UNITED STATES SENATE
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

Hearing on the Development of the New Basel Capital Accords
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Mr. Chairman, Senator Sarbanes, I appreciate your invitation to testify today. I am currently Professor of Law at Georgetown University Law Center and the Nomura Visiting Professor of International Financial Systems at Harvard Law School. I teach, among other things, Banking Regulation and International Economic Law. At present I am at work on a book on Basel II. As you know, I held several economic policy positions in the Clinton Administration, ultimately as Assistant to the President for International Economic Policy. I testify today purely in my individual capacity as an academic, with no client interests or representation.

Basel II would, if implemented, represent the greatest change in the regulation of commercial banks since the early 1980s. The savings & loan debacle that followed those changes is a cautionary tale of the potential for unintended and unanticipated consequences from any major regulatory change. Even policies that eventually prove worthwhile can entail significant transitional problems. In the case of the advanced internal-ratings-based (A-IRB) approach of Basel II, there are major additional grounds for concern: the complexity of the rules, the opaque manner in which they will be implemented, the absence of reliable information on the impact those rules will have on capital levels, and uncertainty on how the new regime will affect global financial stability.

These and other difficulties have stretched the Basel II process years beyond the original target date for completion. They have also bedeviled efforts by bank regulators to implement into U.S. law the final Basel II rules, as released in June 2004. In late September the agencies delayed once again their timetable for implementation. In their notice of delay, however, the agencies expressed their intention to issue a notice of proposed rulemaking early next year. My principal recommendation is that the agencies not proceed with an implementation regimen unless and until they are able to answer more convincingly the basic questions surrounding the impact of Basel II – most importantly, its effect upon minimum regulatory capital levels.

Because Congress has previously given the banking agencies broad authority to regulate bank capital levels, no legislation is needed to implement this international arrangement. But, as the regulators have already been responsive to the concerns of banks throughout the Basel II process, one would hope they will be at least as responsive to a considered request for caution by Congressional committees of relevant jurisdiction.

While delay will understandably upset those financial institutions that have prepared for Basel II in anticipation of substantial reductions in their capital requirements, there is no compelling reason to brush aside the important unanswered questions. Our banks today are sound and they are profitable. There is no crisis requiring action in the face of incomplete information. While it is certainly important to encourage large banks to adopt the best available methods for risk management, this is insufficient justification for a leap into the unknown on capital requirements. As I explain in the next section, capital requirements have become so central to prudential bank regulation that proposals for significant change should be subjected to the full scrutiny and debate that would accompany any major modification of government policy.

In the remainder of my testimony I will first review the key role played by capital requirements in prudential bank regulation, next identify the goals that the Basel Committee has itself set for the revised Accord, and then discuss my doubts that Basel II will realize these goals. Finally, I will elaborate my reasons for counseling caution and suggest some steps this Committee might take to assure that Basel II does not compromise the safety and soundness of large banks, both in the United States and abroad.

The Importance of Capital Regulation

Regulatory monitoring of bank capital levels has existed in the United States since at least the early years of the twentieth century. Although the sophistication of that monitoring evolved fairly steadily, explicit minimum capital requirements were not imposed by U.S. bank supervisors until the 1980s. In the intervening years, capital requirements have become central to prudential regulation. As a result, the complete overhaul of capital regulation contemplated in Basel II is of greater significance to the safety and soundness of the U.S. banking system than the Gramm-Leach-Bliley Act or, indeed, any other legislation since the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA).

Bank capital is generally thought to play three interconnected roles. *First,* it provides a buffer against bank losses arising from bad loans or any other cause. Capital reserves permit the bank to absorb these losses without becoming insolvent. *Second*, capital mitigates creditor losses if the bank nonetheless fails. *Third*, capital holdings create a disincentive for banks to take excessive risks. If a bank has low or zero capital, its owners and managers will be tempted to put the funds available from deposits towards risky, but potentially high-return, uses. They have literally nothing to lose. The higher the bank's capital levels, the more they have to lose, and thus the more prudent their lending policies should be.

These effects of capital can be found in any corporation, but the government usually does not require minimum capital levels in companies. We generally leave it to those who lend money to corporations to find ways to protect themselves. Where banks are concerned, however, there are powerful reasons to regulate capital levels. The existence of federally-insured deposits means that the government is, in effect, one of the biggest creditors of most banks. Since the premiums charged for deposit insurance are not in any strong sense calibrated for the riskiness of the bank, capital requirements serve as a substitute to protect the FDIC, and ultimately American taxpayers.

In addition, there is a widespread perception in financial markets that many large banks are considered "too big to fail" by bank supervisors. Bank failures can in some instances lead to much greater harm to the economy as a whole than the bankruptcy of even the largest non-financial corporations. Most important, of course, is the possibility of a systemic effect, in which the failure of one large bank produces dislocations that reverberate through the financial system. In the worst case, the result could be a freezing up of credit availability and thus a shock to the economy. Creditors of banks thought to be too big to fail may not insist on high enough levels of bank capital because they believe that the Federal Reserve Board will bail out a very large bank before it becomes insolvent. Capital requirements help compensate for this form of moral hazard effect.

There is nothing particularly new in the role that regulatory capital can play. What is relatively new is the reliance placed on capital regulation to assure bank safety and soundness. For half a century following Depression era reforms, banks were quite circumscribed by legal restrictions and technological limitations. The activities they could engage in, the interest rates they could pay depositors, and the places where they could do business were all severely constrained. Banks were, in an important sense, protected from themselves, or at least from any inclination they might have to take business or financial risks. They were also the beneficiaries of a more or less guaranteed market for their services as financial intermediaries between savers and users of capital.

Changes in the financial environment, such as the expansion of capital markets and the rapid growth of money market funds, provided vigorous competition to banks at both ends of their business. What followed is well-known. Geographic, interest rate, and activities restrictions were all relaxed or eliminated. Banks undertook new activities and many took more risks in their traditional lines of business. There ensued some fairly dramatic problems, notably the weakening of large money center banks during the Latin American debt crisis of the early 1980s and the S & L crisis later in the decade. If the safety and soundness of banks were to be ensured, a new approach was obviously needed. Congress decided upon capital regulation in the wake of the Latin American defaults and, in FDICA, built on that approach by mandating the important practice of prompt, corrective action. Regulators in many European countries had already implemented various forms of risk-based capital requirements.

Today we rely on capital regulation as the most important single element of bank regulation. We use capital levels to determine when supervisory intervention is required. We use capital levels to decide when banks are strong enough to engage in the non-banking activities permitted by Gramm-Leach-Bliley. And, of course, we rely on capital levels to provide a buffer against loss and insolvency from the complex and varied activities of a large, modern bank.

This very brief survey of the role and history of capital regulation is, I hope, sufficient to show the importance of knowing with some certainty the impact of the proposed regulatory changes before actually adopting them. It is never possible to predict all the effects that a new regulatory scheme will have but, the more important that scheme is to ensuring a social good as important as bank safety and soundness, the more we should know before it is prudent to proceed.

The Basel II Process

The first Basel Accord on capital adequacy had two aims: *First*, to increase the stability of the international financial system by ensuring that internationally active banks had sufficient capital cushions. This arose directly from the travails of U.S. and other banks arising from the Latin American sovereign debt crisis. Congress had insisted that, in exchange for the partial bail-out these banks were to receive through IMF assistance to the defaulting sovereigns, the banks be required to increase their capital levels. Regulators in a number of other countries shared a concern that the capital levels of many large banks were too low. *Second*, the Accord was intended to promote greater competitive equality among internationally active banks from different countries. American and British banks in particular believed that the more generous safety nets for banks provided by the governments of Japan and France gave banks in those countries access to private capital at a lower cost. As noted earlier, bank creditors who believe that the borrowing bank will be saved from insolvency by its government will demand a lower risk premium in their lending to that bank.

With a lower cost of funds, the bank will in turn be able to lend profitably at lower rates than its competitors from countries with less generous safety nets.

To what degree were these aims realized? It is difficult to isolate the effects of Basel I, as implemented around the world, from economic conditions, market developments, and other regulatory factors. Regulators in the Basel Committee countries were already converging around the view that risk-based capital requirements should be an important element of bank regulation. Thus Basel I essentially ratified and harmonized a regulatory trend; it did not initiate a major regulatory change. Whatever the reasons, it is indisputable that capital levels rose following adoption of the Accord. In the intervening years large international banks have remained remarkably sound, despite two international financial crises and rapid change in financial services industries. The major exception, of course, has been the Japanese banking system, but the origins of its problems considerably predated implementation of Basel I.

There is little reason to believe that the Accord has, to any significant extent, created the proverbial level playing field among internationally active banks. We do not have the benefit of comprehensive empirical work on this question. Still, on the basis of some limited work on the question, several scholars have concluded that, in all likelihood, national differences in tax, accounting, and other regulatory measures outweigh any leveling achieved by harmonized minimum capital standards. This is not to say that such standards have *no* effect on the competitive position of banks – only that it is probably modest compared to other factors.

The shortcomings of Basel I have been well-rehearsed throughout the Basel II process, and I need not repeat them in detail today. Suffice it to say that the possibilities for regulatory arbitrage prompted the Basel Committee to undertake a substantial revision of the original Accord in the late 1990s. Its first effort, released in 1999, was roundly criticized by large banks and others as sharing many of the same flaws as Basel I. Subsequently the Committee completely reoriented its work, producing the Advanced Internal Ratings Based (A-IRB) approach to capital regulation. In the course of this shift, the Committee adopted an additional aim for Basel II – to bring regulatory capital requirements more in line with the quantified credit risk assessment and management practices of many large banks. U.S. and other supervisory agencies on the Committee had concluded that the complexity of banking transactions and the speed with which the creditworthiness of counterparties may change had rendered Basel I anachronistic. Supervisors commented that the Basel I capital requirements were based on such crude assessments that they really did not provide a useful picture of the risk profile of a large, complex bank.

It is important to note that, in re-orienting the revision of the Accord towards basing regulatory capital requirements upon banks' internal credit modeling, the Basel Committee repeatedly emphasized that its goal was neither to raise nor to lower the aggregate level of regulatory capital in the banking system.

The regulatory agencies that constitute the Basel Committee – including U.S. supervisors – have thus identified their purposes for internationally harmonized minimum capital requirements: (1) stability in the international banking system, to be achieved through minimum capital levels that reflect (2) a closer alignment of regulatory capital with the "economic" capital determined by banks themselves on the basis of sophisticated risk management systems to be optimal for their situations, which (3) does not result in significant changes in aggregate levels of regulatory capital, while (4) promoting competitive equality among internationally active banks. My misgivings about the process arise in substantial part because, at this juncture at least, Basel II does not stack up well against these stated aims.

Unanswered Questions Concerning Basel II

Earlier in my testimony I referred to the savings & loan debacle of the 1980s. Let me emphasize that I do so not because I predict that implementation of Basel II would lead to a comparable calamity, but because that episode is an object lesson in the potential for unintended and unanticipated consequences resulting from major regulatory change. Even the most thorough analysis cannot eliminate completely the possibility for such consequences. But, in the absence of pressing circumstances that require a response to deal with an immediate threat, major regulatory change should generally proceed only after analysis has yielded a reasonable degree of confidence as to the likely effects of that change. In the case of Basel II, I believe that we are not at that point of reasonable confidence. To the contrary, some of what we *do* know gives additional grounds for concern.

Uncertainty as to Impact on Capital. The matter can be stated simply: As we sit here today, no one knows what the impact of the Basel II formulas will be on the regulatory capital requirements applicable to the large banks that will adopt the A-IRB approach. Each time U.S. banking supervisors have performed a so-called Quantitative Impact Study (QIS) to attempt an assessment of these effects, the results have surprised them. The latest of these exercises, QIS-4, suggested that minimum capital levels would fall by at least a quarter, and in some cases much more, at half the bank holding companies participating in the study. This clearly was not the result the Federal Reserve Board expected.

Let us be clear. I am speaking here not about *unintended* consequences of regulatory change, such as shifts in market behavior of regulated entities. I am speaking of the *intended* and direct consequences of the new rules upon the amount of capital the banks must hold. The inability to determine what minimum capital levels will actually be required under the A-IRB approach is a major reason why, on September 30, the banking agencies again delayed the implementation schedule for Basel II in the United States. Yet, even as they announced the delay, the agencies indicated their intent to move forward with implementing regulations early next year. In an apparent effort to reassure those of us concerned that capital levels will decline significantly under Basel II, they also indicated that they will limit the amount by which minimum capital can decline in the first three years that Basel II is in effect. Finally, the banking agencies state that a bank's primary federal supervisor will decide whether to terminate the capital floors at the end of the transition period.

At present, then, the position of the banking agencies is essentially as follows: We do not really understand what the impact of the Basel II formulas will be on minimum capital levels, but we think the only way we will find out is to implement the new rules. We will not let regulatory capital fall too quickly in the first few years. After that, we will take a look at what happens and, if we see the need, instruct banks to hold higher capital levels than the Basel II formulas would require.

This plan is at best premature. It might be defensible if the overall impact of the regulatory change were broadly understood, with some second-order effects unclear based on the test runs. Here, though, the banking agencies cannot say what the most basic impact of the Basel II rules will be. The agencies may respond that they can raise increase minimum capital levels down the line if capital appears to be dropping too much. In the present context, this argument is not persuasive. The very determination of the Fed, in particular, to proceed with implementation in the face of all doubts and uncertainties leads one to question whether the agencies would admit errors and effectively supersede Basel II in a few years. Moreover, one must expect that the large banking organizations would vigorously oppose any move to, as I am sure they would put it, increase their capital requirements above what their credit risk models indicate is necessary.

The presumption, I believe, should run in the other direction. Implementation should not proceed until the impact and implications of Basel II are much better understood, and have been much more thoroughly vetted. It is hardly unreasonable for Congress and the public to expect that there be at least one impact study that bears out the expectations and predictions of the banking agencies before they proceed with implementation.

Questions About Credit-Risk Models. The inability to specify the effects of Basel II formulas on regulatory capital is of even greater concern in light of the anticipated reliance on credit risk models as the basis for determining minimum capital levels. The concern arises both from the technical state of credit risk models and from the supervisory challenge in overseeing the use of those models.

Credit risk modeling is a relatively new undertaking, at least in its comprehensive form. Any model is, of course, only as good as its inputs. If the credit risk parameters supplied by banks are unreliable, even a well-constructed model will give a misleading picture of actual risk. One difficulty is the potential for intentional distortion of model input. Even assuming good faith on the part of the banks, the relative dearth of useful historical data is cause for concern. There is generally less than a decade's worth of historical data available from which to generate the values incorporated into the model. Additionally, it is considerably more difficult to backtest credit risk models than market risk models. While the prices of traded securities change daily, defaults are relatively unusual events and tend to occur in clusters because of adverse macroeconomic conditions. Because there has been no serious recession during the last decade, there has been little opportunity to stress test the models.

The banking agencies have acknowledged that even the credit risk models used at the largest banks do not yet possess the "sophistication and robustness" that would be necessary to rely upon them for regulatory purposes. Basel II takes account of the relatively undeveloped state of the art of credit risk modeling by imposing its own formulas into which only four bank-generated variables are fed (probability of default, the bank's exposure at default, expected loss if default occurs, and the maturity of the asset). Yet even oversight of this process presents a new kind of supervisory challenge. The complexity of, and differences among, bank models will require a highly specialized expertise within the banking agencies in order to oversee compliance of A-IRB banks with their capital requirements. The banking agencies have assembled teams of experts to supervise the qualification, implementation, and operation of models in the A-IRB banks. To my knowledge, though, the agencies have not provided detailed information on the numbers of experts they have employed or projections as to how many bank models the teams will be able to examine before they are stretched too thin.

Questions about the ability of our banking agencies to supervise the use of internal credit models for regulatory capital calculations naturally raise the question of who can monitor the supervisors. The difficulties raised by the complexity of the bank models are compounded by the fact that much of the information contained in the models will be proprietary to the bank. Congress, academics, and other interested observers will thus not be in a position to assess how good a job the banking agencies are doing. Nor will creditors of banks be able to make their own informed assessment of the bank's risk and capital position, thereby limiting a source of market discipline that might contribute to bank safety and soundness. Finally, the opaque nature of the supervisory process for internal credit risk models means it is not clear whether and how U.S. banking agencies will be able to determine if their foreign counterparts are effectively supervising their own A-IRB banks. Basel II would hardly be contributing to even the limited equalization of competitive conditions that can be effected by capital requirements if those requirements are not being rigorously enforced in some countries.

There are no easy solutions to these difficulties. It is perhaps understandable that, after years of work, the regulators have grown impatient with the seemingly endless technical challenges and want to get on with implementation, making further needed changes as they go along. However, in my judgment, there are still too many questions outstanding for the agencies to proceed.

A Downward Spiral for Capital Levels? The problem, of course, is not just that the agencies cannot say what the effects of Basel II will be. It is also that such indications as we have from the imperfect impact studies suggest that capital levels could decline significantly. Recall that the Basel II process began with assurances from the supervisors that aggregate capital levels would not decline significantly. It appears that this assurance has been abandoned by the supervisors. Instead, about the only thing we can be sure of is that the A-IRB approach would produce significant declines in regulatory capital.

Indeed, the Basel II process seems to have acquired a disturbing capital-reducing momentum. Large banks appear to regard Basel II as an agreement between the banks and the regulators, whereby the banks will make the investments necessary to qualify for the A-IRB approach and the regulators will reduce required capital levels. I note with some concern that, when the European Parliament was considering new capital regulations based on Basel II, at least one European Commission official was reported to have touted the benefits of reduced capital requirements for European banks of between €80 billion and €120 billion (approximately $94-141 billion at current exchange rates).

After seeing the risk weights that will be applied to residential mortgage and small business lending under Basel II, the 9,000 U.S. banks that will *not* be applying the A-IRB rules became concerned that they will be disadvantaged in competing with the A-IRB banks in those lending markets. Their complaints have prodded the agencies to proceed with plans for a so-called Basel IA for all but the largest twenty or so banks that will adopt A-IRB. Existing capital rules based on Basel I will be modified to provide more “risk sensitivity” – a euphemism for reduced capital requirements – for these categories of loans. The banking agencies’ advanced notice of proposed rulemaking provides only possible means to this end, rather than a concrete proposal. Ironically, some of the ideas advanced by the agencies are contained in the “standardized approach” of Basel II – a revision of the original Basel I approach that U.S. regulators had previously rejected as insufficiently risk-sensitive to be worth implementing. While we do not know exactly where this process will eventually take the banking agencies, it is clear that reductions in minimum capital requirements will be the result.

The Basel I process began out of concern that capital levels at many internationally active banks were too low. In the years following adoption of Basel I, capital levels did generally increase. The Basel II process began out of concern that capital holdings may not be sufficiently related to actual risks incurred, particularly in large complex banking organizations, but with the stipulation that aggregate capital levels would not change significantly. What we seem to be getting is a kind of downward spiral in capital levels – large banks expect reduced regulatory capital requirements in exchange for more complicated risk assessment systems; changes are made in the Basel II formulas that appear to reduce capital requirements; banks that will not be adopting the A-IRB approach seek, and are granted, lower capital requirements in order not to be at a competitive disadvantage with the large banks; meanwhile, the large banks see Europe moving ahead with Basel II implementation under the promise of lower capital levels and do not want to be left behind. Federal Reserve Board officials even suggested last spring that simple leverage ratios would eventually be eliminated, thereby lowering capital requirements even further for banks whose risk-weighted requirements will drop substantially under Basel II. While the Fed backed off this position following an outcry from members of Congress, the floating of this proposal showed the momentum that has been generated for reducing capital levels.

This momentum is all the more disturbing because the regulators have not given us any explanation of why they believe capital levels should be lower than at present, if indeed they believe so. Capital requirements reflect a judgment as to the optimum trade-off between making more bank resources available for investment in productive activities and the costs that will be borne by the public fisc and the economy if banks fail (or are propped up by the government so as not to create problems in other parts of the financial system). This trade-off is a policy judgment; it cannot be reduced to a formula. In some respects, the judgment is based on the intuition of those with knowledge and experience of banks and banking systems. The bank regulatory agencies have not explained their theory of where capital levels should be, and why. Instead they have focused mostly on technical issues. They leave those of us observing the process worrying that the overriding goal of the Basel II process has become simply getting the new rules in place.

Some Practical Steps Forward

While I share the skepticism of many academics and former policymakers that the A-IRB methodology of Basel II is the best approach to capital regulation, I cannot say today that I have concluded it should be abandoned. However, there are simply too many important unanswered questions – theoretical, policy, and practical – to make proceeding with implementation a prudent course of action. My core recommendation to you is that members of Congress urge the banking agencies not to proceed with implementation until at least the more important such questions have been satisfactorily answered:

- Do the agencies believe that, in general, minimum capital levels are too high and, if so, what is the basis for that belief?

- Have the agencies been able to predict with reasonable precision the levels of capital that the A-IRB approach will require of large banks, and then to confirm their prediction through studies that are well conceived and executed?

- Have the agencies done scenario planning to anticipate the effects, unintended and otherwise, of Basel II upon the financial system as a whole? For example, are significant portions of certain kinds of assets likely to migrate out of banks into the unregulated sector? If so, might new risks of financial disruption be created?

- What do the agencies regard as the effective capacity of the specialized examiner teams that will be overseeing the use of bank models under A-IRB? How will the agencies determine whether other countries are successfully monitoring bank capital levels under the A-IRB approach?

- Have the banking agencies consulted with institutional investors, ratings agencies, independent analysts, and other market actors concerning the amount of information about their credit modeling that A-IRB banks will be required to disclose?

- Do the banking agencies continue active study of alternative approaches to capital regulation, such as the varieties of proposals based on market discipline or on so-called precommitment? I add this question because, although I do not believe that any of those approaches is at present appropriate as the sole basis for capital regulation, I cannot but wonder whether devoting some of the time and resources spent on developing the A-IRB approach might have revealed workable variants of other ideas. It seems to me that we should continue to explore these and other alternatives since, as many experienced observers believe, the A-IRB approach may not ultimately prove feasible.

It may well be that the agencies already have good answers to some of these questions, in which case they should be able to satisfy some of these concerns fairly quickly. With respect to the core issue of what capital levels will result from the Basel II rules, I believe that more work almost certainly needs to be done.

I have one other suggestion for you to urge upon the banking agencies if and when Basel II is implemented. The heart of the A-IRB approach involves using banks' internal estimates of the probability of default and a few other variables as the basis for risk-weighting minimum capital requirements. As mentioned earlier, there is not much of a track record on how accurate the predictions will be, especially in a time of economic turbulence. It will thus be important to rigorously and thoroughly evaluate the performance of the models on an ongoing basis. While I expect that the banking agencies will themselves pay heed to this subject, it would be useful for all concerned that there be an independent examination of this critical issue. Banking agency staff with credit model expertise will presumably be fully occupied in supervision, and will not have time for a complete assessment of past performance. In any case, it will be reassuring for Congress and the public to have an independent evaluation to complement the views of the banking agencies. Just as Congress has urged, and even mandated, evaluations of the efficacy of certain government spending programs in accomplishing their stated aim, Congress should encourage the banking agencies to contract with expert outsiders to conduct periodic evaluations of the bank models and of the supervisory requirements for the A-IRB banks.

Conclusion

Banking agencies in the United States and other Basel Committee countries have invested an enormous amount of work in the Basel II process. There is little question but that, as a result of this effort, we understand far better the challenges of risk management and prudential regulation in large banks operating in the financial services environment of the 21st century. It is clear, to me at least, that the Basel I standards cannot indefinitely remain a viable method of capital regulation. But that does not mean they should be abandoned before we have enough information to know that their replacement will be a net improvement. The mere fact that so much has been invested by the banking agencies in the A-IRB approach is not itself a justification for moving forward. Indeed, the accomplished economists who work in those agencies should know better than most of us the old economic axiom that the sunk costs you spent yesterday should not affect your assessment of the best way to spend additional resources going forward.

There needs to be more information developed by the agencies and more public debate on the central questions concerning Basel II before we make such dramatic changes in the regulation of our largest banks. It is noteworthy that the leadership of all five of the key institutions has turned over, or is in the process of doing so, since the Basel II process got underway in earnest (I include the Federal Reserve Bank of New York as a key actor, in addition to the quartet of the Federal Reserve Board, the Office of the Comptroller, the Federal Deposit Insurance Corporation, and the Office of Thrift Supervision.) I am hopeful that the new leadership is well-positioned to build on the work that has been done, while heeding the concerns of this Committee and others, to formulate sound and effective capital policies for all our banks.

Thank you for your attention. I would be pleased to answer any questions you might have.