could have a negative impact on the stability of at least some retail credit markets.

WGCA members look forward to working with the Basel Committee to develop risk-weighting functions that are more appropriate to the retail context than those presented in the Consultative Proposal since extrapolating from the approach taken in the corporate portfolio is inappropriate.

B. Equity Exposures

The Consultative Proposal contemplates segregating bank equity investments into a separate portfolio and assessing regulatory capital against that portfolio. However, the Committee has not yet determined whether capital should be assessed using a market risk/stress-testing approach or a credit risk/internal ratings approach.[40] Conventional wisdom holds that the Basel Committee added this component to the Consultative Proposal due to concerns that banks' venture capital investments in "new economy" companies had experienced significant declines in value with the decline of the NASDAQ during 2000. Concerns with potential double-gearing also could generate a reasonable foundation for such regulatory standards.

A broader perspective would note that banks' equity investment and underwriting activities are likely to become a significant source of income in the coming years, as the shift toward fee-based income sources increases. In addition, it seems clear that even as a number of credit assets migrate to the trading book, the number of market assets with little or no liquidity held by banks will increase. The WGCA believes that the evolution of the regulatory capital framework for banks requires that a consistent

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40 IRB Proposal, para. 381-395.

framework be built for traded assets (regardless of whether they are credit or market transactions) and that a consistent but different capital framework be built for assets that will not be traded (regardless of where they originate). An appropriate capital framework that wanted to create incentives for prudent risk management processes would also recognize that different kinds of equity investments have different risk profiles and should be treated differently.

1. Nontraded Equity Holdings

Equity holdings that a bank would expect to hold almost indefinitely without trading should be treated as consistently as possible with the treatment of banking book exposures. Such holdings should be identified by a bank based on (a) its underwriting role, (b) its intention to acquire bargaining leverage or control over the company's affairs such that the bank's investment would be recovered, (c) the lack of a traded market for private equity, or (d) the establishment of strategic alliances through cross-shareholdings.

Within the Standardized Approach, the WGCA believes that these holdings should be subject to a 100% risk weight (i.e., 8% capital requirement). In the IRB Approach, the WGCA believes such holdings should be treated using a framework comparable to that used for other banking book exposures (i.e., a PD/LGD/EAD framework) with the following modifications to avoid confusion with the credit risk framework since such holdings are not properly subject to default risk:

- **The term *PD* should be replaced by the term *probability of loss (PL)* and should be determined as the probability that the company in that the bank has the equity holding will experience a default event in any senior debt instrument held by the bank. Thus, the PL value for a strategic investment would be identical to the PD estimate made by the bank for any senior debt. Use of bonds as proxies has limitations that would require adjustments in the capital framework. For example, borrowers will default more frequently on bonds than they would on bank credit lines and bond defaults need not negatively impact equity holdings (especially private equity holdings that are not traded publicly).**
- **The term *LGD* should be replaced by the term *loss (L)* and should be set at 100%. Thus, the bank would be assumed to suffer a complete loss of its investment at the time of a credit default event.**
- **Equity holdings should be treated as undated exposures and therefore maturity adjustments should not be applied.**

This proposed structure would establish comparability and consistency with the credit risk framework without creating conceptual confusion or implying that equity investments expose a bank to default risk.

2. Traded Equity Holdings

All other equity investments would be treated as if they were trading assets, relying on a stress-testing approach to set the regulatory capital requirement. Likely factors in making this choice include the nature of the capital market, the industry sector, and the country in which the bank has a holding.

C. Project Finance

Chapter Seven of the Consultative Proposal sets out a series of proposals for setting capital requirements to cover exposures in "project finance" portfolios. The Basel Committee proposes as a

working definition of the portfolio "lending in which the performance of the underlying, unique projects, whether it is still under construction or already in development or use, is intended to warrant the debt service and, accordingly, serves as the primary source of repayment."[41]

Difficult questions surrounding the scope of coverage implied by this definition must be answered before the WGCA can provide an opinion on the appropriate calculation mechanisms for exposures in this portfolio. It seems clear that the Consultative Proposals in this area will have a disproportionate impact on internationally active Islamic banks, since those banks extend credit by funding projects (and taking direct equity stakes in obligor entities). It is possible that special-purpose vehicles established by such banks to hold the equity stakes related to the project might require special attention when implementing the new capital framework in the Middle East and North Africa.

Clearly, commercial real estate and infrastructure finance fall within the ambit of the Basel Committee's proposed definition. It is unclear, however, whether the participation by a multilateral investment bank (MDB) in an infrastructure project should qualify the project for treatment different than that afforded to a private sector commercial real estate project. The proposed Basel definition also lacks clarity on whether the structure (e.g., is a special purpose vehicle established to fund/guarantee the venture? What are the recourse arrangements?) can or should affect the regulatory capital treatment of the project. Significant definitional characteristics in addition have an impact on the risk associated with the project. It is also unclear whether asset-based finance (e.g., underwriting the lease or purchase of planes, trains, and ships) properly falls within the scope of this portfolio or whether it more properly belongs in the corporate portfolio with explicit recognition of collateral values related to the underlying physical asset. Finally, it is extremely unclear and politically important whether small to medium-sized businesses fall within the realm of this portfolio rather than the corporate or retail portfolio.

The WGCA accepts the general definition of project finance contained in the Consultative Proposal.[42] However, the WGCA believes that a distinction must be made between cash flow finance (i.e., "infrastructure projects") and the financing of both the construction and leasing of movables such as airplanes and ships (i.e., "asset-based finance") and some commercial real estate finance of similar risk profile.

Regardless of the portfolio segmentation, the WGCA believes that a PD/LGD/EAD paradigm should be used to calculate regulatory capital to cover lending to project finance structures, with certain modifications. First, specialized LGD values should be crafted to reflect loss experience in each portfolio segment. Second, validation procedures for PD and LGD values must be different from those applied in the corporate context. With respect to PD validation, these processes must be amplified to take into account the special structures of the projects in question and the role that cash flows play in assessing risk. It is also possible that procedures specific to project finance lending affiliated with multilateral development banks may be necessary to reflect the relative lack of experience with defaults for these instruments.[43] With respect to LGD validation, similarly tailored processes should be established.

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[41] IRB Proposal, para. 402.

[42] In the Consultative Proposal supplemental document on the IRB Approach, para. 402, the Basel Committee defined project finance as "lending in which the performance of the underlying, unique project, whether it is still under construction or already in development or use, is intended to warrant the debt service and, accordingly, serves as the primary source of repayment."

[43] "The history of B-loan performance is dominated by the IFC's experience. The IDB and CAF have not yet written off any B-loans, and all their outstanding B-loans are performing. The EBRD reported 16 loans totaling $339 million in non-accrual status at year-end 1998. A small fraction of these are B-loans. The EBRD's reported cumulative write-off figure for its entire loan portfolio since its founding was $20 million at the end of 1998 … Given the limited number of B-loans that have been made in most countries, quantitative analysis of historical loss

In summary, it may not be reasonable to require statistically validated estimates of PD, LGD, and EAD for project finance exposures. This does not mean that quantifying the risk associated with those projects and allocating an appropriate amount of capital for them is an impossible task. The WGCA notes that the Institute's Working Group on Country Risk has described the qualitative and quantitative processes used to assign country risk ratings to demonstrate that more than just statistical analysis is necessary for some ratings processes. The WGCA believes that project finance risk is comparable to country risk in this respect.

Consequently, the WGCA will work during the summer to develop a set of recommended best practices and oversight standards for validation of banks' project finance rating and risk management systems. At the same time, the WGCA will investigate whether additional standard LGD factors can be set in the Standardized and IRB Approaches based on observable market information and/or internal data. For example, some portions of project finance (e.g., asset-based finance) could be treated as a collateralized corporate loan if sufficient quantitative evidence of LGD values could be established. **This work should be completed by August 2001.**

1. Infrastructure Projects

With respect to infrastructure finance, the WGCA believes that statistically validated PD and LGD values are at best difficult to generate due to the unique characteristics of each project. This problem is compounded in the MDB-financed infrastructure context, where sovereign or B-loan components are involved. Nevertheless, the WGCA believes that best-practice techniques for estimating EL or its components can be identified. Such techniques should be used for purposes of generating capital requirements to cover these activities.

It has been noted that the maturity dimension of project finance is important, since the risk profile of a project can alter significantly before and after construction has been completed. This argues for distinguishing between bonded facilities and pure cash flow financings. In addition, since most projects are ring-fenced, guarantors can become marginal to the project's risk profile even if such an emphasis would create structural symmetry with the treatment of guaranteed corporate exposures. Most bankers have indicated that the larger longer-term projects tend to be underwritten with recourse, with cash flows ring-fenced and with all risk elements well defined. These terms should be reflected in the capital requirement for such projects. In addition, it may be possible to rely on external ratings for the large projects since major rating agencies rate bonds issued by those projects. Such ratings could serve as an appropriate proxy for risk-weighting purposes.

2. Asset-Based Finance

The WGCA believes that a distinction should be drawn between nonrecourse asset-based finance and asset-based finance with recourse. **In the case in which a bank has recourse against the company building or leasing the assets, the PD/LGD/EAD framework for corporate exposures should be applied and the exposure should be treated as an exposure to the party against which the bank has recourse. In the case in which recourse is not available (either *de jure* or *de facto*), an EL-based approach might be appropriate for the same reason as it might be for infrastructure projects (i.e., the difficulty in developing statistically validated PD and LGD values).** In the case of nonrecourse

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experience in any one country may not be meaningful. In addition, some shareholder governments may object to disclosure by the MDBs of country-based B-loan loss experience." *Report of the IIF Working Group on Multilateral Development Bank B-Loans* (July 2000), pp. 18-19.

asset-based finance, different EL estimates will likely be necessary for assets still under construction and assets that have been completed and are being leased.

D. Securitization

The Basel Committee's proposals on the treatment of securitization have received a great deal of attention and criticism for the harsh treatment of these instruments. The WGCA appreciates the attempt by the Basel Committee to address the risks that exist in securitization activities and the policy concerns associated with the role that securitization instruments can play in regulatory capital arbitrage. The WGCA also agrees with the goal of eliminating regulatory capital arbitrage through securitization activities. **However, the WGCA believes that the Consultative Proposal's proposed regulatory capital treatment of securitization activities is overly stringent and risks having the unintended side-effect of penalizing those legitimate securitization activities that are designed to enhance liquidity and optimize bank portfolios. Therefore, the WGCA proposes a number of changes to these proposals.**

Emerging market banks are particularly worried about the potential impact of the securitization proposals on the development of their capital markets. Most note that policymakers in the past few years have been urging banks to contribute to the growth of local capital markets by issuing securities backed by the bank's lending assets. The goal is to promote increased liquidity and reliance on capital markets as an additional source of credit intermediation. Following the crises in Asian economies during 1997-98, banks were also encouraged to use securitization vehicles as a means of cleansing their balance sheets and creating capacity for additional lending in economies experiencing credit difficulties. One unintended effect of the Consultative Proposals is that banks and capital markets in emerging economies would not have access to these instruments at reasonable prices.

Concerns are not limited to emerging markets. Investment and underwriting of properly structured securitization instruments provide banks with increased liquidity management capacity and free up bank balance sheets to lend to more obligors. The Basel Committee proposal to apply a 20% conversion factor to liquidity facilities fails to reflect (a) the rarity of drawdowns on these facilities and (b) with respect to asset-backed commercial paper conduits, the active policy by conduit administrators to manage their programs so as to avoid the need for cash liquidity. **A conversion factor of 10% would be more appropriate to reflect the risk involved and should be applied in addition to the risk weighting based on the credit quality of the underlying assets.**

The Consultative Paper also proposes that any first-loss credit enhancement provided by a bank should be deducted from its capital. This approach fails to reflect the risks associated with these transactions. **It would be more appropriate to assess individual securitization tranches according to their PD and LGD profiles. Similarly, risk weights assigned to sponsoring banks in conduit programs should be consistent with the weights for originating or investing banks in both the Standardized and IRB Approaches.**

Banks in the WGCA agree that the 100% LGD assumption for the IRB treatment of securitization vehicles also is excessively conservative. By their contractual terms, these instruments are more likely to have lower LGDs than their corporate counterparts. **Therefore, the WGCA believes that securitizations deserve no less onerous treatment than loans to corporations. Specifically, the standard LGD assumption for securitizations in the Foundation IRB Approach should be set at 50%. Where banks can justify a different LGD using internal data, this alternative LGD value should be recognized within the Advanced IRB Approach.**

Overnight elimination of these instruments, which is possible, could dry up access to new credit extensions by a number of borrowers. It should also be noted that the main underwriters of securitization vehicles in the United States (the government-sponsored entities such as the Federal National Mortgage Association) are becoming increasingly important sources of capital market benchmarks for financial markets as the U.S. Treasury continues withdrawing Treasury securities from active circulation. Elimination of the key source of assets (banks) could slow the underwriting and issuance activity significantly.

The Consultative Paper proposes as well that asset-backed securities deemed to be below investment grade or unrated should be treated as credit enhancements and deducted from capital. This would generate higher capital requirements for securities rated BB+ to BB- than for equivalently rated corporate obligations. **Such discontinuities are illogical and contradict the basic principle that similarly risky assets should receive similar risk weights.**

Simply put, the Consultative Proposal is excessively broad and will have a number of undesirable and unintended effects unless corrected as described above. The WGCA notes that, if the regulatory capital framework is calibrated appropriately, there will be no incentive for banks to engage in securitization activities for the purposes of regulatory capital arbitrage. This would mean that there is no need to impose regulatory capital requirements on securitization activities.

The WGCA understands that this may not be an appealing proposition from a supervisory standpoint. **At a minimum therefore, the WGCA believes that those securitization vehicles created prior to the implementation date for the new Basel Accord should be "grandfathered" from certain elements of the securitization rules (e.g., the implicit recourse penalties) to prevent significant market dislocations.** In addition, the securitization rules should not allow for national discretion in determining the treatment of second-loss credit enhancements. Instead, the Basel Committee should develop a uniform rule to be applied in all jurisdictions. Finally, the penalties imposed on those banks found to have provided implicit recourse twice should be reduced. Otherwise, the extreme nature of the proposed penalties for these instruments may make them unusable by national regulators.

CHAPTER SIX: SMALL AND MEDIUM-SIZED ENTERPRISES/MIDDLE MARKETS

The treatment of small and medium-sized enterprises (SMEs) or middle-market borrowers remains unclear in the Basel proposals. These obligors share many qualities with retail borrowers (relatively small exposure sizes, relatively large numbers of borrowers, and relatively large but stable expected loss experiences) as well as corporate borrowers (e.g., limited liability, and in certain situations or countries recourse to the owner/borrower may not be available). **Unanimity exists only with respect to the importance of the sector and the potentially harsh impact that the Basel proposals would have on the sector.**

There is no question that SMEs form the backbone of any free-market economy.[44] They provide employment, creativity, risk-taking, and product innovation to markets. They also tend to rely mostly on commercial banks as funding sources since their access to capital markets is limited by their size and ambition.[45] It will be extremely important that implementation of the new capital framework does not have any unintended negative consequences on lending to this important sector of the economy.

Regrettably, it seems that implementation of the new capital framework would in fact penalize harshly lending to SMEs. The Standard Approach would assign a 100% risk weight to most SMEs solely due to the fact that most of these businesses are unrated. Because a definite capital benefit exists if a firm is rated well, high-quality SMEs could find that their access to credit could become tighter and less affordable relative to their rated colleagues. This could create pressure for good-quality SMEs to obtain external ratings and access capital markets directly for their funding needs, thus accelerating disintermediation trends. Finally, failure to recognize physical collateral in the capital framework deals an additional harsh blow to these firms since they are more likely to be required by banks both to post collateral to support their borrowing and to post physical collateral.

Within the IRB Approach, the treatment of SMEs is even harsher. To begin with, it is far from clear whether such borrowers belong in the retail portfolio or in the corporate portfolio. Opinions are divided within the WGCA. Some members believe that if these borrowers are evaluated using a behavioral scoring system, then capital requirements should be assessed within the context of the retail portfolio. Other members believe that the key distinguishing characteristics relate to the borrower's size, such that only small businesses (regardless of their structure or their lending activity or the banks' internal risk management system) qualify as retail. Others believe that all companies, regardless of size, should be assessed capital within the corporate portfolio since lending to these entities manifestly is not a personal loan.

No one definitional solution seems satisfactory. Portfolio segmentation based solely on firm size presents difficulties in an international setting, given that a small company in a large economy may

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44 In the United States alone, the following statistics provide a perspective on the importance of this sector. "Small businesses—firms having fewer than 500 employees—are an integral part of the U.S. economy. They account for about half of private sector output, employ more than half of private sector workers, and provide about three-fourths of net new jobs each year." These are statistics collected by the U.S. Small Business Administration for 2000, as quoted in: Marianne P. Bitler, Alicia M. Robb, and John D. Wolken, "Financial Services Used by Small Businesses: Evidence from the 1998 Survey of Small Business Finances," 87 Federal Reserve Bulletin 183 (April 2001).

45 "Commercial banks were also the most common supplier of lines of credit, loans, and capital leases in 1998; about 39 percent of small businesses had a credit line, loan or capital lease from a commercial bank at the end of 1998 (compared with 20 percent relying on finance companies and leasing companies) … commercial banks were three times more likely than finance companies, five times more likely than leasing companies, and about six times more likely than family or individuals to be the source of these services for small businesses in 1998." Id., at pp. 197-98.

resemble a large company in a small economy. Portfolio segmentation based on risk management and measurement choices creates potential arbitrage and gaming opportunities since incentives could exist to characterize certain loans as "SME" solely to gain beneficial treatment. Finally, allocating all small-business lending to corporate portfolios in an effort to increase diversification benefits generates the risk of ignoring some of the homogenous risks posed by all small businesses.

These difficulties lead a few WGCA members to conclude that a separate portfolio type devoted exclusively to SME credits must be created. These banks believe that the curve for corporates is very different and steeper than that for SME lending. The elasticity of the curve in relation to changes in the economic environment, they believe, is very different and less severe for SMEs relative to large corporates. Other banks view these arguments as supporting a special LGD assumption for SME lending, not a completely different risk-weighting function. Another group of banks believes that the best solution to these issues is to adjust the benchmark risk-weighting curve for all exposures.

The WGCA does not propose any solution to this problem in this report. However, it does note that part of the reason for the dilemma exists because of the current risk-weighting function in the corporate portfolio, which would be applied to SME credits. The one-factor model used to calculate the risk-weighting function specifies an asset correlation assumption of 20%. Many banks believe this assumption is excessively high based on their domestic experience. Some banks, using Moody's data, suggest that a correlation assumption of 10% to 14% is more appropriate for SMEs.

However, proving that an alternative correlation assumption is more appropriate for global markets requires robust cross-country data from banks' internal systems rather than reliance on an external database of corporate credits from predominantly one market. Some European countries maintain "Credit Registries" with significant amounts of data concerning SME lending behavior. However, this data is not perceived to offer good informational content for regulatory capital statistical analysis because the perception among a number of regulators is that the data do not truly reflect default experiences. They believe SME defaults are driven mostly by bank choices rather than by market forces. A global group such as the IIF would face the additional difficulty of attempting to present a set of globally comparable statistics drawn from economies where the SME market structures are highly idiosyncratic.

Without a solid base in bank internal data, the WGCA cannot make any positive recommendations concerning how best to craft a global supervisory standard in this area. WGCA members are further constrained by the fact that the regulatory capital framework will not permit them to use credit risk models to assess regulatory capital. The only way to contest a correlation assumption and suggest an alternative would be to conduct a thorough modeling exercise over the course of the next few months. Little appetite exists within the WGCA to conduct such a time-consuming exercise given that the prospect of having the models and their outputs recognized in the Basel capital framework at present is not good.

These pages are offered in an effort to promote debate and thinking about how best to address the issue in a risk-sensitive manner. In an effort to address the issue, WGCA members will examine carefully the results of the Quantitative Impact Study currently under way under the auspices of the Basel Committee. The first goal will be to determine whether in fact the existing risk-weighting function has a disproportionate impact on lending to SMEs. If so, then WGCA members will investigate whether any additional data can be found to suggest a solution.

CHAPTER SEVEN: PILLAR TWO—SUPERVISORY REVIEW AND INTEREST RATE RISK

A. Supervisory Review

Under Pillar Two, the Committee seeks to foster a more active dialogue between banks and their supervisors. Accordingly, the implementation of this pillar will manifest itself in an increasing pace of on-site examinations, inspections, off-site reviews, and discussions with management. Additionally, to limit the influence of discretionary elements in that process, the Committee suggests that supervisors should take care to carry out their obligations in a highly transparent manner. This implies an intensive exchange of information both between regulators and an international bank and among regulators of that bank. Last, an enhanced exchange of information is also called for to facilitate the full implementation of the three pillars across jurisdictions.

The WGCA believes that the Committee should explicitly promote effective coordination among national supervisors. WGCA members note that Home country supervisors in most countries already have authority and responsibility for undertaking consolidated oversight activities as described under the Pillar Two proposals. However, full and effective implementation of the new capital framework will require regulators to cooperate more extensively than ever before. Insufficient coordination by national supervisors of the interaction with sophisticated international banks would increase the compliance burden on the management of these institutions without increasing the quality of information flowing to supervisors.

The WGCA supports the basic aims of Pillar Two in ensuring appropriate internal risk management, measurement and control, adequate internal capital assessment and planning, and compliance with the qualitative requirements associated with the more advanced methods of risk measurement for credit and operational risk. The WGCA is also pleased to note that the first two of these objectives are not seen as essential only for banks adopting more advanced measures of risk but, rather, as key components of the management of any bank. The WGCA also recognizes the importance of close interaction with the supervisors as described under Pillar Two to foster a relationship of mutual trust and cooperation. In this context, effective risk mitigation and advances in risk management techniques should receive appropriate recognition in the overall capital charge.

Banks participating in the WGCA note that Pillar One capital requirements will include prudential buffers for uncertainties surrounding the Pillar One regime. In the context of regulatory discretion regarding the decision on scaling factors and the recognition of certain risk mitigation techniques, Pillar One already incorporates considerable safety margins with regard to capital requirements. Overall, the differentiation between Pillar One (minimum capital requirements) and Pillar Two (supervisory review process) should be consistently enforced, thus abolishing the current blend of components in Pillar Two. If uncertainty exists concerning whether Pillar One produces an adequate capital charge, a mechanism should be established in advance to ensure that banks are protected from possible arbitrariness at the hands of the regulator. **Given the rigor of the validation standards for the IRB Approach, most WGCA banks expect that qualification to use the IRB Approach will not result in an additional capital charge under Pillar Two.**

The WGCA agrees with the Basel Committee that capital should not be regarded as a substitute for fundamentally inadequate controls or for inadequate risk management processes targeted by the supervisory review process. However, using Pillar Two to increase the minimum capital requirement based on perceived inadequacies in internal control mechanisms should be paired with information on how the bank can improve its internal systems so as to reduce the Pillar Two requirement to the regulatory minimum established under Pillar One. The WGCA is particularly concerned that regulators

could use Pillar Two to impose additional capital requirements on banks even where no well-defined weakness or lack of management and control exists.

Concerns also exist with respect to how Pillar Two will actually be implemented. It would be helpful, for example, for the Basel Committee to make more transparent statements on the circumstances under which a regulatory decision to impose additional capital charges could be taken under Pillar Two and which parameter values might be applicable. **The WGCA underscores the importance of the due process recommendations made by the Steering Committee last year concerning the necessity for transparent and clear oversight processes, especially with respect to notifying and appealing administrative action taken under Pillar Two.**[46]

Clarity in this area is absolutely critical for two reasons. First, the nature, size, and reason for a capital charge should be completely transparent, especially in a world where Pillar Three transparency standards will require banks to provide a great deal of information to capital markets on their regulatory capital. Second, level-playing-field concerns make paramount the importance of establishing some consistency among regulators of applying globally uniform standards in various jurisdictions. The Basel Committee should also consider and provide guidance on how to address a situation in which some jurisdictions might prohibit regulators from imposing capital requirements under Pillar Two if the effect of such requirements would generate a capital cushion in excess of the minimum established under Pillar One.

The Pillar Two proposals seem to signal a shift away from an explicit capital framework based on minimum requirements toward one based on "adequate" levels of capital and an "appropriate margin above the minimum regulatory capital requirement." In this context, the economic capital concept is also mentioned several times. However, the underlying methodology in determining economic capital is subject to a number of rather strategic management decisions such as the desired target rating for the bank (which translates into the statistical confidence level) and the inclusion/omission of correlations between risk categories, among other factors. It is possible that transparency in banking markets could actually decrease if implementation of Pillar Two resulted in a situation in which the minimum requirements established under Pillar One only begin to form the basis upon which regulators build an adequate capital cushion.

The WGCA also notes that full implementation of the Pillar Two proposals will require regulators to increase substantially their supervisory resources if they are to evaluate banks' internal control systems in a meaningful manner. Some WGCA members have expressed concern that a shortage of regulatory experts could generate an incentive for individual regulators to create additional safety margins under Pillar Two at the national level without relating such additional requirements to specific business-related weaknesses or deficiencies. **The Basel Committee should carefully consider how to limit supervisory discretion under Pillar Two to avoid creating significant distortions in the competitive landscape under this scenario.**

The Pillar Two proposals would also require regulators to assess the strategic planning and economic capital cushion by a bank. This assessment will need to be undertaken with great care to avoid establishing capital requirements for strategic and business risk (which the Pillar One proposals clearly indicate should not be covered by regulatory capital) and becoming involved in decisions that are at the heart of the responsibility of a bank's management. In particular, it is unclear why the failure of a bank to meet its strategic goals should be the concern of supervisors if this failure does not threaten the financial system or the bank's own solvency.

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46 SCRC 2000, p. 12, pp. 17-19.

WGCA participants note that banks seeking AA or better external ratings must hold economic capital well in excess of the minimum to achieve a high rating. Lack of clarity with respect to why an additional capital requirement is being imposed under Pillar Two will therefore have three clear effects. First, it will cloud external assessment of a bank's risk management and capital adequacy. Second, it will set the target/trigger ratio for bank management excessively high. Third, without a clear reason for imposing an additional Pillar Two requirement, it is impossible to determine whether the capital establishes a reasonable safety margin for that bank. It is worth noting here that even before implementation of the Pillar Three transparency requirements, market discipline exercised through rating agencies and analysts already has a direct influence on the bank's perception to the public and its funding costs in the marketplace, as well as the stock price.

B. Interest Rate Risk

The Consultative Proposal recommends that regulatory capital be assessed on banks whose interest rate risk (IRR) exposure is so large as to qualify it as an "outlier" based on the effect of a 200-basis-point shift in interest rates. This concept was originally presented to the markets in 1993 as part of the market risk proposals. The WGCA at that time made the following recommendation: "If regulators do impose IRR capital charges, those charges should be limited to IRR outliers and should be limited to the amount of risk in excess of the industry norm. This Report also urges the Basel Committee to recommend that any IRR-related capital charges should be based on both banking and trading books, and that any capital already set aside for market risk should be deducted from the IRR component in order to avoid double counting … Finally, this Report recommends that the definition of outliers and of the relevant industry norm both be clarified."[47]

The WGCA is pleased to see the Basel Committee proposal treat interest rate risk under Pillar Two using an outlier approach, as recommended by the WGCA in 1993. The WGCA believes that the identification of distinct risk types (credit, market, interest rate, and operational) will enhance the transparency of risk management practices.

47 WGCA 1993, p. 22.

CHAPTER EIGHT: PILLAR THREE—TRANSPARENCY AND MARKET DISCIPLINE

The Consultative Proposal includes a fundamentally new element in the regulatory capital process: explicit disclosure requirements. Failure to meet the proposed disclosure requirements would render a bank ineligible to operate under the new capital framework. The proposal seeks to harness market discipline to supplement the supervisory efforts of banking regulators. This is to be accomplished by requiring banks to disclose publicly their portfolio structure and distributions as well as portfolio volatility levels, disaggregated by default probability grade.

The WGCA would like to reaffirm[48] its strong support for increased transparency in banking markets. Many of the proposed disclosures are consistent with IAS 30. The WGCA believes that increased disclosure will serve all parties interested in sound management of banks, particularly as bank internal systems are used to set regulatory capital requirements. A major challenge, however, is to develop a set of disclosure standards that will provide meaningful, timely, and relevant information to the market.

Concern continues to exist, however, that the Consultative Paper disclosure requirements will result in the disclosure of too much raw data with marginal informational value. The Consultative Proposal's suggested disclosures provide a good example of the kinds of portfolio breakdowns that stock market analysts might require of banks listing their equity or bonds publicly or that might be required to assess a bank's income stream. The Consultative Proposals do not, however, provide a good window on the adequacy of a bank's regulatory capital. This is because so much additional portfolio structure information would be presented that the capital adequacy information would likely be lost.

The detailed disclosure requirements could also expose banks to competition problems from a variety of sources. As noted in last year's report, some of the required disclosures "may inadvertently require banks to provide information that could adversely affect their competitive position in financial markets. This is especially true of banks that operate in small national or niche markets."[49] The WGCA notes that nonbank competitors such as hedge funds, corporations, and investment banks will not be required to comply with the same disclosure standards. This could generate an unfair competitive advantage for such entities relative to banks without substantially improving shareholders' ability to assess the adequacy of a bank's capital cushion.

The WGCA believes it is important to note that banks do not operate in a completely opaque environment currently. Much of the requested information already is provided to national regulators. In addition, data from syndicated loan activity are already provided to bank analysts and large shareholders through disclosure rules promulgated by the Securities and Exchange Commission in the United States.

It is also important to note that different groups have different interests and uses for financial information. An emphasis on stock or income analysis could generate a set of disclosure requirements that would release a great deal of general information to the market without sufficient context, background, or information.

The risk of misinterpretations and consequent market volatility could be quite high. Fed by misinterpretations of the data, market discipline could accentuate a problem rather than facilitate orderly resolution of a problem. WGCA members remember the experience of a leading bank in the United States in the mid-1990s that shared a sophisticated presentation of its interest rate risk hedging activities using swaps and other derivative instruments. The analysts failed to understand the information presented

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48 WGCA 2000, p. 19.

49 Id.

and promptly issued sell orders on the bank's stock based on an assessment that the bank did not have its risk management processes sufficiently under control. After the market volatility subsided and the stock price recovered (over a period of a few months), and after market analysts became more familiar with the information presented, it became clear that the bank in fact had a robust risk management and sophisticated interest rate risk management process in place. This situation must be avoided going forward, especially since markets are more interconnected now than in the past.

Rather than release a large amount of data to the markets without discrimination or consideration of its informational value, the WGCA believes that the disclosure requirements implemented as part of the regulatory capital framework should be focused on providing information relevant for evaluations of banks' capital adequacy. The WGCA therefore believes that Pillar Three should adopt a more holistic approach to disclosure by framing the general principles that disclosure is designed to achieve. Without such refocusing, implementation of the proposals presents a serious risk of providing more data and less risk information to financial statement users. It will also be important to ensure that the disclosure requirements imposed under Pillar Three are not excessively prescriptive and do not conflict with existing accounting standards.

The WGCA recognizes that the Basel Committee may be committed to specifying some data points for compliance with the Pillar Three initiative to improve transparency and market discipline. The banks in the WGCA therefore recommend a series of different quantitative disclosures that have been adjusted to provide more targeted and meaningful information to financial statement users. **The WGCA therefore recommends the following data sets as replacements for those proposed by the Basel Committee:**

A. Quantitative Disclosures: All of the following from IRB banks, by PD band:

i. Funded amount
ii. Unfunded amount
iii. Weighted average EAD
iv. Weighted average LGD
v. Weighted average maturity
vi. Expected loss
vii. Regulatory capital

B. Qualitative Disclosures: Descriptions of the following:

viii. PD validation process
ix. LGD methodology
x. EAD methodology

C. Additional Disclosures: Top five geographic and industry segments as a percentage of total exposures.

CHAPTER NINE: LOOKING FORWARD TO CREDIT RISK MODELS

Throughout this report, the WGCA has suggested that a number of the elements in the proposed framework may be acceptable only in the interim. A number of banks are disappointed that the new capital framework does not expressly contemplate the use and validation standards for credit risk models. They also believe that the methodology and value used for the asset correlation assumption to calibrate the entire capital framework is excessively conservative (especially when applied to SMEs) and should be adjusted based on the outputs of banks' internal credit models.

All WGCA members support and appreciate greatly the statements made by the Basel Committee in the consultative paper indicating that implementation of the IRB Approach prepares banks to implement credit risk models in the near future. The WGCA agrees that requiring banks to use internal or external ratings will initiate a process that encourages banks to become more scientific in their risk measurement and will prepare the databases needed for proper model implementation.

Using a model to calibrate the regulatory capital charge without permitting banks to use models themselves creates some frustration, especially when the model used by the regulators does not reflect asset correlation. Some banks believe that reliance on Moody's 30-year data as a basis for analysis would generate a more accurate and appropriate asset correlation assumption. Opinions in this area are mixed, however, and tend to be influenced heavily by the choice of model used to assess correlation.[50] While most WGCA members would agree that many of the underlying problems could be fixed if the Basel Committee had chosen to use a multifactor credit risk model to calibrate the framework, most would also agree that it is unlikely that the Basel Committee would be willing to use a multifactor model before a critical mass of banks had been using such models for economic capital allocation purposes.

WGCA members are hopeful that implementation of the new capital framework will speed acceptance and comfort with the use of credit risk models. They also hope that implementation would generate sufficiently robust databases to permit the credit risk modeling debate to begin in earnest as soon as the capital framework has been finalized.

Looking forward, it is also clear that banks will increase their involvement in a variety of insurance activities. In addition to diversifying banks' income streams and risk exposures, expansion into insurance activities will heighten the importance of recognition for models that recognize correlation and diversification effects across risk types regardless of the functional form of the transaction generating the risk.[51] Efficient and effective banking practices will continue to evolve, even as implementation of the new capital framework begins. **Regulators and bankers should consider carefully how best to facilitate speedy and robust implementation of the new capital framework so that the next generation of risk measurement systems and management processes can be created.**

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[50] *Modeling Credit Risk: Joint IIF/ISDA Testing Program*, February 2000.

[51] This is consistent with previous IIF recommendations indicating that the regulatory capital framework for risk types should be consistent across industries, so that credit risk (for example) is treated in the same manner regardless of whether the entity incurring the credit risk is a bank, an insurance company, or a securities firm. *Response to the Consultative Papers Released by The Joint Forum on Financial Conglomerates*, Report of the Task Force on Conglomerate Supervision (July 1998).

CHAPTER TEN: CONCLUSION

The WGCA believes that the Consultative Proposal has provided an appropriate framework for developing a risk-based regulatory capital regime for credit risk. The WGCA is pleased to offer the suggestions and proposals contained in this report as part of the effort to refine the Consultative Proposal. The WGCA also notes that in the areas in which it will be conducting additional work, it expects to be able to provide robust proposals prior to this fall. Thus, the WGCA believes that continued dialogue between the industry and the supervisory community will lead to the development of a regulatory capital framework that promotes the stability of the financial system, establishes level playing fields for banks, and contributes to sound risk management practices by the implementation date for the new Basel Accord.

Appendix A

Institute of International Finance, Inc.

Working Group on Capital Adequacy

Abbey National
ABN AMRO Bank, N.V.
Australia and New Zealand Banking Corporation
Banca Intesa
Banca Monte dei Paschi di Siena, S.p.A.
Banca Nazionale del Lavoro
Banco de Galicia
Banco Itaú
Bank of China
Bank of Nova Scotia
The Bank of Tokyo-Mitsubishi
BBVA
Byblos Bank
Ceskoslovenska obchodni banka
CIBC
Citigroup
Credit Agricole Indosuez
Credit Suisse First Boston
DBS Bank
Deutsche Bank
Dresdner Bank
Fortis Bank
Fuji Bank, Ltd.
Grupo Financiero Banacci
Gulf International Bank
HSBC Holdings plc
ING
J.P. MorganChase
Komercni Banka, a.s.
Lloyds TSB
Mediocredito Centrale
National Bank of Greece
Qatar National Bank
Rabobank Nederland
Riyad Bank
Royal Bank of Canada
Royal Bank of Scotland
Sanpaolo IMI S.p.A.
The Sanwa Bank Limited (UFJ Holdings, Inc.)

Skandinaviska Enskilda Banken
Société Générale
Standard Chartered Bank
Sumitomo Mitsui Banking Corporation
TD Bank
UBS AG
Vseobecna Uverova Banka, A.S.

Appendix B

IIF STEERING COMMITTEE ON REGULATORY CAPITAL

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Member of Supervisory Board
ABN AMRO Bank N.V.

Vice Chairman: **Mr. Peter C. Godsoe**
Chairman of the Board and CEO
Bank of Nova Scotia

Members:

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Group Risk Director
Abbey National Plc

Dr. Tom de Swaan
Member of the Board of Managing Directors
ABN AMRO Bank N.V.

Mr. Ghazi Abdul-Jawad
President and Chief Executive Officer
Arab Banking Corporation

Dr. Mark Lawrence
Group General Manager, Risk Management
ANZ Bank

Dr. Roberto Setúbal
President
Banco Itaú S.A.

Mr. Gustavo A. Marturet
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Banco Mercantil C.A., S.A.

Mr. Jose del Valle
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Banco Santander Central Hispano

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Executive Vice President
Bank of America Corporation

Mr. Mao Xiaowei
General Manager
Bank of China

Mr. Masaharu Hamakawa
Member of the Board of Directors
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Ms. M. Eileen Kennedy
Head, Treasury Department
Bank One

Sir Andrew Large
Deputy Chairman
Barclays Bank PLC

Mr. Daniel Dumas de Rauly
Executive Vice President
BNP Paribas Group

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Citigroup

Mr. Wolfgang Hartmann
Member of the Board of Managing Directors and Chief Risk Officer
Commerzbank AG

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Vice Chairman
Credit Suisse Group

Mr. Jesper Ovesen
Chief Financial Officer
Danske Bank A/S

Dr. Thomas Fischer
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Deutsche Bank AG

Dr. Heinrich Linz
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Dresdner Bank AG

Mr. Erik van de Merwe
Advisor
Fortis Bank

Mr. Tosaku Harada
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The Fuji Bank, Ltd.

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General Manager
HSBC Holdings plc

Mr. Dieter Rampl
Member of the Management Board
HypoVereinsbank AG

Mr. Cees Maas
Member of the Executive Board and Chief Financial Officer
ING Group N.V.

Mr. Michael Green
Director of Group Risk Management
Lloyds TSB Group plc

Sir David Walker
Senior Advisor
Morgan Stanley International

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Royal Bank Financial Group

Mr. Fred Watt
Group Finance Director
Royal Bank of Scotland Group

Dr. Rainer Masera
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Sanpaolo IMI S.p.A.

Mr. Didier Hauguel
Director of Global Risk Management
Société Générale

Mr. David Edwards
Head of Group Risk Management
Standard Chartered Bank

Mr. Christopher Roberts
Joint Chief Executive Officer
Tokai Bank Europe plc

Mr. Walter Stürzinger
Group Chief Risk Officer
UBS AG

Mr. Jiri Kunert
Chairman of the Managing Board
Zivnostenska Banka a.s.

Appendix C

THE INSTITUTE OF INTERNATIONAL FINANCE, INC.
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May 2001

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Chairman
HSBC Holdings plc

Vice Chairmen

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Member of the Board of Managing Directors
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Charles H. Dallara *(ex officio)**
Managing Director
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David Eldon
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Hongkong and Shanghai Banking Corporation Limited

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Merrill Lynch International

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Bank of Nova Scotia

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Liu Mingkang*
Chairman and President
Bank of China

Gerhard Randa
Chairman and Chief Executive Officer
Bank Austria CA Gruppe

Frank Savage
Chairman
Alliance Capital Management International

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Banco Itaú S.A.

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KBC Bank NV

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Chief Executive Officer and Member of UBS Group Executive Board
UBS Asset Management

Secretary of the Board
Michael Bradfield, Esq.

* Member of the Executive Committee