Roger W Ferguson, Jr: Basel II

Testimony by Mr Roger W Ferguson, Jr, Vice Chairman of the Board of Governors of the US Federal Reserve System, before the Subcommittee on Domestic and International Monetary Policy, Trade and Technology, Committee on Financial Services, U.S. House of Representatives, Washington, D.C., 27 February 2003.

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Chairman King, Congresswoman Maloney, members of the Subcommittee on Domestic and International Monetary Policy, Trade and Technology: It is a pleasure to appear before you this morning on behalf of the Board of Governors of the Federal Reserve System to discuss Basel II, the evolving new capital standard for internationally active banks and bank holding companies. At this time, bank supervisors in this country and abroad are evaluating the results of a recent survey to assess the potential quantitative impact of the current proposals on the world's large banks. In addition, the supervisors in the United States are still incorporating feedback from our discussions with bankers, an ongoing process that will continue even after final rules are adopted. From the U.S. perspective, a hallmark of the Basel II process has been the effort to tailor the capital framework to the evolving industry best practices. We intend for these dynamic efforts to continue.

That having been said, after almost five years of discussion and revision, Basel II is about ready for the last rounds of comment - which we anticipate this spring and summer. We expect the Basel Committee to approve its package by late this year, the corresponding U.S. rulemaking process to be completed next year, and implementation to begin in late 2006. Banks need some certainty for planning, but this is not inconsistent with further changes between 2004 and 2006, and thereafter, as we learn more and as practices evolve.

Why is a new capital standard necessary?

The supervisors in this country have determined that Basel I, the current capital regime adopted in 1988, must be replaced for the most complex banks for three major reasons: defects in Basel I as it applies to these large entities, evolution in the art of risk management, and increased heterogeneity and concentration in the banking system.

Defects in Basel I

Basel I was a major step forward in capital regulation. Indeed, for most banks in this country, Basel I is now - and for the foreseeable future will be - more than adequate as a capital framework. Most banking institutions in this country engage in businesses with risks that counterparties and supervisors can evaluate relatively easily. Moreover, because of their lack of geographical diversification and/or limited alternative funding sources, the market continues to force most banks to carry capital positions considerably in excess of regulatory minimums under Basel I. For these reasons, U.S. supervisors do not believe the benefits would exceed the costs of requiring most banks to shift to Basel II. However, for the small number of large, complex, internationally active banking organizations, Basel I has serious shortcomings, which are becoming more evident with time. Developing a replacement to supply to these banking organizations is imperative.

First, Basel I is too simplistic to adequately address the activities of our most complex banking institutions. Basel I categorizes each bank's assets into one of only four categories, each of which represents a certain risk class. Each risk class has its own risk weight that is multiplied by 8 percent to get the minimum capital charge: zero for most sovereign debt, 20 percent of 8 percent for most intra-bank exposures and for agency securities, 50 percent of 8 percent for residential mortgages, and 100 percent of 8 percent for all other exposures. These "all other" credits include essentially all corporate and consumer loans, meaning that the whole spectrum of credit quality over which banks do much of their lending - from Aaa to the most speculative credits - receives the same regulatory capital charge. The lack of differentiation among the degrees of risk means that the resultant capital ratios are too often uninformative and might well provide misleading information for banks with risky or problem credits or, for that matter, with portfolios dominated by very safe loans.

Moreover, the limited number of risk classes not only limits the value of the capital requirement but also creates a regulatory loophole that creates incentives for banks to game the system by capital arbitrage. Capital arbitrage, in this case, is the avoidance of certain minimum capital charges through sale or securitization of those assets for which the capital requirement that the market would impose is less than the regulatory capital charge. Clearly, the market believes that the 4 percent capital charge on most residential mortgages (50 percent of 8 percent) and the 8 percent on most credit cards (100 percent of 8 percent) is higher than the real risk, facilitating the securitization and sale of a large volume of such loans to other holders. This behavior is perfectly understandable, even desirable in an economic efficiency sense. But it means that banks that engage in such arbitrage retain the higher-risk assets for which the regulatory capital charge - calibrated to average quality assets - is on average too low.

Supervisors, through the examination process, are, to be sure, still able to evaluate the true risk position of the bank, but the capital ratios of the larger banks are becoming less and less meaningful, a trend that will only accelerate. Not only are creditors, counterparties, and investors less able to evaluate the capital strength of individual banks from what are supposed to be risk-based capital ratios, but regulations and statutory requirements tied to capital ratios have less meaning as well.

The evolving state of the art

At the same time, risk management and appropriate capital determination have evolved significantly beyond the state of the art at the time Basel I was developed. Banks themselves have developed and adopted some of the new techniques to improve their risk management and internal economic capital measures. But clearly banks can go considerably further. Basel II would speed adoption of these new techniques and promote the future evolution of risk management by establishing a framework that is more risk-sensitive.

Increased heterogeneity and concentration in banking

Finally, market pressures have led to consolidation in banking around the world. Our own banking system has not been immune; it, too, has become increasingly concentrated with a small number of very large banks operating across a wide range of product and geographic markets. Their operations are tremendously complex and sophisticated, and their significantly different strategies add a high degree of heterogeneity to their operations. At the same time, significant weakness in one of these entities, let alone failure, has the potential for severely adverse macroeconomic consequences. It seems clear that the regulatory framework should encourage these banks to adopt the best possible risk measurement and management techniques while allowing for the considerable differences in their business strategies. Basel II presents an opportunity for supervisors to encourage these banks to push their management frontier forward. Of course, change is always difficult, and these new mechanisms are expensive. But a more risk-sensitive regulatory and capital system would provide stronger incentives to adopt best practice internal risk management.

Let me be clear. If we do not apply more risk-sensitive capital requirements to these very large institutions, the usefulness of capital adequacy regulation in constraining excessive risk-taking at these entities will continue to erode. Such an erosion would present U.S. bank supervisors with a highly undesirable choice. Either we would have to accept the increased risk of instability in the banking system, or we would be forced to adopt alternative - and more intrusive - approaches to the supervision and regulation of these institutions.

Basel II

I want to stress that the U.S. supervisory authorities intend to apply only the so-called Advanced Internal Ratings Based (A-IRB) version of Basel II. We will *not* be adopting the two other variants of Basel II - the Standardized and Foundation Internal Ratings Based Approaches - that have been developed by the Basel Committee. We expect to *require* about ten large U.S. banks to adopt the A-IRB approach, but we anticipate that a small number of other large entities will *choose* to adopt it as well after making the necessary investment to support their participation.

All other banks in this country will remain on the current Basel I capital standard when the new Accord is implemented. For these thousands of banks, the shortfalls of the current rules, as noted, are not sufficiently large to warrant a mandatory shift to the Basel II regime. However, any of these institutions

will have the option to adopt the A-IRB requirement, as we expect some large entities to do at the outset. If they seek to do so, however, they will have to meet the same high standards of internal infrastructure and controls that will be required of the core group.

The Federal Reserve Board believes that the A-IRB approach of Basel II will address the material defects of Basel I for these entities. By requiring strong internal standards as an entry criterion, the Basel II approach will ensure that these banks adopt structured, formal, empirically based methods of managing credit risk, which will lead to significantly improved risk-management capabilities at the very largest banks and other adopters. Capital requirements themselves will become more risk sensitive and less prone to artificial distortions. The poor incentive structure of Basel I will be removed for A-IRB banks. Supervisory practices will also become more consistent with evolving risk-management practices. Risk-based capital ratios will become more reliable as an indicator of financial strength.

I turn now to another aspect of Basel II: its three pillars. At the outset of the Basel II process, the supervisors on the Basel Committee determined that a robust capital adequacy framework should include three important elements or pillars. Pillar I consists of the minimum capital requirements themselves - that is, the rules by which a bank calculates its capital ratio and by which its supervisor assesses whether it is in compliance with the minimum capital threshold. Pillar II, the supervisory oversight pillar, encompasses the concept that well-managed banks should seek to go beyond simple compliance with minimum standards and perform for themselves a comprehensive assessment of whether they have sufficient capital to support their risks. In addition, supervisors should be in a position to provide constructive feedback to bank management on these internal assessments, or "economic capital", based on their knowledge of industry practices at a range of institutions. Finally, Pillar III seeks to complement these activities with market discipline by requiring banks publicly to disclose key measures related to their risk and capital positions. The concept of these three mutually reinforcing pillars has been key to the Basel II effort.

Pillar I: Minimum regulatory capital requirements

The minimum capital requirements for credit risk under the A-IRB approach are built around the same concepts that underlie all modern portfolio-based methods for systematically measuring credit risk. The first, and perhaps most important, input to this approach is an estimate of the likelihood or probability that a borrower will default. Second, lenders need a sense of the size of the loss in the event of a default because they are often able to recover something from a defaulted borrower's assets or from collateral or a guarantee. Third, the lender, who often has an undrawn credit line or loan commitment to a borrower, needs to estimate what the amount borrowed is likely to be at the time a default occurs. These key inputs - probability of default (PD), loss given default (LGD), and exposure at default (EAD) - are the building blocks of the A-IRB approach to estimating capital requirements. Many banks are currently working to improve their ability to estimate these quantities, using a wide variety of techniques from expert judgment methodologies to quantitative statistical models.

A-IRB permits banks to use any or all of these, requiring only that the procedure for estimating these three key parameters be based on empirical information, that it be rigorous, that it be reproducible by third parties, that the process be subject to strong internal controls, and that the results be shown to measure risk accurately. The supervisor must, in fact, validate the estimation procedures and the controls that support them before a bank can use A-IRB. As part of the validation process, a bank must demonstrate that these risk measures are in fact used in credit-granting decisions, as well as for other management purposes such as reserving and pricing. The intention is for the supervisor and the manager to focus on the same issues.

These estimated risk variables are inputs to regulatory formulas that will determine the minimum required capital for a given portfolio of exposures. Just as the methods of determining the inputs can change as the state of the art changes, the formulas that translate the inputs into capital requirements can be modified as well by the regulators. Basel II can improve as knowledge improves.

The rules surrounding Pillar I are clearly more complicated than I have just described, and the volume of comment letters and the number of pages that have been and will be published for comment will attest to that. One reason for that complexity is that the large, complex banking organizations, to which the rules are addressed are, in a word, complex. Simple rules just cannot address their issues and the nature of their business. These rules have been adjusted and modified significantly as a result of comments from bankers and other interested parties. Sometimes those comments have led to simpler rules. But, more often, they have led to even more complex rules because each complex bank to which they apply operates somewhat differently from other banks. Thus the rules have been modified

to address important and meaningful differences in risk. Simple rules too often become straightjackets; flexibility requires more complex rules.

Pillar II: Supervisory oversight

Indeed, because even complex rules cannot adequately capture the risks and desirable procedures for each bank, the A-IRB establishes with Pillar II a mechanism for dialogue on risk and capital between bank managers and bank supervisors. I have already noted that supervisors will verify the process for determining credit-risk measurement, for ensuring ongoing control over the process of determining these risk-measure inputs, and for ensuring that the risk inputs are used for more than calculation of regulatory capital. In addition, Pillar II requires that the bank maintain its own internal assessment of its risk relative to its capital - both currently and over the cycle as well as in periods of stress - *and* that the supervisor review and respond to that assessment. The focus is on ensuring that the bank has strong risk-assessment capabilities and that the supervisor and the bank jointly assess and evaluate that capability.

This kind of dialogue cannot be captured by any set of rules. It will focus on a frank discussion of loss potential and of any unusual capital needs associated with unbundled risks not captured in Pillar I. It addresses the individual bank's special risk profile, its special business strategy - which might, for example, imply geographic or borrower concentrations - or its unique cyclical sensitivities. Such discussion, review, and analysis are focused on the individual bank's possible unique need for a capital buffer - an amount in excess of its Pillar I minimum. Such buffers are designed to minimize the risk that losses and capital erosion could trigger undesired responses under prompt corrective action and the associated reactions that could affect financial and real macroeconomic stability.

Pillar II, we should be clear, has some drawbacks. It is inherently less transparent than Pillar I because outsiders will not know which portion of a bank's excess capital is deemed "necessary" to address a particular risk specific to the bank and which portion is truly an "extra" cushion. It is also more difficult - although not impossible - for supervisors to require an uncooperative bank to hold Pillar II capital than rule-imposed Pillar I capital.

Pillar III: Market disclosure

Basel II seeks to minimize the public difficulty of interpreting capital ratios by requiring public disclosure of considerable quantitative and qualitative information, including, in effect, the risk inputs I described earlier. Such disclosures also provide incentives for banks - the disclosers - to adopt better risk-management techniques and to link their capital requirements to their risk profiles. All these results will enable the public to make comparisons among banks more easily. Indeed, the ability to compare will be an important constraint on any supervisor, foreign or U.S., who might not diligently apply the rules to its banks; outliers will appear unusual and, with insufficient explanation, be subject to market discipline.

Indeed, a key reason for Pillar III is to seek to harness market discipline to bring pressure on banks to adopt safe and sound practices. Public disclosure increases market discipline in two ways. First, by providing more information, it enables the market to impose differential funding costs and availability on banks, related to the risks they take; additional risk requires additional Pillar I capital, but the disclosure of that risk and the size of the capital buffer also affects the minimum price that counterparties require to provide funding. Second, as noted, it facilitates comparisons across banks. Because outliers will be subject to particularly close review by the market and other national regulators, banks and their regulators will have more difficulty evading their minimum capital requirements.

Key issues

Not surprisingly with such a significant proposal, some are concerned about certain aspects of Basel II. It might be useful to the subcommittee if, in the remainder of my comments, I focus on a number of issues that have been raised. Before I do, however, I want to reiterate to the subcommittee that the process of developing the Basel II proposals has involved a truly unprecedented dialogue with banks on a wide variety of issues. That dialogue is still going on, especially with regard to technical issues involving retail credit, risk-mitigation techniques, securitization, and other matters, including some that should be called to your attention.

Operational risk

One of the early decisions by the participants in the Basel II process was to focus more clearly on credit risk in the capital determination process. Doing so required that all the other risks that had been combined with credit risk in Basel I be unbundled. Several years ago, the first necessary step in the unbundling of these risks was taken when the market risk of trading activities was separated for its own treatment. The Basel II effort has focused very carefully on the credit risks that banks take and has sought to ensure that the framework appropriately measures the marginal contribution of such risks to a bank's total risk profile. But this focus implies the need to consider the way to address other important banking risks. Some of these risks are sufficiently modest that they can be addressed through the supervisory process - Pillar II. But one risk, operational risk, has been historically so important in the depletion of capital and the failure of banks that it should be subject to specific Pillar I minimum capital requirements.

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events, and it includes legal and compliance-related risks. These risks and their associated losses are often in the news: rogue traders, fraud and forgery, settlement failures, inappropriate sales practices, poor accounting and lapses of control, troubles in acting as custodians and managing assets, and legal settlements involving significant payments for losses alleged to have been caused by banks. All of these costs have been substantial both here and abroad.

Indeed, many banks, in their internal economic calculations, already allocate a significant portion of their capital for operational risk - averaging 17 percent in the subset of large banks we sampled. A couple of banks even make the amount public, and increasingly the market is sensitive to the fact that not all excess regulatory capital is held just as a general buffer, that is, that excess *regulatory* capital is not necessarily excess *economic* capital. But the public is unable in most cases to differentiate the excess regulatory capital held for specific purposes from that held for general purposes. This inability is a particular problem under Basel I for those entities with modest credit risk and dominant operating risk. Under Basel I, the regulatory capital is driven solely by credit risk, and therefore the requirement tends to be too low for activities that do not entail much credit risk but do expose the bank to operational risk. The A-IRB banks under Basel II that specialize in such activities - for example, processing securities and payments and acting as custodians - will experience increases in their *regulatory* capital requirements on those activities. Every day these entities transfer very large amounts of federal funds, act as custodians for massive quantities of securities, and dominate payments and securities transfer systems. Disruptions in their operations can cause, and have caused, serious difficulties in world financial markets.

U.S. supervisors will propose that those banks that are required, or that choose, to adopt the A-IRB approach to Basel II will also be required to hold capital for operational risk, using a procedure to develop the size of that charge known as the advanced measurement approach (AMA). Because of earlier comments by U.S. bankers, the amount of required operational risk capital will not be subject to a minimum floor nor will the charge be based on revenue. Rather, under the AMA, A-IRB banks themselves will have the primary responsibility for assessing their own operational risk capital requirement. This requirement will be a Pillar I charge and will be disclosed to market participants under Pillar III. The banks that remain under Basel I will not be subject to an operational risk capital charge in the United States.

The advanced measurement approach gives banks the flexibility to develop their own methodology for calculating the operational, or "op", risk capital charge. The supervisor, to be sure, will require that the procedure be comprehensive, systematic, and consistent with certain broad guidelines. These guidelines specify such factors as the necessity for independent risk management, board and senior management oversight, audits, the use of historical internal and external loss data, scenario analysis, and so forth. The supervisor must review and validate each bank's process, but again considerable flexibility exists for individual bank application. The op risk capital charge is expected to reflect banks' own environment and control mechanisms and can be reduced by insurance and other risk mitigants. For example, if a bank invests in improved contingency procedures and approaches, we would expect such an investment to be reflected in a reduction in the need for operational risk capital under the AMA.

Several U.S. banks that are developing an op risk capital requirement under the advanced measurement approach have told us that they are very comfortable with the results so far. Importantly, they say that the procedures have allowed them to better identify business activities and practices that pose operational risks and that they have taken steps to minimize the risks. That result is critical to

supervisors who believe that the AMA methodology will produce a lasting discipline for banks, encouraging them to think carefully about and minimize the risks associated with their business activities. Supervisors expect the advanced measurement approach to provide the incentives to invest in new systems and practices that will reduce the potential for serious losses from operational risk.

Operational risk and the AMA are issues that I call to the subcommittee's attention because I am aware of a very few banks that aggressively oppose this aspect of Basel II. Accordingly, I have held a number of discussions with bankers on this subject over the last year, including many direct conversations with the senior bankers who have expressed the most concern about the issue. As I indicated earlier, I believe this sort of dialogue has been essential to the appropriate development of the Basel II framework and is something that we will continue to emphasize. But as a bank supervisor and as a central banker, I have to say that we have not found the arguments of the operational risk skeptics to be convincing.

The skeptics argue that the cost of developing and using the advanced measurement approach and the associated capital charges divert resources away from actual investment in risk-reducing systems and better backup systems. As I will discuss more fully, Basel II, without doubt, is costly; but the final judgment for any expenditure must rest on the balance between costs and benefits. We and, as noted, many banks believe that the AMA is critical for the kind of formal analysis that focuses banks' attentions on the operational risks they face. We are also convinced that the explicit Pillar I capital charge creates incentives for them to reduce these risks while ensuring that minimum capital is allocated to absorb the remaining risk.

Critics also argue that an explicit Pillar I capital charge would upset the competitive balance with nonbank and foreign bank competitors. Foreign regulators, it is argued, will be less aggressive in their rule enforcement than U.S. regulators. As I earlier suggested, Pillar III - disclosure - will highlight any significant differences across banks, in the expectation that counterparties will penalize inconsistent risk measures. In addition, the Basel Supervisors Committee has set up an implementation group of senior supervisors to coordinate the application of the rules across countries.

As for nonbanks, the argument ignores the significant edge banks will continue to have from access to the discount window and the Federal Reserve's payments system. This competitive edge attracts customers and lowers funding costs relative to nonbanks. In addition, most of the banks that have expressed concern about the operational risk capital charge are already carrying large excess regulatory capital positions, supplementing their quite small current regulatory capital. Indeed, we do not believe that these entities would have to raise any new capital to meet the proposed op risk charges, but rather would simply shift excess to required capital. "Excess" *regulatory* capital may be reduced for some banks under Basel II, but we believe that such reductions because of op risk are perfectly consistent with making capital requirements both more risk sensitive and more transparent, not to mention more accurate.

The effort not to raise regulatory capital requirements is underlined by the critics' preference that op risk capital needs be addressed in Pillar II - that is, it should be part of the undisclosed capital buffer developed as part of the supervisory oversight of banks on a case-by-case basis. We again disagree. Excess regulatory capital would appear larger than it should, and the transparency of the proposed procedure would be lost. Inevitably, such an approach would treat banks with similar risks differently. Supervisors would also have less leverage over a bank's capital allocation for op risk and third parties would have more difficulty comparing capital among banks than they would under a Pillar I rule.

In short, we have not been convinced by the arguments we have heard, and we still believe that op risk is every bit as real a risk as credit risk and should be treated in the same way - with an explicit Pillar I capital charge.

Commercial real estate

Some banks - mostly those that would not be subject to the A-IRB capital requirements unless they chose to become so - oppose the higher capital charges that A-IRB banks would generally face on their commercial real estate loans. These banks argue that bank lenders have learned from the losses of the 1980s and early 1990s and now do much better underwriting by insisting on more borrower equity and better appraisal procedures for commercial real estate. These improvements, critics argue, have reduced default rates and losses and, if anything, argue for lower, not higher, capital requirements or at least the same capital charge that is applied to business loans under A-IRB.

Setting aside that the system has not been tested by a true real estate cycle since the early1990s, the supervisors agree that commercial real estate underwriting has significantly improved. These improvements have been incorporated into the empirical analysis that our staff has used in developing the Basel II proposals. In the view of the Federal Reserve, however, capital requirements should be based on more than just the chance that an individual loan will default: They should also be based on the tendency of defaults to occur at the same time, in "clumps" - what economists refer to as high asset correlation. Defaults and losses occurring in clumps require higher capital than such losses spread out over time. According to our analysis, this clumping tendency is much stronger for commercial real estate credits than for business loans. Moreover, though improvements in underwriting have made individual loans safer, the asset correlations among such loans in a given portfolio - the "clumping" tendency - has not changed as a result of improved underwriting.

The staff of the Federal Reserve has discussed this issue with bankers and has shown them an analysis - based on several data sets and using different methodologies - requesting their evidence of any errors or new data sets that challenge the staff's conclusion. The Federal Reserve is in the process of making this analysis widely available and is again asking for critical evaluation and any contradictory information. We are, in short, willing to listen. If banks can provide evidence that this proposal embodies erroneous assumptions or is otherwise analytically faulty, we will change it.

Cost. Implementing A-IRB in this country is going to be expensive for the small number of banks for which it will be required, for those banks choosing it, and for the supervisors. For the banks, the greatest expense is in establishing the mechanisms necessary for a bank to evaluate and control their risk exposures more formally. Nonetheless, such costs are modest relative to the size of recent charge-offs. The A-IRB approach will not eliminate losses: Banks are in the business of taking risk and where there are risks, there will be losses. But we believe that the better risk-management that is required for the A-IRB will reduce losses and provide benefits to bank stakeholders and the economy. The cost-benefit ratio looks right.

Furthermore, attributing all the costs associated with adopting modern, formal risk-management systems to Basel II is a logical fallacy. The large banks required to adopt A-IRB - banks that must compete for funding in a global marketplace - would ultimately have to undertake such measures with or without Basel II. Basel II may well speed up the adoption process, but many of the costs attributed to Basel II actually just reflect the costs of doing business in an increasingly complex financial environment.

Competitive equity

Some regional banks have told us that they are concerned that regional, and perhaps smaller, banks will be competitively disadvantaged by Basel II, even if they are not required to adopt A-IRB. Their concern has two parts.

First, some regional banks feel that market pressure and the rating agencies will force them to adopt A-IRB and, as a result, to incur significant costs. Our discussions with rating agencies do not support the regional banks' fears. Indeed, our sense is that the rating agencies feel that adoption of A-IRB by regional banks at this time would not be cost effective. In our opinion, any regional bank interested in adopting the A-IRB approach at its inception should carefully assess the costs and benefits of doing so.

That said, we expect the art and science and, indeed, the very language, of risk management to migrate toward that used for A-IRB. Over the years ahead, as the new risk-management techniques become more cost effective for them, regional banks, we suspect, will adopt these techniques and, thereafter, probably adopt the A-IRB at the regulatory level. But adopting them now would be premature, and we believe that regional banks will not be pressured to do so by either the rating agencies or the regulators.

The second part of the competitive equity concern is the belief by some regional and community banks that they will be placed at a competitive disadvantage with A-IRB banks because of the larger banks' lower regulatory capital charges on residential mortgages, loans to smaller businesses, and certain retail loans.

The direct competitive impact on Basel II and Basel I banks is important. Of course, the rulemaking process in the United States will probe the issue fully. However, a number of factors suggest that the concern about competitive impact is not well founded.

In terms of *overall* capital, A-IRB banks will likely face lower capital charges for some types of lending, but they will also face higher charges on other loan categories, such as commercial real estate finance and higher costs of developing the risk-management infrastructure to be an A-IRB bank. They will also be subject to an explicit capital charge for operational risk and the cyclical buffer in Pillar II that will not be imposed on non-IRB banks.

In the *individual loan markets* for which Basel II lowers A-IRB capital charges, we also have reason to believe that competitive balance will not be disrupted. In the business loan market, for example, the smallest banks do not directly compete with the banks that will be required to adopt A-IRB. Small banks' close ties to local communities afford them substantial information advantages over larger banks. As a result, they tend to focus on relationship lending to small businesses and individuals. A-IRB banks, in contrast, tend to make such retail loans by using automated underwriting tools. Larger regional banks are more likely to compete directly with A-IRB banks, but for two good reasons we believe that Basel II will not affect these banks significantly.

First, today not regulatory capital but economic capital - the individual bank's management judgment about internal capital allocations for its own decisionmaking - drives loan pricing and origination decisions. Nothing in Basel II will change for the capital charges implied by economic capital. Moreover, for some years, as I discussed earlier, when there has been a difference between regulatory and economic capital, sophisticated banks have used capital arbitrage techniques to reduce their effective regulatory minimums. Asset securitization deals, in particular, have allowed banks to dramatically reduce the amount of capital they currently hold for residential mortgages and many retail loans. Regulatory capital arbitrage - market reality - thus has already reduced the effective capital charge for the loans for which A-IRB banks will receive lower on-balance capital charges. Basel II increases transparency by bringing regulatory minimums more in line with reality, but it will not change the *status quo* competitive environment very much, if at all. In short, Basel II will bring A-IRB banks' regulatory capital charges more in line with the capital charges they have, through arbitrage, already obtained.

The second reason minimum regulatory capital requirements are unlikely to significantly affect competitive behavior is that most well managed banks carry sizable excess capital buffers. Smaller banks in particular, operating with less leverage than larger banks, hold substantial excess regulatory capital, which reflects their lack of diversification and more limited access to funding. Basel II will not change that fact. Under Basel II, small banks will continue to hold more capital than A-IRB banks, but A-IRB banks' true risk-based capital positions will be measured more accurately.

Conclusion

The Basel II effort reflects the collective judgment of the supervisors of the world's largest and most complex banking organizations, including those of the United States, that the activities and practices of such firms have been outgrowing our existing supervisory approaches. At the same time, the role of these banks in our financial systems continues to grow. In my judgment, we have no alternative but to adopt, as soon as practical, approaches that are appropriately suited to the task of bank supervision of our larger banks in the twenty-first century.

The Basel II framework is the product of extensive multiyear dialogues with the banking industry regarding state-of-the-art risk-management practices in every significant area of banking activity. Accordingly, it provides a roadmap for the improved regulation and supervision of global banking. Basel II will provide strong incentives for banks to continue improving their internal risk-management capabilities as well as the tools for supervisors to focus on emerging problems and issues more rapidly than ever before.

I am pleased to appear before you today to report on this effort as it nears completion. Open discussion of complex issues has been at the heart of the Basel II development process from the outset and no doubt will continue to characterize it as Basel II evolves further.