Issues for the Basle Accord

Remarks by
William J. McDonough

President
Federal Reserve Bank of New York

Chairman
Basle Committee on Banking Supervision

Delivered before the
Conference on Credit Risk Modeling and Regulatory Implications
Barbican Centre, London, England

September 22, 1998

ISSUES FOR THE BASLE ACCORD

I am very pleased to speak today at this timely and thought-provoking conference on credit risk modeling. I have had the good fortune to assume the chair of the Basle Committee on Banking Supervision at a time of tremendous intellectual ferment in the theory and practice of risk management, especially with respect to the measurement and control of credit risk. Since credit risk is, of course, the most important of all banking risks, I welcome this opportunity to provide my perspective on these revolutionary developments now under way and their implications for the Basle Accord.

I use the word revolutionary quite deliberately, because I view the development of credit risk modeling as the catalyst for a complete rethinking of the theory and practice of credit risk management. These changes might well be as important as the application of modern portfolio theory to the management of market risk. For the banking industry, for financial supervisors, and, I would argue, for the macroeconomy, the practical implications of these changes are profound, because the availability and distribution of credit and liquidity on a sound basis are of fundamental importance to the functioning of the global economy. The last year in Asia and in emerging market countries elsewhere has provided us with a sobering reminder of that importance.

Credit risk models are intended to provide more precise measures of credit risk, and the measurement of credit risk is operationally the foundation of the Basle Accord. The implication for the Accord seems fairly clear, and it is tempting to make the issues of measurement the focus of public discussion. I would like to step back, however, and consider the broader set of concerns that led the Basle Committee to agree on a capital accord and its particular structure.

A comparison of the developments leading to the Basle Accord in 1988 with the issues we face today should help us move from considerations of the mechanics of regulatory capital requirements to the much more important questions of the requirements' supervisory purpose, role in influencing bank risk taking, and impact on transparency in the financial markets. In covering this territory this afternoon, I hope that you will take away three observations:

- the urgency of a full-scale review of our current approach to regulatory capital requirements;
- the importance of reviewing capital in the context of our overall supervision of banks and the need for greater transparency in markets; and
- the strong leadership that the Basle Committee intends to provide to this effort.

I view the development of credit risk modeling as the catalyst for a complete rethinking of the theory and practice of credit risk management.

BACKGROUND TO THE 1988 BASLE ACCORD

In the mid-1980s, the liberalization and globalization of financial markets—and, most important, the unleashing of competitive forces through deregulation—raised concerns about the long-run health of the banking system in many countries. The first of these concerns centered on the effects of competition on bank profitability and capital building. The second involved the changing nature of risks being taken by banks, both at the time and prospectively. And a third, related concern was the influence of regulatory capital requirements on bank risk-taking decisions.

The intention of the original Accord was clearly twofold: to arrest a slide in international capital ratios and to harmonize different levels of and approaches to capital among the Group of Ten (G-10) countries.

In the years just before the Basle Accord, large banks in all but a few major countries seemed to hold insufficient capital relative to the risks they were taking, especially in light of the aggressive competition for market share in the international arena. Many banks were rapidly expanding credit to foreign governments, banks, and corporations that were not long-standing customers, in a variety of overseas lending markets. The pressure of expansion forced down margins, and thus, although business was expanding, neither income nor capital kept pace. Even countries in which the supervisors attempted to maintain their traditional discipline found it difficult to resist completely the downward pressure on international bank capital ratios. The potential for disaster in the combination of rapid international expansion and stagnating capital growth had already been amply illustrated in the early 1980s with the developing-country debt crisis.

The downward slide was furthered by differences in banks' cost of capital, largely a reflection of the dispersion in required bank capital levels. This dispersion in part reflected differences in the philosophy and approach taken to the supervision of bank capital adequacy. In some countries, public sector banks appeared to have an unlimited call on the capital of the state. In such circumstances, capital regulation seemed to be relatively unimportant. In other countries, banks were believed to have hidden reservoirs of financial strength in undisclosed reserves and undervalued assets. Thus, low capital ratios were not necessarily associated with financial weakness in those jurisdictions. But in still other countries, the supervisors imposed relatively high minimum ratios on banks and expected and received adherence to those high levels.

The force of international competition tended to magnify the differences across countries. Because the cost of capital was critically important in pricing loans and other credit, low expected capital levels were believed to be a driving factor in narrower margins in international lending.

Thus, the intention of the original Accord was clearly twofold: to arrest a slide in international capital ratios and to harmonize different levels of and approaches to capital among the Group of Ten (G-10) countries.

The perception of what capital requirements should cover was also in flux in the mid-1980s. The primary focal point for banks doing business internationally was still traditional commercial lending and related activities. Thus, it was no surprise that a measure of credit risk became the foundation of the Basle Accord.

At the same time, the Basle Committee recognized that an unprecedented expansion of financial markets and financial activities was in train. The employment of modern portfolio techniques and options theory to the day-to-day businesses of trading, hedging, and asset management ushered in the over-the-counter swaps and options markets and an expansion of securities trading. New types of credit risk developed—much of it nontraditional and difficult to measure, such as the counterparty credit risk in derivatives—as did new types of market risk. The Basle Committee clearly saw the Accord as a document to be amended periodically. At the time of its publication, the Accord included a simple quantitative technique to capture counterparty credit risk, but that technique has since been refined several times. The Committee also announced its intention to carry out further work on market risk capital requirements, a task that was completed in 1997.

Supervisors were also aware of the powerful influence of capital requirements on bank risk-taking incentives. Prior to the Accord, most capital requirements took the form of leverage ratios. Supervisors had concerns that such leverage ratios tended to discourage the holding of relatively liquid, low-risk assets. However, they observed that off-balance-sheet committed credit lines and letters of credit had begun to soar. Although the expansion of capital markets activities clearly contributed to the growth of off-balance-sheet credit activities, supervisors suspected that such activities were also attractive because they were usually not subject to a capital charge.

These observations led to the most important innovation of the Basle Accord, its risk-based structure, which assigned different capital weights to a small number of asset classes, both on- and off-balance-sheet, of different perceived average risks. Even with this innovation, however, the framers recognized that the risk-based structure would inevitably introduce a new, if moderately less objectionable, set of distortions to the decision making of banks because of its simple nature. That is one reason why supervisors have placed so much emphasis on banks holding capital well above the minimums.

To sum up, the 1988 Capital Accord

- was intended to raise capital ratios, which were generally perceived as being too low in many countries, and to harmonize minimum levels as well;
- focused primarily on credit risk but anticipated that new credit and market risks would need to be incorporated in the capital requirements; and
- was recognized to be a relatively simple approach to credit risk with the potential to distort incentives for bank risk taking.

The Basle Committee clearly saw the Accord as a document to be amended periodically.

COMPARISONS WITH CURRENT CONDITIONS

In the intervening years, the themes have changed only as a matter of degree. Now, as then, international financial competition seems intense, but today it is more truly global and even less respectful of traditional industry dividing lines. We have continued to observe—at least until recently—an erosion of spreads in international and syndicated lending to levels that are worrisome, and we have seen a revival of concern about the capital adequacy of banks in some countries.

The scope of global competition greatly influences the nature of the challenge in framing capital requirements.

The scope of global competition greatly influences the nature of the challenge in framing capital requirements. International competition now reaches banks in emerging market countries, both in the banks' domestic markets and in the international markets. Supervisors now need to make sure that the future regulatory capital framework addresses the needs of banks in these countries and does not inadvertently drive a competitive wedge between G-10 and non–G-10 competitors. Further, large banks now compete head-to-head with nonbank financial institutions, especially securities firms, in a variety of product markets globally. Supervisors need to evaluate the competitive and strategic impact of the bank regulatory capital framework in light of that competition.

Until the recent market turbulence, bank supervisors were observing strong pressures on banks to increase leverage. To some extent, the pressure to leverage may mean that capital requirements in certain business segments are simply too high. The oft-cited example is the capital charge assigned to high-quality corporate debt, a charge that is viewed as far above what the market has required or what can be justified by historical loss experience. In such business segments, it is not surprising to see efforts to securitize credit or to observe a decline in bank market share in overall financing activities. While some loss of market share is no doubt an inevitable outcome of the increase in financial assets held and managed by institutional investors, regulatory capital requirements have also played a role.

But the pressure to leverage can also reflect the pressure to enhance results. As is well known, the enhancing effect of leverage on the way up quickly results in snowballing losses on the way down.

Thus, in framing capital requirements, supervisors will no doubt want to reflect the greater precision in assessing and pricing certain types of risk in the marketplace while not encouraging leverage to mask weak financial performance. But I do not believe that such complex distinctions can be made entirely through capital regulations. Supervisory activities such as examinations, financial and risk analysis, and an ongoing dialogue with management are critical to making those distinctions and fashioning a supervisory response in cases in which the leverage is judged to be harmful.

Increasingly, the marketplace is also assessing and reacting to banks' business and capital strategies, although the process is clearly still uneven. Our experience as supervisors suggests that the pressures of the market can be highly effective in getting bank managements to reconsider flawed strategies. Thus, supervisors currently place high priority on enhancing market discipline.

Now, as then, supervisors are seeking to reflect the existing, and anticipate the potential, risk profile of banks in their supervisory approach to capital. To be sure, supervisors still worry about concentrations in the commercial lending portfolio or in country exposures—witness the global real estate problems of just a few years ago and the concerns about particular emerging market exposures today. But changes in the risk profile of banks and in techniques for measuring and managing risk pose major new challenges for quantitative capital requirements.

Let's start with credit risk. Credit derivatives, wholesale credit securitization, and credit risk models taken together have the potential to greatly change the nature and amount of credit risk at banks. Credit derivatives offer the ability to transfer credit risk independent of funding, relationship management, or workout capacities, much as interest rate and foreign exchange derivatives have allowed banks to manage market risk independently of liquidity risk. Wholesale credit securitization creates the ability to extract and segment a variety of potential risks from a pool of credit exposures and to repackage them to create notes, securities, or credit derivatives with a variety of credit risk characteristics. Credit risk models facilitate credit risk transfer and segmentation by providing an estimate of the credit risk in a portfolio. For the first time, it is possible to provide a measure, however imperfect, of the amount of credit risk being bought, sold, or repackaged.

The power of greater transferability, segmentation, and measurability of credit risk could provide potentially enormous benefits to banks in managing and controlling their credit risk. But I am also mindful of the complexity that can result from this process—consider the U.S. mortgage-backed securities market as an example. A first step in the direction of complexity can be seen in the many wholesale credit securitizations involving "first loss" and "second loss" risk exposures, the latter representing a new and largely unanticipated challenge in interpreting the Accord.

These same developments will almost certainly complicate supervisors' understanding of the risks of banking institutions. That means that supervisory activities, such as examinations, will become, if anything, a more important complement to capital regulation and will be necessary to extract the true meaning of capital ratios and other analytical tools. In turn, we supervisors will need different, and probably more, information about the risk profiles of firms.

The marketplace will face the same difficulties in understanding the risks of banks. Supervisors therefore have an important role in promoting greater market discipline by identifying the types of information that are useful in making those judgments and encouraging the disclosure of that information.

The complementary roles of quantitative capital regulations, ongoing supervisory activities, and market discipline are even more apparent as we turn to operational risk and stress loss potential. The nature and amount of

Changes in the risk profile of banks and in techniques for measuring and managing risk pose major new challenges for quantitative capital requirements.

The distribution of operational risk is probably not uniform among banks, a circumstance that raises questions about how well credit risk capital requirements such as those mandated by the Basle Accord track the total risk of banks.

these risks depend in large part on difficult-to-observe factors such as the quality of controls and the degree of correlation among markets under stress.

The financial industry has been devoting resources to creating a robust management structure for operational risk. Problems such as those at Barings or at the U.S. offices of Daiwa Bank reflected failures of management oversight and internal control. Such failures, especially when combined with individual wrongdoing, can have a devastating impact on financial firms. Other, more prosaic examples of the high cost of controlling failures or cleaning up problems do not make the headlines but exist in virtually every firm.

The distribution of operational risk is probably not uniform among banks, a circumstance that raises questions about how well credit risk capital requirements such as those mandated by the Basle Accord track the total risk of banks. As businesses such as custody, corporate trust, and other securities-processing operations continue to consolidate in a relatively small number of banks, it seems likely that higher levels of operational risk will be found at those institutions. But the amount of operational risk will also reflect the less readily quantifiable aspect of the quality of operational controls across all of a bank's businesses.

Payments and settlement risk is a special case combining elements of both credit risk and operational risk. Credit events over the last several years often show up first—and sometimes exclusively—in the payments and settlement activities of banks. In the United States, for example, banks had little traditional direct exposure to Barings but did have exposure through clearing and settlement arrangements.

The size of settlement exposures depends not only on easily observable factors such as transaction size, but also on the procedures and controls that govern the business. For example, in March 1996, while I was Chairman of the Committee on Payments and Settlement Systems, that Committee published a study showing how internal control processes in the release of payments and the reconciliation of receipts influence the size of foreign exchange settlement exposures. The report found greater than expected risk in these transactions, much of it not captured in bank measures of settlement exposure. In this case, an understanding of the procedures and controls in the settlement process was essential to establishing meaningful risk measurement methodologies.

The increasing awareness of stress loss potential among bank senior managers is another example of the complementarity of capital regulation, supervisory activities, and enhanced disclosure. As market participants understand better the expected loss and the variance of expected loss in bank activities, their attention inevitably turns to the potential for really large losses—the result of low-frequency, high-severity events in the financial system.

Stress testing is the leading technique to assess the direct and indirect effects of unusual market events. Stress testing is fundamentally a qualitative and judgmental process, usually superimposed on a more formal, statistical approach to risk measurement. As such, it is not susceptible to codification in quantitative capital requirements. While stress testing has gained prominence in these turbulent times, the assessment of stress loss potential and the development of strategies for controlling stress loss have long been a hallmark of excellent financial management.

Although most risk models used by banks are designed to capture all forms of normal day-to-day risks, a real concern of supervisors is the low-probability, high-severity event that can produce losses large enough to threaten a financial institution's health. Moreover, like the supervisory community, the market is coming to understand the importance of stress loss potential. One of the most positive developments seen in the recent market turbulence is the speed with which many G-10 financial institutions have provided information about important exposures and losses to the marketplace, a direct reflection of the greater influence of market discipline.

The final comparison of past and present that I would like to make involves the incentive issues that concerned the original framers of the Basle Accord. Now, as then, supervisors are observing that capital regulation can distort bank decision-making incentives. The current wave of wholesale credit securitizations appears to reflect in part such distorted incentives. It is increasingly apparent that the falling cost of conceiving and executing sophisticated arbitrage strategies is eroding the efficacy of the Basle capital standards.

This erosion is perhaps less surprising than another insight we have developed since 1988: that capital requirements continue to influence the business decision making of banks, even when banks appear to be well above the regulatory minimums. Let me elaborate.

On the positive side, I think the views of banks today about the appropriate level of capital—that is, the need for a relatively high level of capital—are much closer to the sentiments of supervisors than was the case in the mid-1980s. Today, healthy banks maintain high capital levels in part because they have taken seriously the lessons of the last fifteen years that mistakes are generally costly and potentially fatal in a highly competitive industry with overcapacity.

Banks also maintain high capital levels because the marketplace has learned the same lessons and demands those levels. But I do not think that the framers of the Basle Accord realized the powerful influence their thinking would have on the techniques used by market analysts and ratings agencies to evaluate bank financial conditions. The analyses offered by these groups often build on the Basle capital standard and its risk-weighting scheme and generally assume that banks' actual capital ratios should well exceed the Basle minimums.

Banks, however, have been moving away from the risk-weighting approach in making an internal assessment of capital adequacy. Many banks now draw on risk models and new risk measurement techniques to make their assessments. This change opens up two sources of distortion in incentives. The first is the growing gap between the approach specified in the current capital requirements and the internal

Capital requirements continue to influence the business decision making of banks, even when banks appear to be well above the regulatory minimums.

It is simply not possible for supervisors to come up with universal capital requirements that both optimize the allocation of credit and resources within the economy and minimize the moral hazard in safety net arrangements.

processes of firms. The second arises because the market does not necessarily bridge the analytic gap between banks and supervisors and may set more stringent requirements.

Indeed, we have to have realistic expectations about our ability to close the gap completely. Today, we have the benefit of some recent research telling us that it is simply not possible for supervisors to come up with universal capital requirements that both optimize the allocation of credit and resources within the economy and minimize the moral hazard in safety net arrangements. Nor can capital regulation ever be viewed as a substitute for sound economic decision making by individual banks about their actual capital levels.

Whatever we choose as a direction for future capital requirements is likely to be imperfect and will eventually need to be replaced, no doubt sooner than we would like. That we have benefited for ten very solid years from the Basle Accord is a compliment to the framers. And in the last ten years, there has been at least one major innovation in interpreting regulatory capital ratios—prompt corrective action, a regulatory failsafe mechanism to ensure that supervisors intervene early and forcefully enough when banks are in trouble. This approach to capital regulation may warrant further attention as we consider our options going forward.

Finally, despite the progress I have cited, we know that some individual banks and banking systems are not well capitalized at present, suggesting that both supervisors and the marketplace are not universally applying the lessons we have learned. That is, we are far from being able to say that the combination of banks' internal management discipline and market discipline is so strong that capital requirements are not needed and that supervisors of internationally active banks do not need a capital accord. Indeed, just the contrary: I do not think there has been a more urgent need for the Basle Committee to exercise leadership in this arena than exists now.

To sum up the comparison of 1998 and 1988, I would like to emphasize three points:

- Competition in the industry now effectively encompasses a much wider circle of institutions. Therefore, the applicability of capital requirements in the twenty-first century must go well beyond G-10 banks.
- The risk profile of banks is changing in its composition and complexity and in the methodologies used to describe it, making strong supervision and enhanced market discipline important complements to capital regulation.
- Recent experience and research on the impact of the Basle Accord on incentives within banks suggest that seeking to achieve optimum capital only through regulatory means will not work. This conclusion again points to the need for a dynamic mix of supervision, market discipline, and robust capital regulation.

IMPLICATIONS FOR THE ACCORD

Let me turn now to the role of the Basle Committee.

For some time, the Basle Committee has been monitoring the developments I have described today, with the assistance of the Capital Subgroup chaired by Claes Norgren, the general director of the Financial Supervisory Authority in Sweden. Committee members have benefited from the extensive research and discussion under way in the supervisory community, the financial industry, and academia, and from conferences like this one.

At its July meeting, the Committee decided that the time had come to review the Basle Accord, a review that the Committee itself will conduct. In all likelihood, the review will lead to a major effort to revise the Basle Capital Accord. While no timetable has yet been laid out, there is broad recognition of the need to move expeditiously and to make significant progress in the next one to two years.

The process that we use in our review and revision of the Accord will require communication with banking supervisors and with supervisors of nonbank institutions. We have a strong interest in ensuring that the capital framework we develop meets the needs of banking supervisors outside the G-10 countries. The Committee plans to have an active and ongoing dialogue with banking supervisors globally, through existing channels and new ones as necessary. In addition, we hope to open up a discussion with supervisors in other key financial industries, such as securities and insurance, about approaches we might eventually consider. Here again, we would not only draw on the existing channels of communication we have with these supervisors and their international organizations but also cultivate new channels of communication.

A parallel dialogue is also necessary with the banking and financial community. To develop the structure and key elements of a capital framework, understand its efficacy and incentive effects, and evaluate its robustness, we will need the input and participation of the financial community. I also believe that the capital framework will only be effective if banks themselves have a disciplined process for assessing their capital adequacy, setting appropriate capital goals, and ensuring that these goals are met. Moveover, I believe supervisors can learn a great deal from institutions where such processes are already in place. Our dialogue with the financial community can, I hope, be extended to rating agencies and securities analysts, groups that play an important role in market discipline.

To conclude, I see a large and demanding agenda ahead for the Basle Committee on Banking Supervision, for financial supervisors globally, and for the financial industry. We welcome the challenge. Our hope is to see through the complexity of financial activity and the variety of supervisory needs across countries and financial institution types to identify the simple, straightforward outlines of a capital framework. If we can identify that framework, we can apply it flexibly to banks at the cutting edge of financial engineering as well as those

Our hope is to see through the complexity of financial activity and the variety of supervisory needs across countries and financial institution types to identify the simple, straightforward outlines of a capital framework.

new to the international markets, to large banks and small ones, and to nonbank financial institutions.

I believe that such an ideal framework will include the following:

- an approach to quantitative capital requirements that offers the possibility of translating our expectations for financial institutions across countries, institution types, and financial industries;
- integration of the quantitative capital requirements with a set of qualitative expectations for banks engaged in managing their risk and evaluating their capital needs; and
- the maximum possible reliance on market discipline, with emphasis on transparency and disclosure.

As our thinking on the Accord develops, the members of the Basle Committee and I will continue to use opportunities such as this, as well as the more usual avenues of consultation, to share our ideas, to raise questions and concerns, and to lay out the path ahead. We will actively seek your suggestions and reactions.

Thank you.