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THE DEVELOPMENT OF NEW BASEL CAPITAL ACCORDS

HEARING

BEFORE THE

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

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

ON

PLANS OF THE U.S. BANKING AGENCIES TO UPDATE AND ENHANCE THE REGULATORY CAPITAL PROGRAM THROUGH IMPLEMENTATION OF THE INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT AND CAPITAL STANDARDS, AND REVISIONS TO THE EXISTING DOMESTIC RISK-BASED CAPITAL FRAMEWORK FOR BANKS

NOVEMBER 10, 2005

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THE DEVELOPMENT OF NEW BASEL CAPITAL ACCORDS

THURSDAY, NOVEMBER 10, 2005

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met at 9:30 a.m., in room SD–538, Dirksen Senate Office Building, Senator Richard C. Shelby (Chairman of the Committee) presiding.

OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY

Chairman SHELBY. The hearing will come to order. You can tell we generally start around 10:00, but some people will have to leave here today, and I want to put you on notice that we have stacked votes starting about 11:30, so maybe we can accelerate the hearing and not lose any substance.

Today's hearing will examine recent developments regarding the new Basel Capital Accord known as Basel II and certainly proposed revisions to existing U.S. capital requirements known as Basel I–A. Federal banking regulators have recently made two important announcements with regard to Basel II. First, on September 30, Federal banking regulators announced their revised plan for implementing Basel II. Under the revised plan, the implementation will begin in January 2008 with a parallel trial run followed by a 3-year transition period from 2009 to 2011.

Because Basel II will require banks to maintain complex and costly internal risk assessment processes, Federal banking regulators have said that Basel II will apply to only the largest, most sophisticated banks. Just a few days after banking regulators announced the revised Basel II timetable, they announced proposing revisions to existing capital requirements, which have been referred to as Basel I–A.

The purpose of Basel I–A, as I understand it, is to modernize the capital requirements for the roughly 7,000 or so banks that do not qualify for Basel II. Additionally, Basel I–A aims to address concerns that the application of Basel II to only the largest banks would create a bifurcated capital requirements system that could put small and regional banks at a competitive disadvantage.

It is my hope that today's hearing will shed additional light on the implications of adopting Basel II and the new Basel I–A. The changes to U.S. capital requirements proposed by Basel II and Basel I–A will have far-reaching implications on not only the safety and soundness of the U.S. banking system but also on both the

competitiveness of the U.S. banking industry and the effectiveness of Federal banking regulators.

Before we implement any changes, I believe we need to make sure that we fully understand these implications.

Today's hearing will have two panels. Our first panel includes John Dugan, Comptroller of the Currency; Governor Susan Schmidt Bies of the Federal Reserve Board of Governors; Chairman Donald Powell of the Federal Deposit Insurance Corporation; and Director John Reich of the Office of Thrift Supervision.

Our second panel will follow them and will include Mr. William M. Isaac, former Chairman of the FDIC and Chairman of Secura Group LLC; Professor George Kaufman, Co-Chair of the Shadow Financial Regulatory Committee and the John F. Smith, Jr. Professor of Finance and Economics at Loyola University Chicago School of Business Administration; Mr. William Seidman, no stranger to this Committee, former Chairman of the FDIC, former Chairman of the Resolution Trust Corporation and CNBC Chief Commentator; Professor Daniel Tarullo, Professor of Law, Georgetown University Law Center; and Ms. Katherine Wyatt, Head of the Financial Services Research Unit, New York State Banking.

We welcome all of the witnesses to today's hearing. Without objection, your written testimony will be made part of the record in its entirety, and Mr. Dugan, we will start with you. Sum up your testimony.

STATEMENT OF JOHN C. DUGAN
COMPTROLLER OF THE CURRENCY,
U.S. OFFICE OF THE COMPTROLLER OF THE CURRENCY

Comptroller DUGAN. Thank you, Chairman Shelby. I appreciate this opportunity to discuss the plans of the U.S. banking agencies to strengthen regulatory capital requirements for our banking system. We intend to do this in two fundamental ways: First, through implementation for our largest banks of the framework generally known as Basel II, and second, for banks not adopting Basel II, through revisions to our capital rules in an initiative generally known as Basel I–A.

In both efforts, our primary goal is to substantially strengthen the long-term safety and soundness of our banking system. Our largest banks require a more risk-sensitive regulatory capital system to address their complex operations and activities. For banks not adopting Basel II, we need to increase the risk sensitivity of risk-based capital without unduly increasing regulatory burden.

To ensure that Basel II would be consistent with continued safety and soundness, the U.S. agencies conducted a quantitative impact study earlier this year known as QIS–4. As you will hear in more detail today, the QIS–4 results, which were based on crude approximations of Basel II requirements, nevertheless raised real concerns among the agencies because they forecast substantial reductions in capital for Basel II banks and substantial differences in capital requirements for very similar credits.

Because these preliminary results would be unacceptable if produced by the final Basel II framework, the agencies conducted in-depth discussions about QIS–4 and what that should mean for the future of the Basel II process. The result of these discussions was

an agreement by all the agencies to move forward but only with substantial new safeguards to address the QIS–4 concerns.

This agreement, which was released as a joint statement on September 30, was based on several key premises. First and foremost, despite the preliminary forecasts of QIS–4, the Basel II framework provides necessary improvements to address recognized flaws in the existing risk-based capital regime for our largest, most complex banks. Basel II will promote significant advances in risk management that will benefit supervisors and banks alike and substantially enhance safety and soundness.

Second, apart from the notice and comment process, further study of the Basel II framework itself will do little to resolve concerns raised by QIS–4, which by necessity was based only on preliminary approximations of a completed Basel II system. Instead, we need to observe live systems in operation—and subject them to rigorous supervisory scrutiny—before we will be able to rely on Basel II for regulatory capital purposes.

And third, we must proceed deliberately, gaining a better understanding of the effects of Basel II on bank risk management practices and capital levels. That means a meaningful transition period during which we can scrutinize Basel II systems while strictly limiting potential reductions in capital requirements through a system of simple and conservative capital floors. Based on the experience we gained through supervisory oversight in the transition period, we will incorporate any necessary revisions to Basel II before the transition period ends. I believe that once the Basel II framework is implemented completely and rigorously supervised in the controlled environment of the transition period, and once we have had the opportunity to make necessary changes to the framework based on the knowledge we gain during that period, the concerns raised by QIS–4 will be addressed.

While the comprehensive Basel II framework is necessary and appropriate to address the complex risks of our largest banks, it would be far too burdensome and expensive to impose on our other banks. Instead, we need meaningful but simpler improvements to our capital rules for these banks that would, first, make capital more sensitive to risk, and second, address competitive disparities raised by the Basel II changes for our largest banks. That is the purpose of our Basel I–A initiative, in which the modifications we are considering would increase the number of risk-weight categories, expand the use of external credit ratings, and employ other techniques to increase the risk sensitivity of capital requirements.

The banking agencies agreed that it is critical to have overlapping comment periods next year for the rulemakings on both Basel II and Basel I–A. This will allow the industry to compare the proposals as they prepare their comments, and will allow us, as regulators, to take both sets of comments into account in finalizing each proposal—a process that will allow a better assessment of the potential competitive effects of these proposals on the U.S. financial services industry.

To summarize, doing nothing to revise our capital rules would, over time, threaten the safety and soundness of the banking system, especially with regard to our largest banks that engage in increasingly complex transactions and hold increasingly complex

assets. Basel II provides a conceptually sound and prudent way forward for these largest banks by more closely aligning regulatory capital and risk management systems with actual risk. Likewise, Basel I–A will provide a more risk sensitive framework for non–Basel II institutions.

Although both processes will take time and will inevitably change to address supervisory concerns, I believe they both will substantially enhance safety and soundness. It is for this essential reason, safety and soundness, that I believe we should support the approach embodied in proposals for Basel II and Basel I–A.

Thank you very much.

Chairman SHELBY. Thank you very much, Mr. Dugan.

Governor Bies on behalf of the Fed.

STATEMENT OF SUSAN SCHMIDT BIES, GOVERNOR, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Ms. BIES. Thank you, Mr. Chairman.

I appreciate the opportunity to join my colleagues from the other Federal banking agencies to discuss the current status of Basel II in this country as well as the status of our proposed amendments to our existing Basel I risk-based capital rules. The Federal Reserve considers the maintenance of strong and stable financial markets to be an integral part of our responsibility and criticality related to the safety and soundness of the participants in those markets.

Part of maintaining a strong financial system is to ensure that banking organizations operate in a safe and sound manner with adequate capital cushions that appropriately support the risks taken. There have been two major developments in the past 6 weeks regarding U.S. regulatory capital requirements that apply to banking institutions: One relating to the Basel II framework and another to the proposed Basel I amendments.

The Federal Reserve considers the ongoing discussion between the Congress and the U.S. banking agencies—and of course with the banking industry and members of the public—to be critical to the success of both sets of proposals. While the current Basel I-based rules have served us well for nearly two decades, they are no longer appropriate for identifying and measuring the risks of our largest, most complex banking organizations.

The Basel II framework is designed to improve supervisors' ability to understand and monitor the risk-taking and capital adequacy of these institutions. It should also provide market participants with a better ability to evaluate the risk positions at those institutions. And perhaps most importantly, Basel II should enhance risk management at institutions adopting it. The advanced approaches under Basel II offer particularly good improvements in terms of risk sensitivity, since those approaches incorporate risk management processes already used by certain banks today.

In April of this year, the agencies announced jointly their reaction to initial results of a fourth quantitative impact study pertaining to Basel II known as QIS–4. The initial QIS–4 results prompted the agencies to delay issuance of a notice of proposed rulemaking (NPR) for Basel II in order to conduct further analysis of those results and their potential impact. During the summer, the

U.S. agencies jointly conducted additional analysis of the information reported in QIS–4 and collectively decided to move ahead with an NPR but adjusted the plan for U.S. implementation of Basel II by extending the timeline and by augmenting the transitional floors.

Probably the most important thing we learned from the QIS–4 analysis is that progress is being made toward developing a risk-sensitive capital system. From QIS–4, we also learned that the favorable point in the business cycle from which the measurement was conducted had an effect on minimum regulatory capital produced; that the dispersion was largely due to varying risk parameters used by different institutions; and some of the data submitted by individual institutions, as expected, was not complete.

Based on the results of QIS–4, the Federal Reserve recognizes that all institutions have additional work to do. Indeed, QIS–4 should not be considered a complete forecast of Basel II's ultimate effects, since it was a point-in-time look at how the U.S. implementation was progressing. We certainly expect that as we move closer to implementation, supervisory oversight of the Basel II implementation methodologies would increase. In fact, we would not allow any bank to move to transitional floors until we are satisfied that their Basel II process met our standards.

The proposal for the Basel I amendments, an advance notice of proposed rulemaking, relates, in part, to some longstanding issues in our current capital rules. It is also intended to mitigate certain competitive inequalities that may arise from the implementation of Basel II. In considering these possible revisions, the U.S. agencies are seeking to enhance the relationship between inherent risks in bank portfolios and minimum regulatory capital without undue complexity or regulatory burden on the Basel I banks.

For both Basel II and Basel I amendments, the Federal Reserve fully supports the retention of the existing prompt corrective action regime, which the Congress put in place more than a decade ago, as well as supporting existing leverage requirements. These regulations help to ensure a minimum level of capital both at individual institutions and in the aggregate, which we consider to be absolutely vital to the health of our financial system and economy.

We look forward to continuing to engage the industry, the Congress, fellow supervisors, and others in discussion about what effects the Basel II framework and the Basel I revisions might have on our banking system. We will remain vigilant about potential unintended and undesired consequences. We will make adjustments as necessary to ensure that minimum regulatory capital reflects risk exposures at individual banks and is adequate for the safety and soundness of the banking system.

Finally, I would like to emphasize that from my perspective, the U.S. agencies have worked well with one another on these regulatory capital proposals, and worked in a general environment of cooperation and good will, and we expect that will continue. I thank my colleagues at the other agencies for their efforts in developing the U.S. proposals for Basel II and Basel I amendments.

Thank you, Mr. Chairman.

Chairman SHELBY. Chairman Powell.

STATEMENT OF DONALD E. POWELL
CHAIRMAN, FEDERAL DEPOSIT INSURANCE CORPORATION

Chairman POWELL. Good morning, Mr. Chairman. Thank you for holding this important hearing.

Recently, the agencies described a plan for moving forward with Basel II in the United States. Basel II has the potential to bring about positive change for U.S. capital regulation and that is why I participated in, and support, the agency plan.

Basel II will require better risk management for adopting banks and give the agencies better data to identify emerging risks. Basel II will give banks more flexibility on risk-based capital. For Basel II banks whose risk-based capital requirements exceed leverage ratio requirements, there even is a potential for a moderate reduction in overall capital requirements. The FDIC can and does support these things.

I would like to focus on the interaction of the Basel II framework and our U.S. leverage ratio for bank regulatory capital. There are other important issues, of course. Should capital requirements for mortgages be reduced 90 percent or more as Basel II permits? Do capital requirements for credit card lending need to be increased by 66 percent on average? How can we get consistency in capital requirements under Basel II? What about the competitive impact on smaller institutions?

Those questions are important, but none are so fundamental to the long-term cost of our Federal banking safety net as how Basel II interacts with the leverage ratio.

QIS–4 supports earlier FDIC analysis showing that Basel II is a much lower numerical capital standard than we have in place today. For most insured banks, QIS–4 would require tier one capital-to-asset ratios that are far less than what would be allowed under current prompt corrective action regulations.

As we ask what to make of these QIS–4 results, it is important to remember that the current Basel II framework is not a scientifically pure method for measuring bank capital needs but an imperfect framework crafted to reach consensus among Basel Committee members. The U.S. banking system is among the most well-capitalized in the world, and it is no surprise that an internationally acceptable capital standard might not be consistent with U.S. capitalization levels.

Putting aside these international comparisons, let me be clear that the FDIC views the extremely low capital numbers coming out of Basel II formulas as evidence that changes must be necessary going forward. We view the QIS–4 results as examples of why, under Basel II, the leverage ratio will play a more important role than ever in ensuring the soundness of our banking system.

I believe my colleagues at the table share our discomfort with the low levels of capital indicated by QIS–4 results. They have noted that the leverage ratio would rightly prevent banks from lowering their capital that much. They also share our hope that experience in the Basel II transition years would help us pinpoint and correct the aspects of the framework that give rise to troubling QIS–4 results.

Yet, beyond those hopes for the future, there is a great conflict of expectations that is going to have to be better understood and

resolved. The agencies' plan allows banks to reduce their risk-based capital requirements over 3 years by 5 percent, then 10 percent, then 15 percent, after which there is no floor or risk-based capital requirements.

This phase-out of floors dangles the prospect before banks of much lower overall capital requirements. Yet, most banks in the QIS–4 would continue to have overall capital requirements determined by the 5 percent leverage ratio. Therefore, any bank that thinks Basel II will not be worth the effort without the elimination or significant reduction in the leverage ratio needs to make its views known.

With the PCA standards in place since the early 1990's, U.S. banks have faced more conservative capital regulations than most of their international competitors. This same time period has been one of historic profitability for large U.S. banks, and I do not believe they are suffering under a disadvantage.

There can be little doubt, however, that with Basel II requiring half or less the core capital as does our current 5 percent leverage standard for many insured banks, Members of Congress will hear from our industry about overly conservative regulators and the competitiveness of large U.S. banks.

Those are fundamental questions that cannot be answered by looking at the output of a formula. They will require a different kind of policy debate than we have had so far about the scope of the Federal safety net and the role of bank capital in international competition. Since Basel II was never advertised as an effort to reduce capital systemwide, discussions of the new framework have never revolved around those issues.

The regulators today appear generally of one mind about the future of bank capital regulation in the United States and on this basis have agreed to proceed with Basel II. As I have said today, there is more work to be done. I hope and believe the future leaders of the agencies will continue to insist on the best of both worlds: Sophisticated bank risk management and a clear-cut minimum of regulatory capital to protect against future banking crises. Thank you.

Chairman SHELBY. Thank you, Chairman Powell.

Mr. Reich.

STATEMENT OF JOHN M. REICH
DIRECTOR, OFFICE OF THRIFT SUPERVISION

Director REICH. Thank you, Chairman Shelby and Senator Hagel. I appreciate the opportunity to be here today to present views similar to that which you have heard expressed, the views of the Office of Thrift Supervision on the development of the Basel II capital framework in the United States along with the parallel modernization of current risk-based capital standards under Basel I.

We are more than 2 years from the start of a proposed 4-year phase-in of Basel II. There are significant hurdles to overcome before we can represent to you, Mr. Chairman, that it will be ready to be implemented on a permanent basis. Some suggest that Basel II is not necessary; that we simply need to update our existing capital rules to accommodate advances and changes in the banking

system since the 1988 Basel I Capital Accord. We are reviewing our current rules, but it is important for us to work with all of our institutions to determine what is most important and appropriate for them.

For the largest and most sophisticated banks and especially those that operate internationally, Basel II may be the most appropriate capital framework. For other institutions, either the current Basel I rules or a modified Basel I framework may be most appropriate.

In an advance notice of proposed rulemaking issued last month, we raised this issue, and we welcomed comments on the ANPR to guide us on how best to update our existing Basel I rules, including whether the status quo should be retained as an option. OTS supports the goals and objectives of Basel II, and we are committed to implementing a more risk sensitive capital framework for all of our regulated institutions.

While it is important that the United States continue to move forward on Basel II, we should proceed in a cautious, well-studied and deliberate manner. The revised timeframe for Basel II is consistent with this goal. However, it is critical that all interested parties, including the industry, the Congress, and the regulators, that we continue an active, open, and thorough dialogue regarding Basel II. We will continue to work with Members of this Committee, the other Federal banking agencies and with our international colleagues on these issues.

Perhaps the most significant challenge that we face in this process is maintaining competitiveness. While Basel II provides an opportunity for our largest U.S. institutions to move to a more logical, risk-based capital framework and to remain competitive internationally, it is equally important to identify ways to improve the risk sensitivity of existing Basel I rules.

These objectives are not mutually exclusive but rather mutually dependent in order to prevent potential competitive inequities between Basel II and Basel I institutions. OTS is pleased that Basel I modernization, an initiative that we have advocated, has evolved into a commitment by all of the Federal banking agencies. The goal of this initiative is to achieve greater risk sensitivity without undue complexity.

We strongly support finding ways to improve existing Basel I rules in conjunction with the implementation of Basel II if not sooner. The results of the QIS–4 study suggested that Basel II remains a work in progress in the United States. Consistent with this message, the Federal banking agencies recently announced a 1-year delay in the start of Basel II and an additional phase-in year for its implementation. We also provide for greater supervisory control over individual institutions at each step of Basel II implementation and graduated capital floors for several years prior to full implementation in 2012.

Throughout implementation, institutions will be subject to close supervisory scrutiny and a strict leverage ratio requirement. Basel II does not include explicit capital requirements for interest rate risk, an important issue for all institutions but particularly for OTS-supervised institutions.

The banking industry currently has almost 40 percent of its assets in residential mortgages and mortgage-related assets, and this number is significantly higher for most OTS-regulated institutions. Interest rate risk is especially important for mortgage products, and one of the most important risks confronting mortgage lenders must be addressed uniformly with guidance from our Federal banking agencies on how to measure and manage this risk.

Any discussion of Basel is incomplete without a discussion of the interrelationship between leverage and risk-based requirements. This issue has spawned a substantial amount of dialogue about whether there should be a leverage requirement at all which has, unfortunately, created more heat than light.

OTS supports a leverage ratio, which we view as a mainstay of our regulatory system. As a final note, I would urge a point previously made by my predecessors at the Office of Thrift Supervision; that is, Mr. Chairman, to consider legislation supporting OTS' representation on the Basel committee. I think it is important that OTS' international role be formalized for a number of reasons, not the least of which is the potential impact of Basel II on the institutions and the holding companies that we regulate.

Thank you.

Chairman SHELBY. I thank all of you.

I touched on this in my opening remarks. One of the key concerns about Basel II is its impact on the competitiveness of small and medium-sized banks and how that could relate to our economy, because as we all know, 75 to 80 percent of our job creation in this country comes from small businesses, medium-sized businesses, which deal with small banks in communities from coast to coast, and I think it would be an unfortunate result if instead of improving the capitalization of the U.S. banking industry, Basel II instead created a regulatory framework biased toward large financial institutions.

Basically, we have the most dynamic and healthy banking systems here in the world, because we have a competitive banking system, all the banks in this country. Since I believe it is critical that Basel II does not dampen the competitiveness in any way of the U.S. banking industry, Governor Bies, I pose this to you: What type of analysis have you conducted, and when I say you, the Fed, or do you plan to conduct on the likely competitive effects of Basel II? In particular, has any of your research indicated that Basel II may hasten the trend of consolidation in the banking industry? Is that one of the goals here?

Ms. BIES. Mr. Chairman, it is not one of our goals to foster consolidation of the banking industry. We have completed several studies of particular loan portfolios and mergers and acquisitions, and let me talk about the loan portfolio piece first.

Chairman SHELBY. Okay.

Ms. BIES. When we looked at mortgages and small business loans, we found there might be a small impact, and we propose, in the Basel I amendments, to address these potential impacts. We will get those comments to the advanced proposed rulemaking that we just put out, and try to make sure that we follow through with that in the final NPR in Basel I.

We have already had quite a bit of dialogue with the community and regional banks, all of the agencies, in order to come up with the ANPR, and we will address it. We have just completed a study that was led by the Federal Reserve Bank in Philadelphia around the credit card competitiveness, that is being vetted by all the agencies now, and we hope to make that public within the next few weeks.

In terms of mergers and acquisitions, one of the challenges that I think of when in terms of capital and something that people need to realize is that we have had a dramatic change in the accounting for mergers in the past couple of years.

In the days of pooling, when you just added two banks together, if the bigger bank had a higher amount of leverage, you could carry it through. Now, we are in a world where every acquisition is a purchase accounting transaction. What that means is that when a large bank buys a small bank, on day two, the large bank has no new capital, has all of the assets and in our methodology risk exposures of the smaller bank and a probably added good will, which reduces its regulatory capital.

Chairman SHELBY. It is what you bought.

Ms. BIES. It is what you bought, and the purchase accounting reflects that.

The only way the bank can even get to even or ahead is the old fashioned way: Issue stock. And if they issue stock to the selling shareholders, there will be an impact on capital. Or they may go to the market, or they may use retained earnings. But the only way any merger creates capital above what is used in the merger is by issuing equity, and we think anytime you issue equity, whether there is a merger or not, that is capital.

Chairman SHELBY. The Basel I–A release indicated that there were competitiveness concerns that prompted the proposal to revise existing capital requirements. Governor Bies, is there a plan to conduct any analysis on how Basel I–A is likely to impact the competitiveness of small and medium-sized banks against large banks operating under Basel II?

Ms. BIES. Once we get closer to formal proposals in the NPR, we will try to look at that more intensely. Now, one of the challenges we are going to have is to differentiate between minimum regulatory capital, which is at the heart of both of these proposals, Basel I and II, versus what is held by the banks for business purposes.

And we know for the vast majority of banks of all sizes that they hold real capital way above what they need for minimum regulatory purposes to demonstrate that they are a highly rated institution by the financial markets. And so, we will have to differentiate between those in our analysis, but as we get closer to the proposal, we will be looking at that.

Chairman SHELBY. By charging banks with the responsibility for calculating their capital requirements, that is a little different from what we do today, is it not, Mr. Reich?

Basel II effectively delegates regulatory authority in some areas from bank regulators like yourselves to the banks themselves. While bank regulators must approve a bank's method for calculating its capital requirements, Basel II, as I understand it, never-

theless transfers a lot of responsibility for the safety and soundness of the banking system to the banks themselves.

Chairman Powell, you are the Chairman of the FDIC. I want to pose this question to you. Does Basel II rely too much on the judgment of banks rather than regulators? Do banks have the proper incentives to accurately calculate their own risks? And was Basel II premised on the belief that there were competitive pressures to lower capital requirements below what was required for safety and soundness? In other words, how do we expect banks to be able to ignore those pressures? Is Basel II founded on a realistic incentive structure?

That is a lot of stuff, but you have spent a lot of time on this, and you have a big portfolio on safety and soundness, you all do.

Chairman POWELL. I think, Mr. Chairman, that clearly, as we have all said, because the nature of the balance sheets of these large institutions has changed the risk profile has changed. So, the way that we measure capital against those risks needs to be modified. I support a more rigid risk-based capital regime.

Having said that, you are correct, judgements will be based upon the formulas and the input that institution management will give to the regulators. But, remember that the regulators have oversight and will test those formulas and will look at not only the formulas themselves but will also look at the overall capacity of management to manage their risk. But, that will depend upon the will, very frankly, of the regulators to enforce capital standards they believe properly reflect risk.

Going forward, I think clearly, there will be times that the regulators will have to step in and say the formulas are flawed. If the formulas do not produce the necessary capital that we as regulators believe institutions should maintain, we need the will and the courage of the regulators to step in.

Comptroller DUGAN. Mr. Chairman.

Chairman SHELBY. Yes, go ahead, Mr. Dugan.

Comptroller DUGAN. I just wanted to add one point to that. It is not the individual bank's model. It is our model. It is a model that we have designed. The differences come in the inputs to the model and what the institutions do with them. And, we do have a responsibility to supervise that process, as we do now with other types of inputs.

Chairman SHELBY. And to supervise that process, you are going to have very sophisticated personnel, are you not? Because they are going to have them.

Comptroller DUGAN. With regard to, the models themselves, you do have to have very sophisticated quantitative experts, which we do, and which we will expand over time. The supervisory process to make sure that the inputs into that are based on sound judgments that are valid does not take the same kind of quantitative skills and plays more to the basic fundamental, practical judgment of, in our case, national bank examiners. We think we do have the skills to do that and supervise that process.

Chairman SHELBY. As the Comptroller of the Currency, you will have the primary responsibility to supervise them.

Comptroller DUGAN. That is right. Most of the Basel II banks are national banks, and we will be on the front lines of that supervisory process.

Chairman SHELBY. Senator Sarbanes, I think he has an opening statement.

STATEMENT OF SENATOR PAUL S. SARBANES

Senator SARBANES. Have you finished your—

Chairman SHELBY. Yes, I will come back. We will go another round.

Senator SARBANES. Mr. Chairman, first of all, I apologize to the panel and to my colleagues for not being able to be here at the outset. I will defer my questioning to Senator Hagel, but I would like to briefly make an opening statement.

Chairman SHELBY. Go ahead. You are recognized.

Senator SARBANES. First of all, Mr. Chairman, I want to commend you for calling this timely and important hearing on the development of the new Basel Capital Accords. In fact, you have had a continued commitment to the Committee's oversight function with a focus, of course, on preserving the safety and soundness of our banking system. There is a distinguished group of witnesses, the regulators, who are here now and in the second panel that is going to follow, and we are looking forward to hearing from them. We have some very able people on that panel as well.

Let me say right at the outset, I want to congratulate FDIC Chairman Powell for undertaking the responsibility of serving as coordinator of Federal support for the recovery and the rebuilding of the Gulf Coast region. First of all, Chairman Powell, we thank you for your tenure as the Chairman of the FDIC. I think you have rendered fine service to the banking system and to the country in that capacity.

There is even a deposit insurance bill moving its way through the Congress. It went through this Committee quite easily in the end after a lot of back toing and froing over the years. But you are taking on a very critical and challenging responsibility now in dealing with the aftermaths of Hurricanes Katrina and Wilma, and I know that you have the best wishes of all of us here on this panel, and if there is any way that we can be helpful to you in that effort, we certainly want to do it.

Chairman POWELL. Thank you.

Senator SARBANES. But thank you very much for your service.

With respect to the subject at hand, I must say, Mr. Chairman, this is an important and timely hearing. The last quantitative impact study, QIS–4, indicated the possibility that Basel II will result in a large scale reduction in bank capital. Now, Basel I resulted in an increase in bank capital.

Half the institutions which participated in the study had a reduction of 25 percent or more. One institution had a 50 percent capital reduction. I do not see how one can avoid the conclusion that a reduction of capital on this scale would represent a major change in the safety and soundness status of our Nation's banking system.

Second, the Basel II framework is extremely complex. It will require banks and regulators to create and operate many highly technical financial models. The sheer complexity of these models raises

concerns of how many people will be able to operate, understand, and critique the models and their results.

Furthermore, if the largest banks, which are to be eligible for the Basel II framework, receive large capital reductions, it will create enormous pressure to reduce capital for all of the other banks for reasons of competitive equity. In addition, if risk-based capital is reduced significantly below the leverage ratio for the largest banks as a result of Basel II, it could create great pressure to weaken or eliminate the leverage ratio.

We must recall that our banks are currently very well-capitalized. They are very well-capitalized; they are very profitable. It has really been a good performance for banks, in the general. As a result, it has been a long time since we have faced any significant financial crisis. So you base these models on recent experience. They may not be sufficient for a period of stress in the banking system.

Moreover, Basel II is premised on allowing the banks themselves to determine their own capital requirements. I mean, this premise raises a host of regulatory concerns. I mean, it is like someone said; I was a teacher; if the students could set the exam, they all would have gotten A's.

So, this is an important hearing. I have a very real concern that this thing is just moving down the path, that there is a lot of pressure from the other countries that are a part of Basel II to get this thing into place and so forth and so on. But generally speaking, the pressure for strong safety and soundness standards and everything has come from the United States, I think it is fair to say.

And I just think—I know now you had an October 3 meeting, I think, of the Basel II, and before the October 3 meeting, you put out—did you go for—I will ask it in the question period, but my sense of it is this thing is just moving along. I know the Fed has had a long, vested interest in this Basel II, and presumably, they go to meetings, and all their fellow central bankers say, when are you going to do this thing and so forth and so on?

But we cannot let that type of dynamic determine what the result is going to be, and if we just keep moving along without solving some of these problems that I raised, someday, everything may well come to a stop. And then, your problem of your relationships will be much more severe than I think they are right now. So, I just put that as a—and I will come back to some of these in the question period, and I thank the indulgence of my colleague.

Chairman SHELBY. Thank you, Senator Sarbanes. I think your observations are well taken right here.

Senator Hagel, thank you for your indulgence.

STATEMENT OF SENATOR CHUCK HAGEL

Senator HAGEL. Mr. Chairman, thank you.

Welcome. If I could, I would like to pick up where Senator Sarbanes ended and without trespassing on his set of concerns and questions, but this will warm the panel up when you get to Senator Sarbanes.

[Laughter.]

And by the way, Chairman Powell, congratulations on your new gainful employment.

Safety and soundness, what are your concerns about what Senator Sarbanes talked about? Do you have any? This is somewhat of a departure, and I would like to hear from each of you about the issue.

Mr. Dugan.

Comptroller DUGAN. Senator, as I mentioned in my opening statement, I think safety and soundness is why we should go forward. I recognize very much the concerns that Senator Sarbanes raised about the results of QIS–4. Frankly, if those were the results that popped out at the end of the process, they would be unacceptable. They are unacceptable. The drop in capital is too great. The dispersion in results among similarly situated institutions is too wide.

It was staring at those results that forced the regulators to get together and say, what does this mean? Should we go forward, or should we readjust? Should we stop now? What we came up with is a system that (A) recognized that those results were based on a very preliminary read of QIS–4, which, by definition, could not be accurate because the system had not been built and (B) that we needed to put the system in place and supervise the system and see it in operation. Only then would we know exactly what the outputs would be from the capital process.

It is our belief that that process, where we have a better specified system reflecting the final rule that banks have to comply with and banks are subject to rigorous supervision, will address some of those issues. But it probably won't address all of those issues, and we are going to need to adjust the rules once we see the process in operation.

And so, what we agreed on was the need for a longer and controlled transition period where banks cannot drop their capital to impermissibly low levels. During that period, we need to rigorously supervise the system and see what it does, and only when we are comfortable during that carefully controlled environment, and after we make changes to address problems that we see, do we allow the system to go forward. It is our belief that that will address the problems raised by QIS–4.

But to come back to your fundamental point, we believe that we need to go in a direction to get our arms around the risks that our largest, most complex banks are likely to take in the coming years. We at the OCC have three institutions with assets that exceed $1 trillion each. They take risks that are different and more complicated than the risks taken by smaller institutions. They have very complex risk management systems already in place to address those risks, which we believe is appropriate. And we believe that we will gain a great deal by having a common framework across these banks to encourage them to develop state-of-the-art risk management systems that we can supervise, and it will increase the safety and soundness of the system.

As Albert Einstein said, everything should be made as simple as possible—but not simpler. We believe that you have to address the complexity of the risk with a system that is adequate to do the task. We do not have that now. We need to make changes to move institutions in that direction, and we think this is the right way forward.

Senator HAGEL. That is the Shelby formula of success, the Einstein.

[Laughter.]

Chairman SHELBY. Absolutely. We try to follow it, but we get off track, do we not?

Senator HAGEL. Occasionally. That is why we get up in the morning.

Chairman SHELBY. But these people here probably understand the Einstein method.

Senator HAGEL. They do.

Chairman SHELBY. We hope they do.

Senator HAGEL. Governor Bies.

Ms. BIES. Thank you, Senator Hagel. Let me just add a couple more thoughts to what the Comptroller just said, and I agree with his comments.

One of the things I think really came out in QIS–4 to support why we need to move ahead for safety and soundness reasons on the new framework of Basel II are the issues we raised; for example, similar credits being graded differently as input into the models by different banks have been there for ages.

What happened is that the transparency of having the banks look at their models and risks in a similar way, having us look at them in a horizontal way comparing them brought more transparency to light about the differences in the ways the banks actually manage credits and grade individual facilities. So that additional transparency is also going to be an important new tool to help us do our job better, to be able to identify the outliers or the banks that are not following sound practice.

The other thing the effort has done and one aspect that came out in July on an international basis and that will be in our NPR is that as we have said, there are a lot more sophisticated financial instruments out there that the banks have exposure to. In July, we adopted a new framework internationally, and we will tailor it in the United States that really recognizes that the nature of risk in the trading book of banks as opposed to the book of loans, has changed significantly from what is in the Basel I market risk framework.

And it is grossly inadequate for measuring the risk of the kinds of positions that are sitting in trading accounts today. If we look at what is sitting in the trading accounts, we are seeing not the traditional trading activity where bankers buy and sell securities and derivatives all during the day. Instead of that, we are seeing about 15 percent on average of the assets being comprised of illiquid, high risk positions in sophisticated financial instruments.

Many of these are engineered financial instruments, where they take something that starts out as a mortgage loan, goes into a mortgage-backed security, gets tranched into CDO's, and they are holding equity type risk positions sitting in a trading account and not getting the capital treatment for that high risk.

That kind of sophisticated approach, we cannot put within a Basel I framework, because the normal small community bank or regional bank just does not engage in those types of activities. But as we know from derivatives and complex transactions, they can

blow up very quickly. We need more capital. We need a better measure to look at that.

And then, the other thing that Basel II does, which is increasingly important for these banks, and if you look at the banks' earnings and shocks to their earnings in the last few years, bankers in these large organizations earn more and more of the revenue through activities that are related to doing a transaction, processing various forms of payments and transactions for customers, and none of that is reflected on the balance sheet.

The balance sheet has a very small asset for fixed assets or what happens to be there at the end of the day, but there are millions of transactions running through there. And when there is an operational glitch, all of a sudden there is a big earnings hit potential, either through the form of a model failure or compliance risk that entails large penalties.

Operational risk in QIS–4, and this is still being developed in the databases, added 10 percent to capital, above what the banks would have if they stayed under Basel I. So those kinds of changes in these big institutions are why we need more effective tools to make sure we have capital to address these changing risks.

Senator HAGEL. Thank you.

Chairman Powell.

Chairman POWELL. Senator, Basel II is a good thing if we keep the leverage ratio. I believe it will bring better risk management processes and better data for supervisors to identify emerging risks as you just identified. But without the leverage ratio, Basel II would not be a good thing.

Senator HAGEL. Thank you.

Mr. Reich.

Director REICH. Senator, I think safety and soundness is at the top of each of our lists of priorities. It certainly is at the top of my list, and I believe it is for each of the four people at this table.

Our first guiding principle should be to do no harm to the industry today. And I think that the process which currently exists, calling for a parallel run in 2008, with capital floors graduated in 2009, 2010, 2011, full implementation delayed until 2012, and then, only then, with the approval of the primary supervisor of each of the Basel II banks, plus the continuation of the leverage ratio should provide us with essentially a 6-year period of time to get it right and to make any changes that are needed to be made during that period of time.

We expect to come out with an NPR early next year. That will not be the final word, in my opinion, on Basel II. As we go through a 6-year period of testing and observation, I think we are committed to make whatever changes are necessary to make sure we get it right.

Senator HAGEL. Thank you.

Chairman SHELBY. Senator Sarbanes.

Senator SARBANES. Thank you, Mr. Chairman. I have a very deep concern that we are just marching along even though, you know, the QIS had terrible results.

Everyone says, well, we are going to fix it. Just leave it to us; we are going to fix it. And you keep moving down the path. Then, we are going to have a transition period. But of course, at the end

of that transition period, you are going down what? Ninety-five, 90 and 85 percent, I think, so, we are still moving along the same path.

I think you need to tell your international partners there are serious problems here. You probably should say to them look: The Congress may nix this thing altogether. We have to go back and do some careful rethinking. These consequences that were shown in the QIS are unacceptable. Let me ask you: Does anyone at the table today think the U.S. banking system is overcapitalized? I see everyone shaking their head no. Ms. Bies, you did not shake your head one way or the other, so I am kind of interested.

Ms. BIES. I am trying to decide if you are focusing on minimum regulatory capital or the real capital that banks hold, which is determined by the marketplace, and I think that is appropriate. The total capital that the banks hold in the system is appropriate for the risks they hold today, yes.

Senator SARBANES. During this process of negotiating and implementing the Basel Capital Accords, one of the concerns regularly raised in the Congress is that the minimum capital requirements on federally insured banks should be preserved. The regulators, including the Fed, which I understand is the lead agency in this negotiation; is that correct?

Ms. BIES. We have tried to work all of this through in a joint way for the United States, and we are working jointly toward an NPR.

Senator SARBANES. What do the regulators in the Fed think about all of this, not the economists but the regulators within the Fed system? What do they think about all of this? Are they concerned by this lowering of capital?

Ms. BIES. I think all of us were concerned about the results of the QIS–4, and that is why we all, field examiners, economists, as well as the regulatory staff all felt we needed to do a time out and find out why we got the results that we did.

We have engaged in the whole process through the Fed, both the participation of people through the various Reserve Banks who are the examiners on these complex institutions and have had very good participation and really look through and analyze the data, and we have done this with the other agencies. So we are concerned about it, and some of the things that show up in the NPR based on today's information we hope will address some of those areas.

But as has been said by some of my colleagues, one of the challenges here is we have to give the banks enough definition of where they need to enhance their models so they can get on with it and deliver the information so that we can recalibrate. We will revise this. Basel I has been amended 25 times already before this proposal. We are not going to go 6 years on Basel II without an amendment to whatever we put out in this NPR coming out early next year.

Senator SARBANES. Yes, but once you move to a NPR, then, you have crossed an important threshold. Let me ask you this question: We have been assured by the regulators that minimum capital requirements would not be affected by Basel at various hearings before this Committee, correct? Then, Ms. Bies, I read in the *Amer-*

ican Banker, which, of course, we follow closely, Ms. Bies said the leverage ratio down the road has to disappear.

I would say to the industry if you work with us and be patient, we understand the concerns about leverage ratios, and as we get more confidence in the new risk-based approach, it will be easier for us to move away from the leverage ratios. Is it your view that leverage ratios have to disappear?

Ms. BIES. Senator, I did not choose my words well in that meeting. I have tried to make amends to that Q and A that I handled. In my written testimony here, my oral testimony, my testimony in the House in May and every speech I have given on capital since then, I have clearly stated that the leverage ratio needs to stay in place. And in the context in which that was answered, I wish I had answered it in a much more effective manner. We are committed to keeping the leverage ratio in place.

Senator SARBANES. Was there a suggestion in that exchange that the cost of implementing—in exchange for the costs of implementing Basel II, the Fed would work to eliminate the leverage ratios?

Ms. BIES. No, we are not working on eliminating the leverage ratio. We have no staff working on that at all.

Senator SARBANES. Where are the banks looking to get the recompense for the costs involved in instituting these complex models to do the risk-based capital calculations?

Ms. BIES. Senator, I think as prudential supervisors, what Basel II effectively does is sends a message to the industry that if they are going to be operating large organizations that are difficult to manage in an enterprise-wide basis and deal with sophisticated transactions, we expect a quantum leap in the quality of their risk management, and this is part of it. We want models that are used by the bankers as well as by the regulators.

And so, this is part of the cost of doing business as part of a large, complex organization. We feel it is necessary for safety and soundness supervision purposes.

Senator SARBANES. Would you say that the large financial institutions are operating on the premise that there will be a significant reduction in the amount of capital they have to carry as a consequence of Basel II?

Ms. BIES. I think there may be a few, because they are saying that today's capital framework, given their mix of business that they choose to be in in the aggregate requires more capital than they feel is appropriate. What we are trying to do in this Basel II framework is make it sensitive to the business mix of each of the firms, and the proof will be in the results of these models.

Whether their expectations are met or not, we want to make sure there is enough capital for their particular organization's risk that is inherent in that bank. If we do not feel that their risks are really low, their capital is not going to drop at all. And so, what we have here is trying to get better sensitivity, because the mix of the businesses are very, very different across these large organizations.

So we are going to likely have more variability in minimum regulatory capital than we have today, but for each institution, it should be appropriate for the risks, and that is why we are making

them invest in these models, to demonstrate how well they manage these risks.

Senator SARBANES. I understand that under the QIS–4, a significant number of the institutions that are currently adequately or well-capitalized would have their status changed. Their safety and soundness would lessen; that none of those institutions are critically undercapitalized today, but some of them would be under the application of the Basel II; is that correct?

Ms. BIES. That is incorrect, Senator. QIS–4IV was a test along the way of a process that is going to stretch forward for 6 more years. None of us, and we are unanimous, would have qualified any one of the 26 banks who participated in QIS–4 to move forward with Basel II. Their models, their data, are not ready for it.

And so, right now, it is a work in progress. We are meeting with each of the bankers this month so that we can talk to them about what we observed in their submission in the exercise both quantitatively as well as process-wise and emphasizing what they need to do to try to qualify. None of them would have, and that is why the results in and of themselves are really not indicative of what will happen once the models and databases are complete.

Senator SARBANES. Well, you are talking about a changed analysis. But on the existing analysis, what I stated is correct, is it not? I mean, the answer you are giving me is not that what I stated is incorrect but that, well, we are going to change the criteria or the standards, and we are going to get a different result. But I am looking at Chairman Powell's table here. Have you seen this table?

Ms. BIES. Yes, sir.

Senator SARBANES. What do you think about that?

Ms. BIES. What I am telling you is that I interpret the information very differently. We had some banks who basically, for some of the elements, did not have an estimate for an extreme loss and plugged a zero because they did not have a number.

Well, to put in a zero for the extreme losses, which is where you need capital, we would not allow that to be used. But in the model that they submitted, it is there as a zero, and that is part of the reason these numbers went down. We would not accept that. So to hypothetically say this is what the results show, surely, I mean, mathematically, they may. But what I am saying is we would never accept it. These banks would never move to Basel II, any of them, based on the quality of the information they gave us. We would not let anybody start the transition based on what they gave us.

Senator SARBANES. Well, my time is up. That answer seems to me is like a ship passing in the night. It does not really come head to head with what this problem is. It seems to me if you are going to put out this thing, it then has to show a result that is acceptable, and obviously, this does not come anywhere close to doing it. But nevertheless, you are going ahead.

Ms. BIES. But the banks need more specific guidance from us on what these expectations are so that they can move ahead to complete their work. They all are still working very hard to complete their models, and they need it so we can do a more rigorous test.

Senator SARBANES. My time has expired. I guess in the end the question that should be put is, suppose you did not do Basel II?

What would be the bad result of that if you did not do Basel II? We have good capital standards right now. The banks are extremely profitable. We do not have this problem with a competitive disadvantage. Anyhow, my time is up and——

Comptroller DUGAN. Could I respond to that?

Chairman SHELBY. Mr. Dugan wants to answer that.

Comptroller DUGAN. That last question, Senator.

I will tell you I sat in this hearing room behind you during the period in the late 1980's and through the changes that caused banks to have incentives to raise their capital.

Chairman SHELBY. The crisis.

Comptroller DUGAN. That is right.

Senator SARBANES. Scars you for life.

Comptroller DUGAN. Yes, and we believe that banks have raised capital appropriately, and it is a fundamental part of our system. The results from QIS–4 were frankly totally unacceptable. We cannot have a system that produces such results.

If you ask, on the other hand, what would happen if we do nothing, we think, our supervisors think, not just me, and we supervise the largest of these institutions, that it is absolutely critical that we have a sophisticated risk management system and model conceptually like Basel II, a model that we build, not the banks, to get our arms around the most complex risks of these institutions, and that we have a process that will allow us to address what came out of QIS–4 so that we can fix it before these institutions can go live.

That is why we stretched out the transition. That is why we required a much more carefully controlled environment where cannot drop their capital, no matter what Basel II says, during that period, and why we have anticipated we are going to have to change this rule at some point in the future when we see what it looks like, when we have built it to specifications, when we have supervised it, and when we see what the results are at that time.

We think that approach will address part of the problem, but in the end, we are going to have to make some changes. But for safety and soundness reasons, we think it is a fundamentally good idea to go forward.

Senator SARBANES. My time has expired, and I know the Chairman has other questions. We have a very good panel coming. I have looked at some of their statements. I suggest to this panel that you give careful study to the submissions that are coming to the Committee from the next panel we are going to hear from, because they have raised some pointed questions about the situation.

Thank you, Mr. Chairman.

Chairman SHELBY. Thank you, Senator Sarbanes, for your experience and your service here and your long-term memory from many, many crises; we were both here together, probably the only two left, maybe; Senator Dodd, from the crises. Mr. Dugan was here and so forth. But I do not believe there is any substitute for capital. I mean, you have to do it, and as Senator Sarbanes said, our banks are doing very well. Our economy is good.

But things will happen, and they will be challenged. They always are. And I hope, as regulators, that when the system is challenged that these models, whatever they are, will withstand the challenge they sometimes will be in and sometimes they will break. I hope

whatever you do, you do it the right way. And we have this responsibility to question this, as you well know.

We thank all of you for your service, and we thank you for your participation here today.

Chairman SHELBY. We will go to our second panel: Mr. William Seidman, no stranger to the Banking Committee, who has served this country very well; Mr. William Isaac, I would say the same thing, former Chairman, now Chairman of Secura Group, LLC; George Kaufman, Professor of Finance and Economics, Loyola University, Chicago; Mr. Daniel Tarullo, Professor of Law, Georgetown University Law Center; Ms. Katherine Wyatt, head of Financial Service Research Unit, New York State Banking Department.

As I said earlier, your written testimony of this panel will be made part of the hearing record, and Mr. Seidman, we will start with you, if you are ready to sum up any points that you want to make. Your written testimony, all of you, it will be made a part of the record. I know you have a tight schedule, but we have stacked votes, too, later on. We are not going to push you too hard, but we think this is a very important follow-up panel from the first.

Proceed, and welcome again to the Committee, sir.

STATEMENT OF L. WILLIAM SEIDMAN, FORMER CHAIRMAN, FEDERAL DEPOSIT INSURANCE CORPORATION; FORMER CHAIRMAN, RESOLUTION TRUST CORPORATION

Mr. SEIDMAN. Thank you very much, Chairman Shelby and Senator Sarbanes. It is a great pleasure to be back here. I hope you will realize it has been a long time, so I am probably a little rusty and, you know, not quite as well-informed as I used to be. So, I will just try to hit some high points based primarily on my experience. I mean, you have heard some people who are all up-to-date.

Senator SARBANES. Seidman rusty is better than most people well-oiled.

[Laughter.]

Mr. SEIDMAN. Thank you, Senator. That is very kind of you.

First, I was there when the Basel I standards were created, I was part of putting that together. And the idea was that there were certain banks around the world that were undercapitalized that were part of a global system, and the whole effort was to get a minimum capital in the global system so that if something happened, we would not have weak links.

So the idea was to have a uniform, simple standard which could be applied worldwide, and I think essentially that was accomplished. And it was a simple standard that people could understand.

Basel II, of course, is not simple. Here are the regs for Basel II right here. I can just about lift them up. That is the regs for Basel II. They have been working on for 7 years, and as you have heard——

Chairman SHELBY. Does anybody understand them?

Mr. SEIDMAN. Not me, I guarantee you that.

Chairman SHELBY. If you do not understand them, I would be nervous——

Mr. SEIDMAN. I do not think anybody would be willing to take a test on that right now.

Chairman SHELBY. Go ahead.

Mr. SEIDMAN. So our experience with minimum capital standards and with capital standards in general was when there is stress, they are too low. I can tell you that if capital standards had been any lower than they were back in the 1980's, our two largest banks would have failed, without question. They were right on the edge.

So the idea that we would like to have less capital, and let me just comment that do you remember Walter Wreston's famous statement that big banks do not need capital? And that is true until there is a crisis, because as long as you are making money, they do not need capital. What they need it for is the unexpected, and that is what I think we are all trying to work on.

Our experience with actually using these models, the only experience I am aware of in the United States is the GSE's, where, as you know, it took 4 or 5 years to create a model, and it was absolutely useless when it came to the problems they had, because how are you going to model the improper accounting? So if you had been using their model obviously did not provide protection.

I thought it was interesting: Chairman Greenspan, who, as I last remembered, was a part of the Fed. They asked him the last thing, the last hearing what do you think about using models for setting regulatory standards? And he said, well, I think it is a good idea. And then, he said are you ready to do that today? And he said no, the models are not ready. And then, they said, well, when can we use them? He said it will be a very long time before we—so even the Fed Chairman is pretty clearly in doubts.

And of course, you have heard about the differences between large banks and small banks, and I will not dwell on that. Let me make clear: I think the models that are being made by these banks are very useful. They are useful for current operations. That is what they are designed to do. They are useful for pricing. They are useful for a lot of things. They are a factor in setting regulatory standards. But in no way that I can think of can you build a model that would be the basis for absolute standards of required capital.

I think there are some adjustments to Basel I necessary, and we have I–A, and I think we have people well-evaluated, who can evaluate that.

Finally, I would just like to quote from one of the learned professors on the Berkeley faculty, and his basic quote is: "Everyone knows when to discard his models. Of course, we understand that even in normal times, the best model is just a guide. If something extraordinary happens, like Russia's problems or the stock market goes down 20 percent, anyone with a modicum of common sense knows that models are not going to be reliable guides." That's when you need the leverage ratios.

Thank you.

Chairman SHELBY. Thank you, Mr. Seidman.

Mr. Isaac, welcome again to the Committee.

STATEMENT OF WILLIAM M. ISAAC, FORMER CHAIRMAN, FEDERAL DEPOSIT INSURANCE CORPORATION; CHAIRMAN, SECURA GROUP, LLC

Mr. ISAAC. Mr. Chairman, Mr. Sarbanes, I appreciate the opportunity to be here. This is a very important hearing. The Basel II

debate is probably one of the most profound debates we are facing in the banking system right now.

As I explained in my written statement I have grave reservations about Basel II, and I believe it carries the potential to do enormous harm to our banking system, which is the strongest, the most profitable, and the most innovative in the world. No regulator, legislator, or banker who lived through the banking crisis of the 1980's, which those of us who are in this hearing right now did, can ever forget the lessons of that period, and one of the most important is that capital matters.

And I agree with Chairman Seidman, that we would have had a lot more banks fail if we had had less capital in the system. I do not believe that the U.S. banking system has too much capital. You asked that question to the earlier panel. I would state that in my opinion, the U.S. banking system does not have too much capital. The rest of the world has too little capital, and the United States should not go down to world standards. That is not the problem. The problem is we need to try to find ways to bring the rest of the world up to U.S. standards, and I do not think we should play any games with that.

We have spent 25 years trying to build a great banking system and increase the capital levels in this country. We have done it, and we have the best system, and it is not time to try to fix it. Basel I was developed in the 1980's to bring uniformity around the world and also to try to calibrate the capital ratios to the risks in the banks.

Despite its objectives, Basel II has done nothing to bring about parity in capital standards around the world. The 20 largest banks in the world outside the United States at the end of 2004 had a median capital to assets ratio of 3 percent. That, I might add, is below the minimum standards required for U.S. banks. That is the median. The median among the 20 largest banks in the United States was 6 percent, so twice as high, and yet, the U.S. banks had much higher returns on assets. The argument that U.S. banks are disadvantaged in the international marketplace is fallacious. We have the best banks. We have the strongest banks. Our banks are taking the fewest risks, and they are making the most money. And so, I do not see the competitive inequity that exists.

When Basel I came into place, most of the career bank regulators were skeptical about it, because when you said we are going to give different risk weightings to different asset classifications, they did not know what would happen to capital. So they quite wisely put in place the leverage ratio to make sure that capital standards did not go too low and they also gave themselves the ability to override Basel I at any point that they felt that they needed to. For example, in subprime lending, the regulators are requiring a lot more capital, risk weights above 100 percent on high risk lending, something that they reserve the power to do despite what Basel I may have said.

But almost since Basel I was adopted, the Committee at Basel, at the Bank for International Settlements, started agitating for a more sophisticated risk system for the more complex banks. My major concerns about Basel II are first of all that it will be based on inadequate and unreliable data. No bank in this country has de-

tailed data on losses that goes back as much as 10 years. How can we build models when we do not have data that takes us through various business cycles?

The past 10 years is the most profitable period in U.S. banking history, and we cannot base models on that period. Moreover, the banks that we are trying to get to build these models did not exist 15 years ago for the most part, at least not in close to their current form. Their names may have existed, but those banks do not resemble anything like what they did 15 years ago. They are amalgamations or mergers of very disparate cultures, data systems, and business practices. Even if we could go back 15 or 20 years with these banks, it is not the same bank it used to be. And so, I am not sure how they build models from that.

Another concern I have with Basel II is trying to get the banks to model their operational risks. I only know of two kinds of operational risks: Those that you can identify, predict, price, and insure against—those have never been a problem in our banking system, because you can predict them, you can price them, and you can insure against them. Then there are operational risks you cannot predict. I do not know how you build a model around something you cannot predict. So, I think the whole notion of creating a model for operational risks and basing capital requirements on the model is flawed.

I think one of the things we need to be concerned about with Basel II if it goes forward in anything approaching its current form is that it might well-foster a complacency and a false sense of security on the part of bank management, and on the part of bank boards of directors, bank regulators, and analysts. I am concerned that people get a false sense of security from the models. They will have more confidence in them than they deserve.

And you do not have to go back very far in history to find out what happens when you do that. Long Term Capital in 1998 was a company that allowed, by all accounts, brilliant mathematicians and Nobel Prize-winning economists to create models and build a firm based on those models. They made some huge bets, and they lost. It resulted in the Federal Reserve forcing the banking system to come in and bail out the company.

I think that the argument that U.S. banks are at a disadvantage vis-á-vis foreign banks is simply wrong. I heard this argument in the 1970's and 1980's about the Japanese banks—that they were going to rule the world. We hear very little about the Japanese banks today except that they are a real drag on the Japanese economy. They pursued growth with reckless abandon. They did not have capital. They did not have earnings. Their business model was not sustainable, and it failed.

I do not know of a single professional bank supervisor, someone who does it for a living, not part-time, I do not know of a single professional bank supervisor who is enthusiastic about Basel II, and I really do not know any bank CEO's who are enthusiastic about it. Capital regulation, in my judgment, should be simple and easily understood. It is foolhardy to accept a capital regime that will be virtually impossible for senior management, boards of directors, regulators, and market participants to understand.

There is nothing wrong with the current capital regime in this country that some relatively simple fixes to Basel I could not cure. I think Basel II is a good exercise. I agree with Mr. Dugan, for example, on the previous panel when he said it is important for bank regulators and bank managements to get their arms around different kinds of sophisticated risks. I agree 100 percent, but Basel II it should be a management tool and a regulatory tool; we should not base our capital standards on it.

The last thing in the world that U.S. regulators should do is engage in a competition in laxity with supervisors in other countries by lowering U.S. standards to international norms. We have the best and strongest system. We should work hard to keep it. Thank you.

Chairman SHELBY. Thank you, Mr. Isaac.

Professor Kaufman.

STATEMENT OF GEORGE G. KAUFMAN, CO-CHAIR, U.S. SHADOW FINANCIAL REGULATORY COMMITTEE; AND JOHN F. SMITH, JR., PROFESSOR OF FINANCE AND ECONOMICS, LOYOLA UNIVERSITY CHICAGO

Mr. KAUFMAN. Thank you, Mr. Chairman, Senator Sarbanes. It is a pleasure to testify before this Committee on the public policy implications for the health and safety of the banking system and the U.S. macroeconomy of the proposed Basel II capital standards. I will summarize my longer written statement.

Basel and structured early intervention and prompt corrective action in this country have different histories. The capital standards constructed in Basel I in 1988 effectively resembled guidelines at the time for best practices in bank capital management; in particular, with respect to incorporating credit risk exposure. In contrast, in the United States, emphasis was not on developing best practices schemes but on developing public policy measures to prevent a reoccurrence of the large scale failures of thrift institutions and commercial banks in the 1980's, which imposed high costs on the insurance agencies and for thrift institutions also on the taxpayers.

The structure was designed to turn troubled institutions around before insolvency, primarily through recapitalization or merger with healthier institutions, and failing that, as a last resort, to legally close and resolve them at lowest cost to the insurance agency and potentially also to taxpayers.

With its emphasis on risk-based capital, pillar one in Basel II basically remains a best practices guide for internal bank management and not a public policy instrument. While there is substantial empirical evidence of an inverse relationship between leverage ratios, which use total assets and not risk-rated assets, and bank insolvency, there is no such evidence between risk-based capital ratios and bank insolvencies.

In other industries, analysts do not compute risk-weighted assets or risk-based capital ratios for individual firms. But they do compute, and investors use, leverage ratios. Risk-weighted assets are an inferior scaler to the total assets to gauge how much capital is available to a bank before the value of its total assets declines below the value of its liabilities and it becomes insolvent.

Unfortunately, Basel II may be on the verge of causing major mischief in the United States that could weaken financial stability. It appears that the 4 percent risk-based tier one capital requirement ratio can be achieved under Basel II for many large banks intending to use the advance internal ratings approach with lower capital than is currently required both under Basel I and to be classified as an adequately capitalized bank according to the 4 percent tier one leverage ratio.

Consequently, the leverage ratio is likely to become the binding constraint for these banks and prevent a reduction in required regulatory capital. The FDIC has concluded that, "U.S. policymakers will be confronted with a choice between ignoring the results of Basel II or substantially weakening the PCA requirements."

Although almost all U.S. banks currently maintain capital ratios at well above the regulatory requirements—indeed, the FDIC reported that bank equity capital ratios at mid-year 2005 climb to the highest levels since 1938, more than twice the ratio required to be adequately capitalized—some large banks appear to be lobbying U.S. regulators to lower the numerical threshold capital leverage ratio to qualify as adequately capitalized to below 4 percent, say, to 3.5 percent or lower.

Congress in FDICIA delegated to the appropriate Federal regulators the setting of the numerical thresholds for all tranches but the minimum critically undercapitalized closure trigger of 2 percent of equity capital. Some large banks are also arguing that the current leverage ratio requirements put them at a disadvantage with their competitors in the rest of the world, who are not subject to these ratios.

For U.S. regulators to cave in to such pressures would be a big and costly mistake. Considerable evidence suggests that even a 4 percent equity leverage ratio is lower than that maintained by almost all domestic nonbank competitors of banks who are not similarly regulated nor covered by a safety net. When industry leverage ratios fall below 6 percent capital, bank failures increase, particularly in a recession.

Indeed, on the whole, there is a negative relationship between leverage ratio and defaults in all industries. With respect to individual large banks, there is no evidence either that equity capital increases the bank's overall cost of funds or that there is an inverse relationship between bank capital ratios and bank returns on either assets or equity.

A time series analysis for U.S. banks shows a weak positive relationship between bank capital and profitability. A cursory cross-section analysis of the world's largest banks also shows a positive relationship between capital and profitability since the 1980's. Recently, United States, United Kingdom, Australian, and Spanish banks have both high capital ratios and high profitability, while German, Swiss, and Japanese banks have both low capital ratios and low profitability, although some adjustment need be made for the possibility of simultaneity in the direction of causation.

Nevertheless, this helps to explain why capital ratios actually maintained by U.S. banks are considerably higher than the regulatory requirements. They are signalling strength to their customers. Likewise, among the largest 1,000 banks in the world in

2003, U.S. banks accounted for only 15 percent of aggregate assets but 22 percent of aggregate tier one capital and fully 37 percent of aggregate pretax profits.

To summarize, adoption of Basel II for large banks in the United States is likely to have little effect on the banks and the economy if the current numerical threshold values for the leverage ratios for adequately and well-capitalized banks are not reduced. It would do little damage. If, however, because the new Basel II risk-based requirements can be met, on average, with lower leverage ratio numbers, the numerical definitions for adequately and well-capitalized banks and PCA were reduced, there are likely to be longer-term adverse consequences. The integrity of prompt corrective action should not be compromised for the sake of harmonizing bank capital standards across countries.

But the Basel process has not been totally negative. It has greatly improved the measurement and management of risk by both bankers and regulators and thus enhanced financial stability worldwide. Basel should be maintained as an ongoing process to develop ever-better bank best practice schemes for internal management purposes. But it should not be halted and put in place in the United States. It is the process, not the end result, that will provide the major benefits.

Thank you.

Chairman SHELBY. Thank you, Professor.

Mr. SEIDMAN. Mr. Chairman, I am sorry; I apologize.

Chairman SHELBY. Mr. Seidman.

Mr. SEIDMAN. I have to leave. But I agree totally with my predecessor, Mr. Isaac, so anything that he says, I subscribe to.

Chairman SHELBY. You are going to associate with him. Well, we appreciate you. We appreciate your appearance. We know your time constraint.

Mr. SEIDMAN. Sir, thank you very much.

Senator SARBANES. Thanks very much for coming. It is nice to have you back before the Committee.

Mr. SEIDMAN. Thank you.

Chairman SHELBY. Mr. Tarullo, am I pronouncing your name, right, Tarullo?

Mr. TARULLO. Tarullo, correct.

Chairman SHELBY. Thank you.

STATEMENT OF DANIEL K. TARULLO
PROFESSOR, GEORGETOWN UNIVERSITY LAW CENTER

Mr. TARULLO. Thank you, Mr. Chairman, Senator Sarbanes. I think you have heard already this morning that there is a lot of common ground, the common ground being that there needs to be better risk management in banks; there needs to be a better capacity in our bank supervisors to understand the risks that banks are assuming; and that Basel I is admittedly imperfect and becoming increasingly so.

But those facts do not translate into a policy conclusion that we should adopt Basel II. And it seems to me, looking at this as a former policymaker, there are two kinds of questions that we and you should be asking. First, are we ready to move ahead to Basel II, given our current state of knowledge and the current conditions

in the world? Second, will we ever be in the position where Basel II is, on balance, the right approach to bank capital regulation?

I am still somewhat agnostic on the second question, although skeptical for a lot of the reasons that you and my colleagues on the panel have articulated. I am very clear on the first question: We are not ready to move forward; the bank supervisory agencies are not ready to move forward; there are too many unanswered questions.

One thing that I think academics and policymakers should have in common is an appreciation of the law of unintended consequences. When you take a regulatory or other action, some things you anticipate, many things you do not. Some of those unanticipated things can be very harmful indeed—witness our history with the savings and loan crisis and the Latin American debt crisis, both of which had some of their roots in prior regulatory actions which, in retrospect, were good for the economy but where the consequences had not been anticipated and guarded against.

So, again, thinking as a former policymaker, how do I understand what the agencies are proposing right now? Well, they are saying first, we want to make the biggest change in bank regulation in about 15 years. Second, we have tried to figure out what the effect will be on bank capital. We are not really sure. In fact, every time we do one of these tests, the results surprise us. But we have now concluded the only way we can really figure it out is to go ahead and implement the new process, the new rules, even though we really admit we do not understand what will happen.

Third, to the extent we do understand, there seems to be a momentum toward capital reduction. And the agencies have not, in my view, and I do not think they did this morning either, articulated their theory of where capital needs to be and why.

This is not a science. There can be and should be sophisticated quantitative aids to capital regulation. But ultimately, regulatory capital levels are a judgment about the amount of safety and soundness, the amount of bank stability versus the constraints on banks moving money out the door to more productive uses. That is a policy judgment. The market needs to make its judgments as to how much risk it wants to bear in lending to banks as well. So I think these things ought not to be confused.

Finally, as you look at all this as a policymaker, you have to say, okay, what are the costs and benefits we are going to get immediately? Why do we have to move so quickly? I think Mr. Dugan is absolutely right: Over the medium to long-term, he needs to get his arms around what is going on in banks. But if nothing happens tomorrow, we are not faced with a crisis. This is not a circumstance in which people come to you as legislators or to them as regulators and say "look, we know we do not understand everything that is going to happen, but we have to move, because the bad things that are happening to us are just too great."

So, Mr. Chairman, Senator Sarbanes, I appended to my testimony a list of just the core questions that I, as a former policy coordinator, would have put to agencies proposing to move forward and that I urge you as Members of the relevant oversight Committee to put to the regulators. They may be able to answer them. I genuinely mean that when I say they may be able to answer them. But

I think what has happened is there has been this kind, as Senator Sarbanes was suggesting, a momentum to finish. There is a kind of exhaustion. The regulators think we have been doing this for 6 years; we are already looking at another six. Let us say we are putting it in place right now, get it off of the desk, and move on to the next set of issues."

That is where the role of a policy coordinator or a Congress oversight committee comes in—to say we understand you are tired of this; we understand it is putting a lot of strain; we understand it is very difficult, but we still need to understand what the consequences will be before we move forward.

Thank you.

Chairman SHELBY. Thank you. That is very articulate. I believe that Senator Sarbanes and I are working together, and we will on this issue. We have a lot of questions that we did not have time to ask the regulators earlier this morning, and some of your suggestions will be very helpful.

Ms. Wyatt, thank you for appearing here with us.

STATEMENT OF KATHERINE G. WYATT
HEAD, FINANCIAL SERVICES RESEARCH,
NEW YORK STATE BANKING DEPARTMENT

Ms. WYATT. Good morning, Chairman Shelby, Senator Sarbanes, and Members of the Committee. My name is Katherine Wyatt. I am a Ph.D. mathematician and Head of the Financial Services Research Unit at the New York State Banking Department. I have followed the development of Basel II for the Banking Department since 2000. I have studied the possible effects of the simpler approaches under Basel II and worked with my Federal counterparts in analyzing banks' implementation programs for Basel II.

I appreciate the opportunity to testify today, because I am concerned that adhering to the current timetable for implementation that the agencies have proposed could lead to far-reaching changes in how we measure capital without sufficient understanding of the possible consequences.

The Federal agencies plan to issue the Basel II NPR in early 2006, then to finish the rulemaking process for Basel II, conduct a year of parallel run of current requirements and Basel II, and have Basel II in effect all by January 1, 2009. They also aim to have the domestic capital modifications for non-Basel II banks or amended Basel I or Basel I–A in effect on January 1, 2009, also.

I am afraid the pushing ahead to complete the rulemaking process for two complex proposals in less than 3 years will not allow time for essential review of either. Now, there are these 3 years of floors that they have talked about. However, banks that adopt Basel II on January 1, 2009, will have already made sizeable investments in systems, in data collection programs, and I think it will be very difficult to make material changes to the proposal after they become effective, and they are ready to start.

I believe there are two large gaps in our understanding of the impact of Basel II that must be addressed before we move to a final rule for either Basel II or Basel I–A. First, we do not know what the actual level of capital will be under Basel II for any given bank. You have heard already this morning about the results from QIS–

4. They are crude. No one is willing to say that this is what the level of capital will be or will not be.

Also, Basel II has changed over time. It was 2½ years ago that the ANPR was released. There has been nothing public since then. Now, the timetable seems to involve going ahead without another impact study of the fully specified proposal after the NPR. Even more importantly, since capital requirements under Basel II are based on the outcomes of mathematical models, we need time to develop rigorous technical guidelines for parameter estimation and tests of data sufficiency to ensure that required levels of capital are adequate.

Now, the second large gap in knowledge comes from the fact that we have not addressed the changes that may be brought by Basel II and Basel I–A across the banking system. Basel II's impact has been studied primarily on large, complex banking institutions. We have not fully studied the competitive effect of Basel II on the close to 9,000 non-Basel II institutions in the country.

It is essential that we study the effects of both Basel II and the amended Basel I or Basel I–A that was released just last month side-by-side before we go ahead.

I would like to speak first about banks' Basel II capital calculations, if I could. Under Basel II, capital requirements for credit exposures are based on the outcomes of a particular mathematical model of default specified by supervisors. This supervisory model is applied to complicated portfolios with a host of adjustments, specifications, exclusions, and exceptions that grew out of attempts to reconcile the model results with existing international bank regulations. As I said, we will not even know what the final U.S. version of these specifications will be until early next year.

Basel II banks provide their own estimates of probability of default, loss given default, exposure at default and maturity as inputs into the Basel II formulas. These parameter estimates depend on the data and other models used by the bank. Now, a key premise of Basel II is that banks will have enough reliable data to produce rigorous results from the model. I think many will agree with me that this is often not the case.

The schedule for implementation must allow enough time for supervisors to work with bank models, to understand different parameter estimation techniques, and to gauge the sufficiency of bank data. Otherwise, there is a real danger that the estimation techniques that most large banks choose will become the de facto best practices.

Unfortunately, Basel II could be gamed by choosing the modeling techniques and data sets that will produce the lowest capital requirements. We have already seen what the QIS–4 results showed. The strong possibility exists also that as the distance between risk-based capital requirements and current leverage under prompt corrective action capital requirements grows, there will be increased pressure on bank regulators to drop the leverage ratio requirements.

The bank supervisors I have talked with are very worried at the prospect of dropping PCA requirements. They remember other times when banks' predictions about the future did not come true. They also point to their experience that well-capitalized banks are

profitable banks, can enjoy lower costs of funding, and can more easily weather economic downturns.

Second, we just do not know enough about the impact of Basel II more broadly on the U.S. banking system. The Conference of State Banking Supervisors described some widely shared concerns about the impact of Basel II in a letter to the Federal agencies in September. CSBS wrote: As proposed, Basel II creates significant differences between capital requirements of banks that adopt Basel II and those that do not. The current approach reduces the capital large institutions hold for mortgages and small business loans among other assets. In a very practical sense, the reduced capital requirements would provide a pricing advantage for the larger institutions.

In a competitive economy, eventually, market forces will likely drive these assets from smaller banks toward the Basel II adopting banks, requiring nonadopting banks, the vast majority of which are small community banks, to move to higher risk areas of banking.

I am afraid that the available analysis does not adequately answer these concerns. The Federal Reserve has posted on its website several white papers covering some of the competitive issues raised by the original bifurcated regime proposed by the agencies. However, these papers are based on Basel II circa 2003, and both the Basel Committee and the Federal agencies have made changes since then. The new, amended Basel I proposal, of course, is not considered at all in this research. The white paper's suggests that the impact on non-Basel II banks may be minimal, but these papers are not definitive, and other authors have disagreed with their findings.

We need to have a much better understanding of the consequences of Basel II before it is implemented. We should take the time now, both Federal and State banking regulators, to fully test the impact of Basel II and the amended Basel I proposals. In this way, we can work to safeguard the soundness and profitability of the banking system, and we can ensure that U.S. borrowers will continue to have the access to capital that a strong U.S. banking system affords them.

Thank you very much.

Chairman SHELBY. Thank you, Ms. Wyatt.

Dr. Kaufman, in your testimony, you indicate, "there is substantial empirical evidence of a negative relationship between leverage ratios and bank insolvency but no such evidence between risk-based capital ratios and insolvency." Could you discuss in a little more detail, help us understand why is this the case?

Mr. KAUFMAN. Because insolvency basically deals with when the value of the assets falls below the value of liabilities. It has nothing to do with whether the value of risk-based assets falls below the value of liabilities. And so, you have a factor there that does not seem to fit in logically into the framework. Take a bank that holds nothing but very low credit risk assets, it would have a very low capital requirement. But if anything happens, if the models make a mistake, then, with the low capital, you burn right through the capital. Capital is a buffer that is to burn through, and the more capital you have, the longer it takes to burn through.

Chairman SHELBY. No sponge to absorb it.

Mr. KAUFMAN. Right.

Chairman SHELBY. Have you done any work or thinking about the likely, if there is going to be macroeconomic impact on the U.S. economy of the adoption of Basel I and Basel I–A?

Mr. KAUFMAN. I have not focused on Basel I–A. As has been said here, the small banks in particular hold so much more capital than is required to be held, I do not think it will make much of a difference.

Chairman SHELBY. Mr. Tarullo, do you have any thoughts there?

Mr. TARULLO. Senator, there have been quite a few academic studies trying to project whether Basel II will exacerbate what is called the procylicality of banking regulation, meaning that when things are bad, the banks withdraw more money from the system, because they have to ramp up their capital requirements. And I would just say that at this point, whether Basel II will increase procyclicality is another of the unanswered questions. The academic studies done to date have differed, and some of it differs based on, as Dr. Wyatt was suggesting, which assumption you are ultimately going to stick into the model.

Chairman SHELBY. Just to the panel, do you believe the adoption of Basel II and Basel I–A leave banks with sufficient capital or would, Mr. Isaac?

Mr. ISAAC. Well, that depends on what they come out with in the end and whether they maintain the leverage ratio. It seems to me that the whole exercise they are going through, a lot of people expect that capital requirements are going to go down, and that was the premise of the——

Chairman SHELBY. Something Senator Sarbanes raised earlier and rightly so.

Mr. ISAAC. And I agree. We see people testifying and making speeches that we have to do this to keep our banks competitive with foreign banks that have much lower capital ratios. So, I believe the premise that everybody is operating on is that capital ratios are going to go down if Basel II goes forward. Small banks say that is not fair to them, so the regulators publish Basel I–A, to lower small bank capital ratios as well. In other words, we fix the inequity by lowering capital ratios across the board.

Chairman SHELBY. Could we be playing with fire, though?

Mr. ISAAC. I think it is a prescription for disaster, and I am strongly opposed to lowering capital standards in this country.

Chairman SHELBY. Professor Kaufman.

Mr. KAUFMAN. I think it all hinges, as has been said a number of times, whether you lower the numerical definitions of adequately capitalized banks under the leverage ratio. If you do not do anything there, then, it really does not matter what comes out of the risk-based Basel II analysis.

The other factor you want to be sure about is that you make it quite clear to the banks and to the country as a whole that FDICIA makes it very difficult to protect uninsured depositors in bank failures—FDICIA coming out of this Committee a number of years ago—and, therefore, that the market better hold enough capital regardless of what the regulatory requirements are.

Chairman SHELBY. Mr. Tarullo.

Mr. TARULLO. Mr. Chairman, I would echo two things Mr. Isaac said: First, we cannot know right now, because these are inchoate proposals. Second, there does seem to be a lot of momentum toward lower capital, both in the larger banks, in the smaller banks that fear the competitive consequences, and I noted in Europe, where the adoption of Basel II in the European Parliament was touted by European Union officials as lowering capital requirements for European banks.

Chairman SHELBY. Ms. Wyatt.

Ms. WYATT. Chairman Shelby, first, I would just point out that when I have looked at capital ratios, it has struck me that already, for many very large institutions, the leverage ratio is the constraining ratio. We are already in the situation where banks are much closer to the leverage ratio than they are to the risk-based capital one.

I think we just have to know more about the actual mechanics of the Basel II programs that banks will have before we can say, and until we do have some assurance about what is going to come out of these Basel II systems, it would be much better to stay with the current capital requirements.

Chairman SHELBY. Competition in the banking community: We have large banks, we have a lot of small banks. As I mentioned earlier, and you well know, all of you, our economy's job creation machine is small and medium-sized business. Mr. Isaac, could this have an effect on competition, the banking industry, and then get into our economy?

Mr. ISAAC. I think that if the large bank capital standard is significantly reduced, and we do not do something about the smaller banks, that is going to have a big impact on small banks around the country, because they are not going to be able to be on the same footing competitively, and it is going to hurt them.

And they tend to reach out and take more risk when they are getting hurt competitively, which creates more problems in the system. I do not think the answer is to lower the capital for the big banks and then respond by lowering the capital for the small banks. I think the answer is keep the minimum standards where they are and use Basel II as a management tool and as a regulatory tool. I actually favor developing these models, because I think it will improve supervision and management of banks, but I do not see the tie between that——

Chairman SHELBY. Lowering the capital, though, should be left out of it.

Mr. ISAAC. Exactly.

Chairman SHELBY. Professor Kaufman.

Mr. KAUFMAN. I do not see that as being a very important issue. As I pointed out, the small banks in particular hold so much more capital than their regulatory requirement now. If you go back to the pre-FDIC days and the pre-Fed days, even, when we did not have capital regulation, you see exactly the same picture as we see now: That the small banks held considerably higher capital than the larger banks. They competed with each other. They both survived. It is just the nature of the beast that when you are smaller, you concentrate your risks more, and you are more likely to hold

higher capital. So, I do not think that the adoption of Basel II will have significant competitive implications.

Chairman SHELBY. Mr. Tarullo, do you have any comment?

Mr. TARULLO. No, I do not.

Ms. WYATT. I think we do not know.

Chairman SHELBY. A lot of things we do not know about this.

Ms. WYATT. And I am sorry to keep repeating that, but the problem is it is not just large banks and small banks. It is not just large banks against small community banks. There are a whole bunch of banks in between. These large regional banks, clearly, it seems to me, are competing with the large banks. And their capital ratios seem to be moving closer to the capital ratios that the large banks keep.

Also, I think there are questions about the kinds of lending that it will be more profitable for Basel II banks to do.

And if they have already invested in a lot of systems, if they have sophisticated data collection programs, it will be easier for them, perhaps, to do a certain kind of retail lending that can be done where the loans can be pooled or even small business loans where you could look at a small business loan in a retail sense rather than as a small corporate loan. I think there will probably be changes in the ways banks do lending because of this, and I think that is one of the things we have to look at.

Mr. ISAAC. Mr. Chairman, could I just add one little thought to that?

Chairman SHELBY. Yes, sir.

Mr. ISAAC. I think the answer to what is going to happen competitively is pretty clear from the fact that something like the 10 largest banks are required to implement Basel II if it goes forward. A significant number of banks below the top 10 are moving to implement Basel II at great expense and not because they want to opt in to Basel II, but because they fear they will not be able to compete against the top 10 banks if they do not implement Basel II.

We do have a system in which everybody is competing against everybody right now, unlike the system we had in the 1970's where everybody carved up their territories. So, I think we have to be very careful about the competitive effects of this. We are going to have a bunch of banks opting into Basel II because they want to take advantage of lower capital, and I do not think they should have lower capital.

Chairman SHELBY. Senator Sarbanes.

Senator SARBANES. Thanks very much, Mr. Chairman.

This has been an extremely helpful panel. We appreciate your appearing today, and also, we appreciate the careful thought that obviously went into the prepared statements. Mr. Chairman, we should send these prepared statements to each of the regulators and urge them to review them very carefully. I suggested that to them when they were here.

Chairman SHELBY. I think that is a good idea. I think it would be probably something that the two of us could work together with our staff and propound a number of serious questions to all of our regulators that we did not have time to do today.

Senator SARBANES. Right.

Chairman SHELBY. We could work on that together.

Senator SARBANES. Fine.

I know we are going to have a vote shortly. I want to lay the basis for my question, and then, I will put it to you. This QIS–4 study which they did, released earlier this year, showed that for the 26 participating U.S. banks, the aggregate capital level would drop 15.5 percent. The median capital reduction was 26 percent. In other words, half of the participating banks would have capital reductions of 26 percent or more, and one of the banks had a capital reduction of 50 percent. But we continue to move down this path.

I mean, you get this kind of study result that just seems to me should bring you up short about what is going on, but the beat goes on. So now, the banking regulators have put out this revised plan for implementation of Basel II framework. By its very terms, they are going to put on a minimum 3-year transition period, during which the agencies would apply limits on the amount by which each institution's risk-based capital could decline with the application of Basel II, so it is going to go 95 percent, 90 percent, 85 percent over a 3-year transition period.

And then, the institution's primary Federal supervisor would assess the institution's readiness to operate under the Basel II base capital rules. They would make a decision on the termination of the floors, in other words, the 85 percent floor, on an institution by institution basis. So what they are putting out there envisions going to 85 percent of the current risk-based capital levels. I mean, it is built right into the proposal.

Now, I am trying to search for where the motive force or the dynamic element is coming from to keep this thing going when you get these kinds of results, when we have very able testimony here, Mr. Chairman, Mr. Seidman, Mr. Isaac are very experienced; Mr. Kaufman, a leading academic; Dan Tarullo, we know, and of course, Ms. Wyatt, Diane Taylor is your superintendent.

Ms. WYATT. Yes, she is.

Senator SARBANES. And you all run a good department there in New York, the New York State Banking Department, with a lot of very able and competent people, and you are one example of that.

And so, why is all of this being ignored? Why do we relentlessly keep moving forward down this path when people are raising a lot of red flags about what the implications of this are? Does anyone on the panel have a theory, a hypothesis, as to what is the driving force behind all of this? I see they all want to answer. Very good.

Mr. ISAAC. I will just speculate a little bit, because I do talk to regulators a lot, and I think I know what is on their minds, at least in many cases. I believe this whole effort is well-intentioned. We have banks that are huge and increasingly complex, and they have all sorts of risks that we are not sure that they understand. And so, there is a desire—I think Comptroller Dugan expressed it—to get our arms around these banks. We need to understand them better, these great big, complex institutions.

So, I think that is the motivation. I think somebody made a very strategic mistake 10 years ago or whenever they started talking about this in the hallowed halls of Basel, when they decided to tie the Basel II effort to capital and to induce the big banks to do it by saying, "You got a shot at lower capital if we come up with a system."

I think it would have been much better if the regulators just simply said, "We do not know enough about you, you do not know enough about you, and we are going to insist that you develop these models; no inducements here. Just do these models. We know it is going to cost you money, but that is the price of being an insured, regulated bank."

And then, we can all see what we are dealing with over a period of 10 or 15 years; we will perfect these models, and maybe then, somehow, that will affect regulation and capital requirements and the like. But we should not start there. We should keep the system in place that has brought us the best and strongest banking system in the world and mandate that Basel II be implemented for purposes of management information and regulatory information so we can figure these banks out better.

I think they are very well-intentioned. I just think they got off on the wrong foot, and it is hard to back off of it.

Mr. KAUFMAN. I would agree with what Mr. Isaac just said. In my prepared statement, I differentiated between public policy tools and best practices, and Basel II basically is a best practice as is Basel I. Given that Europe does not have the prompt corrective action system that we have in this country, they are trying to substitute, without really having thought it through, Basel II for prompt corrective action. That is not going to work.

What we also have going is the Europeans pushing the Americans at this point. We also have natural bureaucratic momentum that is set up. You either stop it, which is difficult to do, or you just keep revising it and keep going. I gave a talk some time ago in which I suggested if the Basel group really wanted to meet in a city named B, maybe they should meet in Baghdad or Bogota. That might stop the process.

[Laughter.]

Chairman SHELBY. That is a good answer.

Mr. TARULLO. I think there is a lot to what Mr. Isaac said, and I would just add the following: I observed frequently when again I was in the position of watching agencies come forward with proposals that there is an early period where different ideas can get some traction. At some point, though, the bureaucratics of the agency become set on one idea. And at that point, every problem that comes along is a problem to be dealt with, to answer it; let us fix this, let us deal with this constituency, but we are going down this track, and it becomes very difficult for someone to get perspective on it.

And I think that is exacerbated for bank regulatory matters, because as you saw this morning, you have four agencies plus the Federal Reserve Bank of New York, which, of course, originally was in the lead on this entire issue. All of them have to work together. There is not continuity of leadership over the course of the exercise. And so, it does acquire a momentum of its own. And I think Mr. Isaac has put his finger on maybe what gave the push to that momentum in the first instance.

Senator SARBANES. Is there a view from the State level about this?

Ms. WYATT. Yes; I have been very fortunate that I have been able to be an observer at many meetings, Federal interagency

meetings on Basel II, and we are very involved in Basel II at the State level. We have many banks that are interested in Basel II, the larger regional banks. And I think that a lot of very useful things have come out of the Basel II process.

I mean, it has been going on for many years. I think we have learned a lot more about banks, and their portfolios have started to address some of the complexities that are here. The problem just is, though, in my opinion, we are not quite ready to go to implementation. I think we need to have a fully specified NPR, something with all the details filled in, and step back, look at it, look at its effect, look at Basel I–A NPR when it is out. Just take a moment to make sure, more than a moment, but to be sure before we go to the next stage.

Senator SARBANES. Is there not a very important dimension that a whole group of banks—it will just work its way right down the pyramid—will say to bank regulators, well, you allowed this Basel II for these 26 or whatever it is large banks. Now, they are holding less capital. But I am still having to hold the old levels of capital.

That is unfair. I am at a competitive disadvantage. You have allowed the most complex institutions to drop their capital levels. Why should we not be allowed to do the same? If you do not allow us to do the same or something comparable, we are going to be at a significant competitive disadvantage, and will that argument not continue to be asserted right down the size chain?

And that is not really being analyzed here. I mean, this is all the focus, what does it do to the 26. But what is the spillover or the carryover effect of this on the rest of the institutions? Is that a substantial problem?

Mr. ISAAC. I think it is a very clear problem. I agree with you completely: It is going to ripple through the system because banks below the top 10 are going to opt into Basel II.

I want to make another point here because I have a special concern, having run the FDIC during the banking crisis of the 1980's and handled the biggest bank failure in our history, Continental Illinois. Continental was the eighth-largest bank with assets of $40 billion. It stressed the agencies—the Fed and the FDIC—and it stressed the banking system.

I do not know what we will do if one or two of these really big ones that we have today gets in trouble, and I think it is not a time to be fooling around with lowering capital ratios. It just is not. We need to understand a lot more, which is why they should keep on moving on Basel II as a management tool and as a regulatory tool, but we should not, under any circumstances, be lowering capital ratios in these banks in my opinion.

Senator SARBANES. Well, Gene Ludwig, who had been a former Comptroller, made the observation just recently that, we were not in a down cycle. He thinks we may have a down cycle in 24 to 36 months and says, you cannot run these models testing it unless somehow you work into the model the down part of the cycle. So, I mean, just to underscore the point are making.

Mr. ISAAC. I agree.

Senator SARBANES. Mr. Chairman, I see the vote has started. This has been a very helpful panel.

Chairman SHELBY. Senator Sarbanes, you have been here a long time. You have chaired this Committee, and we both were here when Chairman Isaac was going through the crisis. We went through the crisis, and we do not want to go through another one.

Mr. ISAAC. I do not either.

Chairman SHELBY. We appreciate all of your testimony, your input, and we are going to look closely at some of the questions Mr. Tarullo and others have suggested, because Senator Sarbanes has a lot of questions to be asked.

Thank you so much. The hearing is adjourned.

[Whereupon, at 11:41 a.m., the hearing was adjourned.]

[Prepared statement and response to written questions supplied for the record follow:]

STATEMENT OF JOHN C. DUGAN

COMPTROLLER OF THE CURRENCY

U.S. OFFICE OF THE COMPTROLLER OF THE CURRENCY

NOVEMBER 10, 2005

Introduction

Chairman Shelby, Senator Sarbanes, and Members of the Committee, I appreciate this opportunity to discuss plans of the U.S. banking agencies to update and enhance our regulatory capital program in two fundamental ways: First, through the implementation of the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework," generally known as the Basel II framework; and second, through revisions to our existing domestic risk-based capital framework for banks not adopting Basel II, generally known as Basel I–A.

The primary impetus for the agencies' work to revise existing risk-based capital rules is to enhance the long-term safety and soundness of our banking system. While the U.S. banking industry continues to operate profitably, supervisors must ensure that regulatory capital rules remain relevant and appropriately address existing and emerging safety and soundness challenges. For our largest banks, the fundamental thrust of our efforts has been to develop a more risk sensitive regulatory capital system better suited to the complex operations and activities of these institutions. For banks not adopting Basel II, our primary goal is to increase the risk sensitivity of our risk-based capital rules without unduly increasing regulatory burden. Work in these areas is again moving forward as the result of agreement by the agencies, announced in a joint statement on September 30.

The joint statement included a revised timeline for U.S. implementation of Basel II and a series of prudential safeguards to ensure that capital levels similar to those that exist in our largest banks today will be maintained over an extended transition period. The statement also highlighted our expectation that the rules implementing Basel II in the United States will be modified as necessary based on experience with the new framework during that transition period, and before the prudential safeguards expire.

The joint statement reflected a consensus by all the U.S. agencies that implementation of the Basel II framework should move forward. Our agreement to do so was based on several key premises:

- First and foremost, the Basel II framework offers necessary and appropriate improvements to address recognized flaws in the existing risk-based capital regime for our largest, most complex banks. Basel II will promote significant advances in risk management that will benefit supervisors and banks alike and that will enhance the safety and soundness regime under which the largest institutions operate.
- Second, to achieve its intended purpose, the framework will have to be thoroughly tested and almost certainly adjusted. The recent quantitative impact study (QIS–4) of estimated Basel II results in large U.S. banks produced significant dispersion of results across institutions and portfolio types and suggested a material reduction in aggregate minimum required capital. Apart from the notice and comment process, however, additional agency study of the Basel II framework itself will do little to resolve those concerns. Indeed, without seeing live systems in operation—and subjecting them to supervisory scrutiny—we will not be able to gain the level of comfort we ultimately must have in order to rely on Basel II for regulatory capital purposes.
- Third, it is our intention to proceed deliberately, gaining a better understanding of the effects of Basel II on bank risk management practices and capital levels. Upcoming Basel II rulemakings, therefore, will include a meaningful transition period during which we can observe and scrutinize Basel II systems while strictly limiting, through a system of simple and conservative capital floors, potential reductions in capital requirements. Based on the experience we gain through supervisory oversight in the transition period, we will incorporate any necessary revisions to the U.S. Basel II-based rules before the transition period ends.

Because we believe that regulations must be tailored to the size, structure, complexity, and risk profile of banking institutions, we expect mandatory application of Basel II to be limited to large complex institutions. However, we need meaningful but simpler improvements in our domestic risk-based capital rules for banks that will not be subject to Basel II. Our Basel I–A initiative is separate from but complementary to the Basel II rulemaking process, and it is important that the public be able to compare, contrast, and comment on definitive proposals for both Basel II and Basel I–A in similar timeframes. We believe that overlapping comment peri-

ods for these two rulemakings is a critical element of our on-going effort to assess the potential competitive effects of these proposals on the U.S. financial services industry.

On this basis, the banking agencies agreed that it is both prudent and necessary to develop and issue a notice of proposed rulemaking (NPR) for Basel II implementation and to solicit comments from the public. In order to do this, however, prudential safeguards are an absolute necessity, and we recognize that further changes will take place through future rulemakings.

The Need for Basel II in the United States

The implementation of Basel II in the United States remains controversial, requiring banks and supervisors to balance sometimes conflicting objectives regarding complexity of minimum capital requirements, regulatory burden, competitive equity, alignment of regulatory capital with better measures of risk, and recognition of marked improvements in risk management capabilities. A fair question, and one we have asked ourselves at various stages of this process is, "Given all the difficulties and uncertainties associated with Basel II, why move forward with it at all?" While other sections of my testimony explain *how* we plan to go forward, I also understand the need to address *why*.

The 1988 Basel Accord, also referred to as Basel I, established a framework for risk-based capital adequacy standards that has now been adopted by most banking authorities around the world. The U.S. agencies have applied rules based on the 1988 Basel Accord to all U.S. insured depository institutions. Although Basel I was instrumental in raising capital levels across the industry in the United States and worldwide, it became increasingly evident through the 1990's that there were growing weaknesses in Basel I. In particular, the relatively simple framework has become increasingly incompatible with the increased scope and complexity of the banking activities of our largest banking institutions. The crude risk-weighting mechanisms of Basel I bear little resemblance to the complex risk profiles and risk management strategies that larger banks are capable of pursuing. The misspecification of risk under Basel I creates inappropriate incentives and arbitrage opportunities that undermine supervisory objectives. And dealing with outdated and mismatched regulatory requirements is costly to banks.

In response to these issues, the Basel Committee commenced an effort to move toward a more risk sensitive capital regime. As the OCC has noted in earlier hearings, we firmly support the objectives of the Basel Committee and believe that the advanced approaches of the Basel II framework—the advanced internal ratings-based approach (IRB) for credit risk and the advanced measurement approaches (AMA) for operational risk—constitute a sound conceptual basis for the development of a new regulatory capital regime for large internationally active banks. In a system in which some individual institutions hold well over $1 trillion in assets, the flaws of the current, overly simplistic risk-based capital system cannot be seen as merely superficial or inconvenient.

It is important to understand that the supervisory benefits of Basel II are found not only in the increased risk sensitivity in regulatory capital requirements, but also in the significantly improved bank risk management systems required to generate them. As the front-line supervisor for national banks, which hold nearly 70 percent of the Nation's banking assets, the OCC stands to gain significantly from implementation of those systems, not only from improved risk sensitivity of regulatory capital ratios, but also from the wealth of internal information and analyses that banks will provide us under Basel II. Banks will be better informed about the risks they face, and supervisors will have information about those risks from both an individual institution and industry perspective. Large banks have already made substantial investments in the development of Basel II systems. Without further guidance and proposed rules, however, progress toward Basel II standards will be severely limited.

While clearly secondary to U.S. safety and soundness concerns, another important consideration is the need for internationally active banks to have similar capital regimes in the jurisdictions in which they operate. The benefits of global comparability in regulatory capital are not limited to level playing field considerations. Moving forward with Basel II also enhances internationally active banks' ability to interact on a meaningful and consistent basis with various supervisory authorities while improving how supervisors interact with one another. Without a common framework, our ability to gain useful information and cooperation from foreign supervisors would be severely constrained. We are very much aware that differences in the implementation details, including the timeline, can create significant challenges for banks operating in multiple jurisdictions. While some of these differences are unavoidable, the OCC and the other U.S. banking agencies will continue to work

closely with foreign-based regulators to address these issues as they arise. The implementation of Basel II will ultimately serve to increase the dialogue and coordination among national supervisors and to enhance the level of cross-border cooperation for our largest banks.

In short, the continued safety and soundness of our banking system demands that we move away from the current simplistic system to one that more closely aligns capital with risk. Put another way, doing nothing to change capital requirements would over time threaten the safety and soundness of the banking system, especially with regard to our largest banks that engage in increasingly complex transactions and operations and hold increasingly complex assets. In these largest banks, more closely aligning regulatory capital and risk management systems with actual risk is a conceptually sound and prudent way to move forward. That is the fundamental purpose of Basel II, and while the framework may require significant changes over time, it is moving in the direction required by safety and soundness concerns.

That is the essential reason why I believe we should support the Basel II approach.

QIS–4 Results and Analysis

In previous Congressional testimony, in Basel Committee deliberations, and in discussions with the industry and other supervisors, the OCC has repeatedly emphasized that reforms to our regulatory and supervisory structure must be adopted in a prudent, reflective manner, consistent with safety and soundness and the continued competitive strength of the U.S. banking system. In furtherance of those standards, the U.S. agencies conducted an extensive quantitative impact study, QIS–4, in late 2004 and early 2005.

It is well-known that QIS–4 helped us identify significant issues about Basel II implementation that have not been fully resolved. Even subsequent to additional agency analysis, the QIS–4 submissions evidenced both a material reduction in the aggregate minimum required capital for the QIS–4 participant population and a significant dispersion of results across institutions and portfolio types. One measure produced by QIS–4 is the estimated change in "effective minimum required capital," which represents the change in capital components, excluding reserves, required to meet the 8 percent *minimum* total risk-based ratio. This measure is independent of the level of capital actually held by institutions and of their currently measured capital ratios. Aggregating over the QIS–4 participants, the decrease in effective minimum required capital compared to existing standards was 15 percent, with a median decrease of 26 percent. As noted above, the additional QIS–4 analyses also confirmed that dispersion in results—with respect to individual parameter estimates, portfolios, and institutions—was much wider than we anticipated or than we can readily explain. In particular, the agencies' additional analysis revealed a wide dispersion of results between institutions with respect to individual credit exposures and selected portfolios, even when controlling for differences in risk.

The agencies are in the process of preparing a more detailed summary of results of our follow-up analyses of QIS–4 for public release and are now conducting meetings with participants to discuss observations about their particular submissions. There are, however, some broad observations I can make today about the apparent underlying causes of the significant reductions and wide dispersions in capital requirements in QIS–4:

- The single most important conclusion from our analysis is that differences in results between banks and within portfolios evidenced in QIS–4 submissions did not correspond directly to identifiable differences in risk. Banks' current estimates of key parameters in the IRB approach—probabilities of default, loss given default, and exposure at default—fall well-short of the level of reliability that will be necessary to allow supervisors to accept those estimates for risk-based capital purposes.
- Closely related is the observation that institutions are still at widely varying stages of development of the systems and processes necessary to implement the Basel II framework. This finding is not intended to be a criticism of bank implementation efforts; banks have dedicated significant staff and budget resources to Basel II. Rather, these development efforts have been hindered by the absence of definitive rules or final guidance in the United States. Consequently, the full impact of Basel II implementation remains to be seen, as do potential ramifications for the U.S. banking system.
- Basel II results appear to be materially influenced by the prevailing economic cycle, which suggests significant fluctuations in capital requirements under the framework over the course of economic cycles.

In short, the QIS–4 results and the inevitable questions they raise are sources of concern for the banking agencies. The process for implementing Basel II as established in the September 30 joint statement is designed to provide the OCC and other agencies a complete understanding of the framework's implications for the banking system. We have concluded that some of the weaknesses identified in QIS–4 are attributable to the fact that no "live" Basel II systems have been built—in large part because we have not yet fully specified all the requirements for such a system. We also believe that certain of the concerns identified in QIS–4 will only be fully understood and resolved as the Basel II framework is implemented through a final rule, final supervisory guidance, and rigorous examiner scrutiny.

The Need to See Systems in Operation

QIS–4 was a voluntary, "best efforts" undertaking by participant banks. The actual implementation of Basel II systems will be preceded by stringent qualification assessments and, assuming qualification, will be subject to regular on-site review by examination staff and other subject matter experts. We expect to see less dispersion in results for similar risks as banks more fully develop IRB and AMA compliant methodologies, supported by enhanced data systems and subject to rigorous ongoing supervisory oversight and disclosure requirements. We remain convinced that supervisors and the industry will both eventually reap significant rewards—in the form of better risk management and better information about risk—when Basel II systems are built and operating.

It became apparent as we analyzed QIS–4 results that we have reached a point where more study of the conceptual underpinnings of Basel II will yield little additional practical benefit. Rather, the questions that we as supervisors still have about Basel II—and there are several that are extremely important—can only be answered by continuing to move toward implementation. Given the obstacles that have not yet been cleared, though, I firmly believe that the only responsible way to do that is in a carefully controlled manner, with strong safeguards, during a significant transition period to see the systems in actual practice.

We see only one pragmatic solution to resolve this inherent stalemate between our insistence on understanding the effects, and allowing for and encouraging the development of systems that will allow us to gain that understanding. That is to proceed with the next steps of Basel II implementation, but with a series of prudential safeguards in place until we can observe approved Basel II systems in actual operation and subject them to supervisory scrutiny. Only then will it be possible to judge whether Basel II is operating as intended and to make adjustments as necessary to ensure that it does.

Transition Provisions

The revised implementation plan announced by the agencies on September 30 includes several key elements that allow for the progress we believe is necessary, over time, for risk management and supervisory purposes, while strictly limiting reductions in risk-based capital requirements that might otherwise result from systems that have not been proven.

The first element is a one-year delay in initial implementation, relative to the timeline specified by the Basel II framework. As a result, the "parallel run," which is the prequalification period during which a bank operates IRB and AMA systems but does not derive its regulatory capital requirements from them, will be in 2008. The parallel run period, which will last at least four quarters but could be longer for individual institutions, will provide the basis for the OCC's initial qualification determination for national banks to use Basel II for regulatory risk-based capital purposes. Following initial qualification, a minimum 3-year transition period would apply during which reductions in each bank's risk-based capital would be limited. These limits would be implemented through floors on risk-based capital that will be simpler in design and more conservative in effect than those set forth in Basel II. For banks that plan to implement the Basel II framework at the earliest allowable date in the United States, we expect to propose the following timetable and transitional arrangements:

Year	Transitional Arrangement
2008	Parallel Run
2009	95 percent floor
2010	90 percent floor
2011	85 percent floor

The OCC will assess national banks' readiness to operate under Basel II-based capital rules consistent with the schedule above and will make decisions on a bank-by-bank basis about termination of the floors after 2011.

We also intend to retain the prompt corrective action (PCA) and leverage capital requirements in the proposed domestic implementation of Basel II. During the several years in which those provisions have complemented our basic risk-based capital rules, U.S institutions have thrived while building and maintaining strong capital levels—both risk-based and leverage. This capital cushion has proved effective not only in absorbing losses, but also in allowing banks to take prudent risks to innovate and grow.

I have mentioned that the floors we intend to apply during the transition period will be simpler in design and more conservative in effect than those set forth in Basel II. I expect PCA requirements to play a significant role in the floor requirements. For example, in order to be "well-capitalized" for PCA purposes, a Basel II bank in 2009 (subject to a 95 percent floor) would be required to have a total risk-based capital ratio of at least 10 percent, calculated under non-Basel II rules but with a 5 percent reduction in risk-weighted assets. The bank would also have to meet the 10 percent total risk-based capital threshold on the basis of its Basel II results, with similar dual calculations applying to the 6 percent well-capitalized threshold for the Tier 1 risk-based capital ratio. PCA thresholds for the leverage ratio would of course also remain in place as they are today.

While we intend to be true to the timelines above, we also expect to make further revisions to U.S. Basel II-based rules if necessary during the transition period (*that is,* before the system-wide floors terminate in 2011), on the basis of observing and scrutinizing actual systems in operation during that period. That will allow us to evaluate the effectiveness of the Basel II-based rules on the basis of real implementation and to make appropriate changes or corrections while the prudential transition safeguards are still in effect. Of course, any future revisions will also be subject to the full notice and comment process, and we expect to look to that process where necessary to help resolve difficult issues.

The revised timeline detailed in the September 30 joint statement also makes possible greater coordination between the Basel II process and the on-going effort to revamp risk-based capital rules governing banks not adopting Basel II. The agencies expect that proposed rules for the U.S. implementation of Basel II will be available in the first quarter of 2006. As discussed in more detail below, the banking agencies are also jointly seeking comments on a number of possible revisions to our existing risk-based capital rules for banks not adopting Basel II. After consideration of public comments on that proposal, the agencies expect to move forward with a notice of proposed rulemaking on Basel I–A in 2006. As I have made clear previously, it is imperative that there be substantial overlapping comment periods on the Basel II and Basel I–A proposed rules. This will permit regulators and industry participants to directly compare the two proposals and assess competitive effects and other issues in the development of comments.

Basel I–A

On October 20, the agencies jointly published in the *Federal Register* an advance notice of proposed rulemaking (ANPR) seeking comments on suggested broad revisions to our existing domestic risk-based capital rules, which are based on the 1988 Basel Accord. I believe the ANPR is a good first step in the direction of improving the risk-based capital rules that apply to U.S. banks without the enormous expense and massive complexity of the Basel II framework.

The modifications we are considering would:

- Increase the number of risk-weight categories to which credit exposures may be assigned;

- Expand the use of external credit ratings as an indicator of credit risk for externally rated exposures;
- Expand the range of collateral and guarantors that may qualify an exposure for a lower risk weight;
- Use loan-to-value ratios, credit assessments, and other broad measures of credit risk for assigning risk weights to residential mortgages;
- Modify the credit conversion factor for various commitments, including those with an original maturity of under 1 year;
- Require that certain loans 90 days or more past due or in a nonaccrual status be assigned to a higher risk weight category;
- Modify the risk-based capital requirements for certain commercial real estate exposures;
- Increase the risk sensitivity of capital requirements for other types of retail, multifamily, small business, and commercial exposures; and
- Assess a risk-based capital charge to reflect the risks in securitizations backed by revolving retail exposures with early amortization provisions.

Our primary goal in this rulemaking effort is to increase the risk sensitivity of our domestic risk-based capital rules without unduly increasing regulatory burden. This is no small challenge, and we cannot easily accomplish that goal without substantial input from the public. In crafting the current proposal, the agencies drew from discussions with the banking industry, Congress, and our experiences in supervising the current risk-based capital regime. It is important to acknowledge that much important work on this proposal lies ahead. While some of the modifications the ANPR presents are well-defined, there are some areas that are not specified in great detail at this time. We are looking to commenters to provide additional views and information on current risk management practices to help refine these areas. So, I am eager to hear from the industry and other interested parties, and I hope this public comment process will begin a fruitful dialogue that will lead to more definitive proposals for a more risk sensitive regime.

We recognize that a number of banks and industry groups are concerned that banks operating under Basel II might gain a competitive edge over banks not governed by the Basel II framework. That issue will remain in the forefront as we more fully develop any proposals that might stem from the Basel I–A ANPR as well as proposals for Basel II implementation. It is almost a certainty that the level of risk sensitivity we hope to achieve under Basel II is not possible in a simpler risk-based capital regime. However, we need to be very mindful of competitive equity issues, and we will endeavor to reduce gaps between the two frameworks as much as possible given our overarching priority to ensure that both frameworks move in the direction of greater risk sensitivity. That will require, among other things, an assessment of the quantitative effects of the Basel I–A proposals as they become more fully developed. It is also critical for regulators and interested parties to be able to review and compare definitive proposals for Basel II and for other domestic capital revisions within the same general timeframes.

Conclusion

The overarching challenge we face is to improve on the simplistic Basel I risk-based capital regime. That regime is a poor arbiter of risks being taken by banks, insufficient to the task of monitoring risk in large, complex financial institutions, and long overtaken by events in the marketplace. It is also a source of inefficiency in the financial system. What we have learned through the development of Basel II is that for institutions that have the scale and financial capacity to do so, we can and should establish high standards of risk management that can be used to improve the alignment of regulatory capital with risk. Our Basel I–A efforts embody our belief that we can and should do better in defining capital requirements for the vast majority of national banks without massive complexity or enormous expense.

We are committed to improving risk sensitivity of the risk-based capital rules for all institutions, but doing so in a way that is tailored to the size, structure, complexity, and risk profile of the institution, and that ensures safety and soundness. For the complex operations of our largest globally active national banks, we believe the Basel II framework holds great promise, and we remain committed to the next steps of implementing it in the United States. For the vast majority of national banks that will not use Basel II, we believe that the Basel I–A proposal introduces enhancement in the risk sensitivity of regulatory capital without unduly increasing regulatory burden.

We have undertaken this task with full awareness of the challenges ahead. The OCC would not be pursuing these proposals if we did not believe they would take the industry and us in the direction of not only better risk-based capital calcula-

tions, but also better risk management, and even more fundamentally, a stronger and safer banking system.

PREPARED STATEMENT OF SUSAN SCHMIDT BIES

GOVERNOR, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

NOVEMBER 10, 2005

Chairman Shelby, Senator Sarbanes, and Members of the Committee on Banking, Housing, and Urban Affairs, I thank you for the opportunity to join my colleagues from the other Federal banking agencies to discuss the current status of Basel II in this country, as well as the status of proposed amendments to our existing Basel I-based capital rules.

Introduction

The Federal Reserve considers the maintenance of strong and stable financial markets as an integral part of our responsibility and critically related to safety and soundness of the participants in those markets. Financial stability contributes to sustained economic growth by providing an environment in which financial institutions, businesses, and households can conduct their business with more certainty about future outcomes. Part of maintaining a strong financial system is ensuring that banking organizations operate in a safe and sound manner with adequate capital cushions that appropriately support the risks they take.

As many of you are aware, there have been two major developments within the past 6 weeks regarding U.S. regulatory capital requirements that apply to banking institutions. First, on September 30, the U.S. banking agencies announced their revised plan for the implementation of the Basel II framework in the United States. Second, the agencies published for comment an advance notice of proposed rulemaking (ANPR) pertaining to amendments to the existing Basel I-based capital rules (the amended Basel I). Taken together, these proposals on Basel II and the amended Basel I represent substantial revisions to the regulatory risk-based capital rules applied to U.S. banking institutions, from the very largest to the smallest. From the Federal Reserve's perspective, these two initiatives, when implemented successfully, should produce a much-improved regulatory capital regime in the United States that enhances safety and soundness. The Federal Reserve considers the ongoing discussion between the Congress and the U.S. banking agencies—and, of course, with the banking industry and members of the public—to be critical to the success of both sets of proposals.

Reasons for Pursuing Basel II

We have all witnessed the substantial changes in the U.S. banking industry over the past decade, including growth in size and geographic scope, expansion of activities, development of new instruments and services, and greater use of technology. As a result, we have seen the rise of very large entities with large geographic reach operating in many lines of business and engaging in complex and sophisticated transactions. The largest institutions have moved away from the traditional banking strategy of holding assets on the balance sheet to strategies that emphasize redistribution of assets and actively managing risks. These dramatic changes to the risk profiles of many banking organizations have only accelerated with the continued evolution of many, often complex, financial tools, such as securtitizations and credit derivatives.

Additionally, risk-management techniques employed by many banking organizations continue to change, improve, and adapt to the ever-changing financial landscape. For instance, operational risk was not part of our risk-management thinking 10 years ago, but tools to identify, measure, and manage it are now becoming prevalent. Also, the lines between the banking book and the trading book have blurred significantly and organizations continue to move resources and products to optimize earnings and manage risks. And finally, global competition has intensified significantly, as the ability of customers to choose from a variety of local and international banking firms, as well as nonbank competitors, has increased.

While the current Basel I-based rules have served us well for nearly two decades, they are simply not appropriate for identifying and measuring the risks of our largest, most complex banking organizations. Basel I, even when periodically amended, must be straightforward enough for even the smallest banking organizations to implement with relative ease. Thus, the categories of risk used to determine capital are very broad and are intended to capture the "average" risk levels across the banking system for that generic exposure.

Large financial institutions tend to manage risk in more proactive ways, and are able to take advantage of new innovations in financial instruments to hedge, sell, or take on risk exposures to support their business strategies and profitability targets. As a result, they are able to remove balance sheet exposures for risks where they feel regulatory capital is set too high, and thereby reduce minimum regulatory capital. Smaller organizations generally do not have the risk-management systems or scale of transactions to make these practices economically viable.

While the balance sheet focus of Basel I is appropriate for most banking organizations, the largest organizations have significant exposures off the books, and these risk exposures need to be considered explicitly in determining minimum regulatory capital for these sophisticated organizations. Large organizations are increasingly gravitating toward fee-based revenue streams. This is due to securitizations of loan portfolios that retain the responsibility of servicing the loans, buying and selling financial instruments for customers, and growth in business lines where fees are generated by transactions and account processing. These activities have little exposure shown on the balance sheet at a moment in time, but failure to operate complex systems and negotiate complex financial deals in a sound manner can lead to large loss exposures given the volume of activity that runs through the line of business. They also use sophisticated models to manage credit, market, and interest rate risks. Poor data integrity, model reliability or lack of sufficient controls, can create losses when management action relies on the faulty results of decision models.

Finally, the complexity of these organizations makes it more difficult for executive management to view risk in a comprehensive way, both in terms of aggregating similar and correlated risks, but also identifying potential conflicts of interest between the growth of a line of business and the reputation, legal and compliance risks of the firm as a whole, In recent years, large financial institutions have reported losses from breaks in these operating controls that in some cases have exceeded those in credit or market risk.

The Basel II framework should improve supervisors' ability to understand and monitor the risk taking and capital adequacy of large complex institutions, thereby allowing regulators to address emerging problems more proactively. It should also enhance the ability of market participants, through public disclosures, to evaluate the risk positions at those institutions by providing much better risk measures. The advanced approaches under Basel II, which include the advanced internal ratings-based approach (or A–IRB) for credit risk and the advanced measurement approaches (or AMA) for operational risk, offer particularly good improvements in terms of risk sensitivity, since they incorporate advanced risk-management processes already used today by best-practice institutions.

Indeed, the expected improvements in risk measurement and risk management form the core of our reasons for proposing Basel II in the United States. Its advanced approaches create a rational link between regulatory capital and risk management. Under these approaches, institutions would be required to adopt a set of quantitative risk-measurement and sophisticated risk-management procedures and processes. For instance, Basel II establishes standards for data collection and the systematic use of the information collected. These standards are consistent with broader supervisory expectations that high-quality risk management at large complex organizations depends upon credible data. Enhancements to technological infrastructure—combined with detailed data—will, over time, allow firms to better track exposures and manage risk. The emphasis in Basel II on improved data standards should not be interpreted solely as a requirement to determine regulatory capital standards, but rather as a foundation for more advanced risk-management practices that would strengthen the value of the banking franchise. But while the new framework would, in our view, provide useful incentives for institutions to accelerate the improvement of risk management, we believe in most areas of risk management institutions would continue to have the choice among which methods they employ.

Thus, from a safety and soundness regulatory perspective, for these large, complex financial organizations, regulators and market participants need the information provided by the advanced framework of Basel II.

Recent Developments with Basel II

The Federal Reserve considers the agencies' September 30 announcement relating to Basel II a good outcome and an example of successful interagency cooperation. As you may recall, in April of this year, the agencies announced jointly their reaction to initial results of a fourth quantitative impact study pertaining to Basel II, known as QIS–4. As the April statement indicated, we were concerned about results from QIS–4 that showed a wider dispersion and a larger overall drop in minimum regulatory capital requirements for the QIS–4 population of institutions than the agencies had initially expected. The initial QIS–4 results prompted the agencies to

delay issuance of a notice of proposed rulemaking (NPR) for Basel II in order to conduct further analysis of those results and their potential impact. The agencies' reaction to the initial QIS–4 results, deciding to take additional time to understand more fully the information provided by the QIS–4 institutions, is an indicator of how seriously we are taking Basel II implementation.

During the summer, the U.S. agencies conducted additional analysis of the information reported in QIS–4. That analysis is for the most part complete. Based on the new knowledge gained from the additional QIS–4 analysis, the U.S. agencies collectively decided to move ahead with an NPR but adjust the plan for U.S. implementation of Basel II. Adjustments to the plan include extending the timeline for implementation and augmenting the transitional floors, which should provide bankers and regulators with more experience with Basel II before it is fully implemented in the United States. In addition, the agencies stated specifically in our joint press release that after completing a final rule for Basel II, we intend to revisit that rule prior to the termination of the transitional floors. That is, we expect to perform additional in-depth analyses of the Basel II minimum capital calculations produced by institutions during the parallel run and transitional floor periods before we move to full implementation without floors. This is consistent with the overall process we have laid out for implementing Basel II. We want to ensure that the minimum regulatory capital levels for each institution and in the aggregate for the group of Basel II banks provide an adequate capital cushion consistent with safety and soundness.

Probably the most important thing we learned from the QIS–4 analysis is that progress is being made toward developing a risk-sensitive capital system. In terms of the specifics of the analysis, we learned that the drop in QIS–4 capital was largely due to the favorable point in the business cycle when the data were collected. While the previous QIS–3 exercise was conducted with data from 2002, a higher credit loss year, QIS–4 reflected asset portfolio, risk management information and models during one of the best periods of credit quality in recent years. We learned that the dispersion was largely due to varying risk parameters used by the institutions, which was permissible in the QIS–4 exercise, but also due to portfolio differences. That is, banks have different approaches to risk-management processes, and their models and databases reflect those differences.

We also learned that some of the data submitted by individual institutions was not complete; in some cases banks did not have estimates of loss in stress periods—or used estimates that we thought were not very sophisticated—which caused minimum regulatory capital to be underestimated. Based on the results of QIS–4, the Federal Reserve recognizes that all institutions have additional work to do. In our view, the findings did not point to insurmountable problems, but instead identified areas for future supervisory focus. In that way, the analysis was critical in providing comfort to enable us to move forward.

It is also helpful to remember that the QIS–4 exercise was conducted on a best-efforts basis. It was just one step in a progression of events leading to adoption of the Basel II framework. We certainly expect that as we move closer to implementation, supervisory oversight of the Basel II implementation methodologies by our examination teams would increase. Indeed, during the qualification process we expect to have several additional opportunities to evaluate institutions' risk-management processes, models, and estimates—and provide feedback to the institutions on their progress. So while the QIS–4 results clearly provided a much better sense than before of the progress in implementing Basel II and offered additional insights about the link between risks and capital, QIS–4 should not be considered a complete forecast of Basel II's ultimate effects. It was a point-in-time look at how the U.S. implementation was progressing.

Institutions participating in QIS–4 put a lot of time and effort into assisting with the QIS–4 analysis. For that reason, we owe it to the institutions to provide feedback prior to engaging in a detailed public discussion of the findings. Those feedback sessions, a full interagency effort involving an interagency agreed-upon presentation of the results, are now underway and we expect them to be largely completed by the end of this month. The agencies plan to release a public document describing our findings shortly after these sessions are completed, we hope by the end of the year.

Proposed Next Steps in the Basel II Process

I would now like to describe some possible next steps in the Basel II process. To be clear, these thoughts represent our best estimates at this time and could change, given the extensive opportunity for public comment and additional interagency discussions to come. But I thought it would at least be helpful to offer the Federal Reserve's perspective.

First, we support the idea of finishing an NPR on Basel II and related supervisory guidance as soon as possible, which right now looks to be in the first quarter of 2006. We believe that the best way to further augment our understanding of the impact of Basel II is to issue the NPR and hear reaction from the Congress, the industry, and the public. In addition, we are interested in issuing the NPR and related supervisory guidance as soon as possible so that bankers can have a better idea of supervisory expectations relating to Basel II. The NPR will help bankers identify the areas where they need to strengthen their risk-measurement processes as they continue to prepare for adoption of Basel II.

After the end of the NPR comment period, the agencies plan to review the comments and decide more specifically on how to move forward. The agencies would then develop a strategy for issuing a final rule on Basel II, of course taking into account comments received. Once the final rule is issued, those institutions moving to Basel II would complete preparations to move to a parallel run, a period in which minimum regulatory capital measures under both Basel II and Basel I will be calculated. Under the current timeline, the parallel run would start in January 2008.

The parallel run period, which is intended to last for four continuous quarters, should provide us with additional key information about the expected results for Basel II on a bank-by-bank basis, as well as the level of bank preparedness to operate under Basel II. Once an institution conducts a successful parallel run, the relevant primary Federal supervisor would then confirm the bank's readiness and give permission for the institution to move to the first initial phase of adoption, into the initial floor period. It is only after an institution has operated to the primary supervisor's satisfaction in the parallel run and each of the 3 years of floors that it would be allowed to have its minimum regulatory capital requirements determined by Basel II with no floors.

During U.S. implementation of Basel II, if at any stage in the process we see something that concerns the banking agencies, we will reassess and propose amendments to relevant parts of the framework. The agencies have already decided to embed in the planned timeline the possibility for a later revision to the initial Basel II rule (before the floors are removed), since it is expected that new information provided in the parallel run and floor years might point to a need for adjustments to that initial rule. This is entirely consistent with the path we have taken in the past regarding Basel I, to which there have been more than twenty-five revisions since 1989. The Federal Reserve considers all of the planned safeguards and checks and balances to be sufficient for Basel II to be implemented in the United States effectively, and with no negative impact on safety and soundness or the functioning of banking markets.

Proposed Amendments to Basel I

As I noted, the Basel II proposal is not the only minimum regulatory capital proposal being contemplated by the U.S. banking agencies. We have issued an ANPR for amendments to Basel I that is another important initiative in our efforts to update regulatory capital rules. The regulatory capital rules to be amended by the ANPR would apply to thousands of banking institutions in the United States, while the Basel II proposal would likely only apply to 10 to 20 at inception. The agencies are focusing considerable attention on the potential interplay between the proposed Basel II rules and the proposed Basel I amendments in order to ensure that the goals for each are achieved.

The Federal Reserve's statement pertaining to the release of the ANPR highlighted that the revisions are intended to align risk-based capital requirements more closely with the risk inherent in various exposures. The ANPR relates, in part, to some long-standing issues in our current capital rules that have been identified (such as requiring capital for short-term commitments). We also noted that the amended Basel I is intended to mitigate certain competitive inequalities that may arise from the implementation of Basel II rules (such as lowering the risk weight for some residential mortgage exposures). In considering these possible revisions, the U.S. agencies are seeking to enhance the evaluation of bank portfolios and their inherent risks without undue complexity or regulatory burden. In issuing the ANPR, an advance notice, the agencies are emphasizing that views are still being developed and additional comment from the banking industry and other interested parties would be both beneficial and welcome before we move forward. We are intentionally leaving a number of areas open in order to solicit a broad range of comments before we narrow down the range of possibilities.

The U.S. banking agencies have identified over the past several years a number of issues that need to be addressed within our current Basel I rules. The development of Basel II-based rules also creates the need for the U.S. agencies to amend the current rules in order to address issues relating to competitive impact. While

we view that impact as limited, we want to ensure that institutions not moving to Basel II have equal opportunities to pursue business initiatives and are not placed at a competitive disadvantage or otherwise adversely affected. That is why we are being very careful to analyze the potential results of these two efforts in tandem, and asking for the Congress, the industry, and others to provide comments on the potential effects of both initiatives.

We believe that the revisions to Basel I-based rules should benefit most institutions by better reflecting current risk exposures in regulatory capital requirements at little additional burden. Naturally, regulatory capital requirements are usually not the binding constraint for banking organizations. Nearly all institutions hold capital in excess of the minimum required regulatory ratios, in many cases several percentage points above, to satisfy rating agencies, debtholders and shareholders, and counterparties in the market. By the same token, pricing in the banking industry is not driven by regulatory capital, but rather, as most would intuitively assume, by supply and demand and business decisions made by bankers. But we think regulatory capital can act as a useful gauge of risk-taking, even though it would not be the deciding factor in business decisions.

With respect to the proposals for amended Basel I, as well as Basel II, the Federal Reserve fully supports retention of the existing prompt corrective action (PCA) regime, which the Congress put in place more than a decade ago, as well as existing leverage requirements. In addition to the safeguards planned for initiatives being discussed today, we at the Federal Reserve take comfort that the PCA and leverage requirements will continue to provide a level of protection for depositors, consumers, and the financial system as a whole. These regulations help to ensure a minimum level of capital at individual institutions and in the aggregate that we consider to be absolutely vital to the health of our banking system and the economy more broadly.

Importance of the Rulemaking Process

At the Federal Reserve—indeed, I think I can say among all the U.S. banking agencies—we understand and respect the rulemaking process and the legal requirements for implementing regulatory revisions. This, of course, includes comment periods for each of our regulatory capital proposals and transparency in our overall process. We encourage a healthy debate about the agencies' proposed initiatives—including the recently revised timeline for Basel II. We look forward to continuing to engage the industry, the Congress, fellow supervisors, and others in a discussion about what effects the Basel II framework and the Basel I revisions might have on our banking system. The proposals are intended to provide the right incentives for bankers, but if the proposals do not achieve this goal, we want to know why. In the past, when we have been provided with well-documented and convincing reasons for making a change to the Basel II framework or the U.S. implementation process, we have heeded those arguments. We expect to have the same posture regarding comments on the proposed Basel I amendments. We continue to recognize that vigorous discussion and debate produce a much better product. And we expect to remain vigilant about the potentially unintended and undesired consequences, particularly those that might affect a certain class of banks.

Additionally, I would like to emphasize that from my perspective the U.S. agencies continue to work well with one another on these regulatory capital proposals in a general environment of cooperation and good will. While the U.S. agencies naturally disagree on certain policy matters and implementation issues from time to time, we at the Federal Reserve are pleased with the outcomes to date and recognize that all 4 agencies are making considerable contributions to the overall effort.

Dialogue with the Industry

The extension of the U.S. timeline for Basel II, along with the ongoing proposals for amended Basel I, obviously present some challenges for U.S. institutions. We will continue our efforts to ensure that we hear about these challenges and do our best to assist institutions in meeting them. First of all, bankers must keep track of the latest proposals and understand what they could mean for their own institutions. For those institutions looking to prepare for adoption of Basel II, making the manifold upgrades in risk-measurement and -management systems—not the least of which is developing credible databases—is even more difficult, especially since complete and final supervisory expectations have yet to be released. But we certainly hope that institutions do not lose momentum based on the revised timeline for Basel II; indeed, that timeline reflects our assessment of the work that still lies ahead.

While institutions might be challenged to move forward in certain areas until the Basel II NPR and its associated supervisory guidance is issued, we still believe that

they can make strides in other areas. For one, the agencies all along have emphasized the importance of institution-specific implementation plans, which include gap analyses, clearly defined milestones, and remediation plans. In other words, we think that institutions could now continue development of the corporate governance surrounding each institution's efforts in Basel II implementation and focus on their individual implementation processes. In addition, supervisors have begun to discuss individual QIS–4 results with each participant; these discussions include specific feedback about the institution's results and some general peer comparisons.

Additionally, we do recognize that the recent update to U.S. implementation plans could generate some challenges for U.S. institutions as they try to implement Basel II worldwide, as well as for foreign banks operating in the United States. Overall, we think these challenges are manageable and we can facilitate solutions to them during the implementation process. While not downplaying potential challenges, the U.S. agencies, in deciding to adjust implementation plans, thought it was important to ensure that implementation in the United States be conducted in a prudential manner and without generating competitive inequalities in our banking markets. As before the September 30 announcement, we continue to work with institutions and foreign supervisors to minimize the difficulties in cross-border implementation. Our support includes extensive discussion with other countries in the Basel Accord Implementation Group, as well as more informal, bilateral discussions with institutions and foreign supervisors. Our view is that these cross-border issues do not necessarily represent fundamentally new problems; while requiring some work, these challenges are manageable. It is also useful to point out that all Basel member countries have their own rollout timelines and national discretion issues, not just the United States—which is entirely appropriate. In order to assist institutions in resolving their cross-border challenges, we are eager to hear specifics from institutions so that we can develop targeted solutions.

Conclusion

Mr. Chairman, in my remarks today I have described the Federal Reserve's views on suggested changes to the current regulatory risk-based capital regime, namely the proposals for Basel II and amended Basel I. I have outlined the need for change, the work completed to date, and some of the lessons learned. In our view, recent exercises such as QIS–4 have served as useful indicators of the progress being made and the direction needed for these initiatives on regulatory capital requirements. QIS–4 was part of an extended series of activities to ensure that the suggested regulatory capital revisions are implemented in an appropriate and prudent manner. From the Federal Reserve's perspective, we should continue to move forward with the activities I described, while seeking comment and listening to feedback at every stage.

Our support for Basel II stems from the belief that it would provide a much better measure of minimum regulatory capital at the largest, most complex institutions, aligning capital with risks to which these institutions are exposed. We also believe that Basel II would bring about substantial improvements in risk management to those institutions. At the same time, amending Basel I for the vast majority of banking institutions in the United States could improve the reflection of risks in Basel I-based rules without much additional burden. Taken together, these initiatives should ensure adequate minimum capital cushions, allow fair competition, maintain safety and soundness, and enhance financial stability.

I am pleased to answer your questions.

PREPARED STATEMENT OF DONALD E. POWELL

CHAIRMAN, FEDERAL DEPOSIT INSURANCE CORPORATION

NOVEMBER 10, 2005

Chairman Shelby, Senator Sarbanes, and Members of the Committee, it is a pleasure to appear before you today on behalf of the Federal Deposit Insurance Corporation to discuss current developments regarding Basel II.

As you know, Basel II is an international effort to create standards for capital requirements that would allow banking institutions to use internal estimates of credit and operational risk to determine their minimum risk-based regulatory capital requirement. Basel II is intended to be a framework that is more risk-sensitive and one that promotes a more disciplined approach to risk management at our largest banks. Basel II has been developed to respond to concerns that the regulatory arbitrage opportunities available under Basel I threaten the adequacy of the regulatory capital buffer needed to ensure financial system stability. It is important to remem-

ber that an overarching objective of Basel II is to reinforce capital adequacy standards by better aligning minimum capital requirements with risk and thereby prevent an erosion of the aggregate level of capital in individual banks and the banking system.

The FDIC supports these broad goals and is actively engaged in the regulatory process to develop a new capital framework for the United States. As the U.S. banking and thrift agencies move forward to implement Basel II, we must ensure that the new capital framework does not produce unintended consequences, such as significant reductions in overall capital levels, the creation of substantial new competitive inequities between certain categories of insured depository institutions, or an expansion of the Federal banking safety net by blurring the regulatory lines between banks and holding companies.

About 6 weeks ago, the U.S. agencies announced a plan for moving forward with the implementation of Basel II in the United States. I participated in and support that plan because Basel II has the potential to represent positive change in capital regulation for our largest banks. Basel II clearly requires a more sophisticated approach to risk measurement by the adopting banks. At the same time, however, the most recent quantitative impact study, QIS–4, showed both a very large reduction in capital requirements for many banks, and large differences in capital requirements for what appeared to be identical risks. All the agencies agreed that the results of the impact study were unacceptable and that more work remains to be done to address these concerns.

QIS–4 was a comprehensive effort drawing upon data submitted by 26 of the largest U.S. banking organizations designed to provide the agencies with an improved understanding of how Basel II affects minimum required capital at the industry, institution, and portfolio level. A comprehensive review of the QIS–4 results, conducted over the spring and summer of this year, raised many questions and concerns. The agencies' preliminary review of QIS–4 data indicates that, relative to Basel I, minimum risk-based capital requirements under Basel II will be reduced for most of the banking organizations in the study—substantially in many cases—to levels that the FDIC does not consider commensurate with the risks to which these institutions are exposed. Further, the results indicate a wide dispersion of results at both the banking organization and portfolio or business line level, including material differences in capital requirements for identical, or virtually identical, credit exposures.

These QIS–4 results pose a dilemma for the agencies. QIS–4 suggests that the present framework will produce unacceptable capitalization outcomes. Yet, committing to specific changes to the framework at this time, without the benefit of further experience and industry systems development, would be premature. That is why, on September 30, 2005, the agencies announced that we will move forward with a Basel II Notice of Proposed Rulemaking (Basel II NPR) that includes additional time for bank systems development with added prudential safeguards. Those safeguards include more conservative risk-based capital floors, and a clear signal that changes to the framework will be made based on further experience. Ultimately, changes to the Basel II framework are likely to be required to avoid unjustified and imprudent reductions in overall capital levels and to reduce the potential for wide variations in capital requirements for similar types of exposures. While improvements in risk management practices and risk profiles may justify lower capital under Basel II, the FDIC believes that a correctly calibrated Basel II standard will produce overall minimum risk-based regulatory capital requirements that exceed the capital necessary to maintain a rating of "adequately capitalized" under current prompt corrective action (PCA) regulations that were mandated by the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA).

My testimony will focus on how Basel II can be adopted and eventually implemented in the United States given the concerns raised by QIS–4. I will focus on the importance of the relationship between the Basel II standards and the PCA regulations, specifically our existing U.S. leverage requirements. My testimony will argue that the QIS–4 results reinforce the need to revisit Basel II calibrations before risk-based capital floors expire and to maintain the current leverage ratio standards. Leverage requirements are needed for several reasons including:

- Risks such as interest-rate risk for loans held to maturity, liquidity risk, and the potential for large accounting adjustments are not addressed by Basel II.
- The Basel II models and its risk inputs have been, and will be determined subjectively.
- No model can predict the 100-year flood for a bank's losses with any confidence.
- Markets may allow large safety-net supported banks to operate at the low levels of capital recommended by Basel II, but the regulators have a special responsibility to protect that safety-net.

Under the current formulation of Basel II, the leverage ratio standard will be more important than ever in guarding against losses to the insurance funds resulting from insufficient capital at the individual bank and the industry level.

Explaining the QIS–4 Results—Concerns Continue

Following a preliminary analysis of the QIS–4 results completed in April, the agencies sshould determine the reasons for the significant declines in required capital levels and dispersion in reported results. Comprehensive analysis was needed to determine whether QIS–4 anomalies reflect actual bank differences in risk, limitations in the design and implementation of the QIS–4 study, variations in the stages of bank implementation efforts (particularly related to data availability), or whether the QIS–4 results indicate the need for adjustments to the Basel II framework.

The agencies are not yet in a position to publish a comprehensive summary of our analysis of the QIS–4 results. The agencies have, nevertheless, determined that the QIS–4 results were driven to varying degrees by all of the aforementioned factors. As was envisioned in the design of Basel II, QIS–4 results show that the amount of required regulatory capital does vary with the risk characteristics of individual exposures. In many cases, however, variation in reported capital requirements had more to do with differences in banks' risk measurement methodologies, or the degree of their adherence to Basel II requirements as provided in the QIS–4 instructions, than with true differences in risk. In the design of QIS–4, the regulators did not intend to be prescriptive about how banks measure their own risk and recognized that the Basel II framework itself allows for considerable variation in capital requirements for identical exposures.

In addition to the observed capital variation that reflected differences in banks' internal risk assessments, the FDIC's analysis suggests that much of the observed reduction in capital requirements under QIS–4 is built into Basel II's formulas. That is, the regulatory capital formulas in Basel II are inherently calibrated to produce large reductions in risk-based capital requirements.[1] Better data, or better compliance by Basel II banks with the standards required by the framework, would not in this view mitigate the large reductions in capital requirements suggested by QIS–4. If anything, QIS–4 may understate the reductions in minimum capital requirements that would ultimately be expected under an up-and-running Basel II.

Exhibits 1–3 in Appendix A provide a sense for the drop and dispersion of capital requirements suggested by QIS–4. At many institutions, the QIS–4 results show significant reductions in risk-based capital. The Exhibit 1 table indicates the total minimum capital requirement of all participating banking organizations falls by an aggregate of 15 percent. Capital requirements declined by more than 26 percent in more than half of the banking organizations in the study.

Basel II sets capital requirements for selected portfolio groupings (for example, wholesale commercial and industrial, retail, real estate development, etc.). At the portfolio level, the Basel II capital requirements for most portfolio groupings decreased substantially across participating banking organizations. Most organizations reported double digit declines in capital requirements for most loan portfolios, with only a few portfolio categories posting increases (notably credit card exposures). For example, Exhibit 1 indicates that capital requirements for wholesale loans declined by 25 percent on average at the subject banking organizations. Capital requirements for so-called high volatility commercial real estate loans fell by 33 percent, while capital requirements for other commercial real estate loans fell 41 percent. Capital requirements for small business loans fell by 27 percent. Capital requirements for mortgage and home equity loans fell by 61 and 74 percent, respectively.

In addition to problems resulting from the significant decline in the level of regulatory capital, concern persists over QIS–4 results showing an inconsistency in the capital results for similar risks across institutions. The Exhibit 2 and 3 charts show the wide variation in capital requirements around the averages reported in Exhibit 1. Further, in a sample of large corporate credits that had identical lending relationships with many of the QIS–4 institutions, individual banking organizations reported changes in minimum capital requirements that varied widely. Using the QIS–4 results of a single reporting institution to set a benchmark of comparison, QIS–4 participants reported minimum capital requirements for these identical credits that ranged from 30 percent less to 200 percent greater than the benchmark bank's calculation. For representative mortgage products, banking organizations re-

[1] See for example, Kupiec (2004), "Capital Adequacy and Basel II," FDIC Center for Financial Research Working paper No. 2004–02, and Kupiec (2005), "Unbiased Capital Allocation in an Asymptotic Single Risk Factor (ASRF) Model of Credit Risk," FDIC CFR Working Paper No. 2005–04.

ported risk weights that ranged from 5 percent to 80 percent on identical exposures. These results suggest that QIS–4 differences in minimum capital requirements are not entirely explained by true risk differences in bank products. Rather, a substantial source of the variation in Basel II capital requirements can be explained by differences in the risk inputs that individual organizations assign to identical exposures.

Overall, the QIS–4 study confirms that the regulatory capital requirements set by the Basel II framework are very sensitive to individual banks' subjective assessments of risk. Achieving consistency in Basel II currently hinges on the hope that industry best practices and better data will lead to reduced dispersion in the capital treatment of similar loan portfolios across banks. At present, however, the QIS–4 results show that there is little commonality in the approaches the various banks are using to estimate their risk inputs. While this inconsistency may, in part, be corrected with refinements to internal systems and through improved regulatory guidance, differences are also inherent in the proposed framework and suggest the need for adjustments and safeguards going forward.

Notice of Proposed Rulemaking Will Set Forth Additional Prudential Standards

The U.S. agencies intend to publish a Notice of Proposed Rulemaking on the U.S. implementation of Basel II during the second quarter of 2006 (Basel II NPR). The Basel II NPR will propose an advanced internal ratings-based approach that includes additional prudential safeguards designed to address the QIS–4 results. These safeguards include:

- A limit on the amount by which an institution's risk-based capital may decline as a result of Basel II. These floors will be retained for a minimum 3-year transition period and established at 95 percent the first year, 90 percent the second year, and 85 percent the third year.
- The release of floors only upon approval of an institution's primary Federal regulator.
- Continuing evaluation of revisions to the framework given actual experiences over the transition period.
- The retention of existing PCA standards, including the existing leverage ratio standards.

The FDIC continues to emphasize the importance of maintaining a minimum capital standard embodied in a leverage ratio. The Basel II standard is not intended to provide capital for all material risks. For example, the interest rate risk associated with most loans that banks hold to maturity, liquidity risk, and business risks such as the potential for large accounting adjustments, are not factored into the Basel II framework. Moreover, the framework relies on individual bank risk exposure estimates that are, by their nature, prone to inaccuracy. Further, these estimates are input into a regulatory model that is only a simplified expression of the actual risks retained by large complex banking institutions. These model risks, that are inevitable when banks are required to estimate their own risk inputs for a simplified regulatory capital model, may lead to inadequate regulatory capital requirements under the Basel II framework.

Retaining the existing leverage ratio, a simple and effective standard, is an important pillar of the safety and soundness regime. The importance of the leverage ratio is highlighted by recent analysis conducted by the FDIC that draws upon the QIS–4 results. This analysis shows that under the current Basel II framework, the leverage ratio will serve a more important role than ever in ensuring that adequate levels of capital are maintained throughout the system.

Basel II and PCA: An Impending Conflict of Expectations

The FDIC has analyzed how the Basel II standard would compare to U.S. capital standards currently applicable to insured institutions. We found that as a set of quantitative capital standards, Basel II appears to lower the bar considerably compared to current U.S. leverage and risk-based capital standards embodied in the agencies' PCA regulations.

The QIS–4 exercise was conducted at the consolidated bank holding company level. QIS–4 does not quantify the minimum regulatory capital levels that may prevail under Basel II at the individual banks that participated in the study. Moreover, the capital requirements reported in Charts 1–3 in Appendix A are for total capital, which includes elements such as loan loss reserves, subordinated debt, and certain intangible assets that do not provide the same level of protection to the insurance funds as does core, or tier 1, capital. To better quantify the issues that are most directly relevant to the FDIC as insurer, we therefore estimated the tier 1 capital requirements that would apply at the 74 insured banks that are subsidiaries of the

26 QIS–4 reporting organizations. Details on this estimation methodology are provided in Appendix B.

Analysis of the QIS–4 data completed by the FDIC shows that Basel II produces minimum regulatory capital requirements that are unacceptably low under the existing PCA standards implemented pursuant to FDICIA. Using QIS–4 data, our analysis reveals that—should the leverage ratio be removed under Basel II—the majority of QIS–4 institutions would be less than adequately capitalized (that is, under-capitalized, significantly under-capitalized, or critically under-capitalized) if they held only the level of capital generated by the Basel II formulas.

As shown in the table on the next page, if the Basel II standards are the only constraint on the banks' minimum levels of capital, the majority of 26 banking companies participating in the QIS–4 study could fall to levels currently considered less than adequately capitalized under the PCA standards; that is, the minimum regulatory capital of these institutions would fall below the 4 percent leverage ratio.

Basel II Conflicts with Existing
Prompt Corrective Action (PCA) Capital Standards

(Tier 1 risk-based capital requirement versus leverage PCA requirement for 26 QIS-4 banking organizations)

	Number of banks in PCA leverage category based on risk-based capital requirements	
Leverage PCA Category	**Current risk-based**	**Basel II risk-based**
Well Capitalized	7	2
Adequately Capitalized	16	7
Undercapitalized	1	5
Significantly Undercapitalized	2	9
Critically Undercapitalized*	0	3
Total Number of QIS-4 Banks:	26	26

*Substituted tier 1 risk-based capital requirement for tangible equity capital requirement.

Source: FDIC calculations based on QIS-4 data.

For each QIS-4 organization we estimated total insured bank tier 1 capital requirements to be well capitalized under U.S. risk-based capital regulations under Basel II and under current risk based requirements. The insured bank share of QIS-4 risk-weighted assets (RWA) is estimated as total insured bank RWA divided by total Y-9 RWA, using current capital rules, at the report date. Insured bank tier 1 capital requirement to be well capitalized is 6 percent of estimated insured bank RWA, plus the insured bank share of any reserve shortfall if such a shortfall was reported.

If the total insured bank tier 1 risk-based capital requirement for an organization, estimated in this way, exceeds 5 percent of average total insured bank assets for that organization, the organization is slotted in the "well capitalized" row. If this risk-based requirement is between 4 and 5 percent of assets, the organization is slotted in the "adequately capitalized" row. If the risk-based requirement is between 3 and 4 percent of assets, the organization is slotted in the "undercapitalized" row. If the risk-based requirement is between 2 and 3 percent of assets, the organization is slotted in the "significantly undercapitalized" row. Finally, if the risk-based requirement is less than 2 percent of assets, the organization is slotted in the "critically undercapitalized" row.

In other words, under the Basel II framework as currently fashioned, the leverage ratio will become the effective, binding minimum capital standard for most large U.S. banking companies. While we are aware that minimum regulatory capital requirements can constrain bank equity returns, we are not aware of any public policy studies or other claims that the current level of regulatory capital requirements is a barrier for the provision of additional banking services that are beneficial for the public. In the FDIC's view, Basel II should be calibrated in a manner that ensures that, for most banks in most circumstances, the overall minimum risk-based capital requirements (credit, operational, and market risk) exceed the minimum leverage capital requirements that are currently set in FDICIA and its implementing regulations.

In terms of the capital impact of an up-and-running Basel II, if the present framework remains unchanged, the FDIC's analysis suggests that the future will bring even greater declines in capital requirements than are suggested by QIS–4. As described in Appendix B, the risk inputs of banks for QIS–4 purposes appear on average very conservative, more so than a strict reading of the framework would require. Moreover, the QIS–4 declines in required capital are achieved without fully factoring in capital reductions that can be achieved using credit risk hedges and third party guarantees under a fully implemented Basel II standard. These additional factors could generate significant reductions in capital requirements beyond those that were identified in the QIS–4 results. The FDIC does not believe that there is adequate support for the agencies to conclude that the capital reductions that likely will result from the current Basel II framework are commensurate with

the reductions in the investment risk exposures of banks that will be engendered by improvements in risk management occurring under Basel II. Indeed, unless it can be demonstrated that Basel II will substantially reduce banks' credit risk exposure profiles, the increase in allowed leverage could easily lead to higher systemwide risks.

Even if there were no leverage requirement and no PCA regulations, the FDIC would find the capital requirements coming out of QIS–4 to be too low for many reporting institutions. Banks operating with the benefit of a Federal safety net have operated at such capital levels for a time, but ultimately at a great cost to that safety net. In part because Basel II can be expected to generate such low capital requirements, the leverage ratio will play a more important role than ever in protecting the insurance funds.

In the view of the FDIC, the leverage ratio is an effective, straightforward, tangible measure of solvency that is a useful complement to the risk-sensitive, subjective approach of Basel II. The FDIC is pleased that the agencies are in agreement that retention of the leverage ratio as a prudential safeguard is a critical component of a safe and sound regulatory capital framework. The FDIC supports moving forward with Basel II, but only if U.S. capital regulation retains a leverage-based component.

Expectations for Insured Banks under Basel II

The Federal safety net in the United States extends explicitly to insured banks, not their holding companies. The absolute accountability of insured institutions for their own governance, and for maintaining an adequate level of capital, is of fundamental importance in controlling the potential cost of that safety net. That is why a critical element for the success of Basel II as a safety-and-soundness initiative is maintaining appropriate expectations for insured banks.

In concrete terms, insured banks that adopt Basel II will need to calculate and report a capital requirement that is appropriate for their own risk exposures. Capital reductions derived from diversification of exposures held in separate legal entities may prove to be only hypothetical should one of the entities become undercapitalized on a stand-alone basis. This does not mean that holding companies will need to maintain separate and duplicative Basel II infrastructures at every insured subsidiary. Indeed, to the extent that regulators expect the accurate measurement of risk at the holding company level, that would seem to require compatible systems at all subsidiary legal entities. In terms of managing and controlling the government's deposit insurance exposure, however, effective risk control requires that capital calculations be geared to the unique risks and exposures of each insured subsidiary.

Transparent Information—Ongoing Analysis Required

The FDIC is committed to transparency, and it is our belief and expectation that the banks and their primary Federal regulators will collaborate and share information in a manner that allows each agency to address its concerns with regard to the new capital framework. As outlined above, the QIS–4 study indicates that modifications of the current Basel II framework are likely to be necessary to ensure that regulatory standards require adequate bank capital and equal capital is required for equal risk. In order to reach a prudent judgment regarding the safety and soundness implications of any such proposed changes and to ensure a level playing field within the United States, the FDIC and the other banking regulatory agencies must obtain adequate information regarding all participating banks' internal credit risk modeling systems and resulting minimum capital requirements. From the FDIC's perspective of assessing risks to the insurance funds, collaboration must include access to information about the critical assumptions, models and data used to implement capital requirements based on banks' own estimates of risk.

Competitive Equity—Basel I–A Advance Notice of Proposed Rulemaking

Throughout the Basel II process, the FDIC has expressed concerns about the potential detrimental effects that the new framework could have on competition within the U.S. banking sector. Indeed, the QIS–4 results suggest that the competitive ramifications could be profound. Absent modifications to the current and proposed risk-based capital frameworks, the FDIC believes that the non-Basel II banking sector could be placed at a competitive disadvantage to larger banks subject to the Basel II framework. To address these concerns, the agencies have issued an Advanced Notice of Proposed Rulemaking to begin the process of developing an alternative for non-Basel II adopters (Basel I–A ANPR).

The Basel II banks already enjoy a pricing advantage over their smaller competitors due to their asset size, underwriting volume, and related economies of scale. However, this pricing advantage could be magnified by the reduced risk-based cap-

ital requirements of Basel II. The higher capitalized non-Basel II banks may become more attractive acquisition targets for Basel II adopters. Further, the results of the QIS–4 exercise show that the advantage of the Basel II framework could be the greatest in those areas where credit risks historically have been the lowest.

Under the Basel II framework, capital requirements for residential mortgages, home equity loans, and similar exposures drop significantly. For example, risk-based capital requirements for single-family residential mortgage exposures fall from 4 percent under current Basel I standards to 1.5 percent under Basel II (based on the average risk-weight reported in QIS–4). Moreover, Basel II, as seen in the QIS–4 results, greatly expands the disparity in minimum required risk-based capital between lower risk and higher risk credits. For example, prime mortgages will receive a much lower capital charge than subprime mortgages under Basel II. In contrast, prime mortgages and subprime mortgages are generally assigned to the same risk weight category under existing risk-based capital rules. It is reasonable to assume that there will be a similar disparity between capital requirements for prime and subprime credit card exposures. As a result, without mitigating changes to the competing frameworks, non-Basel II banks could be placed at a severe competitive disadvantage to Basel II banks in prime-grade markets while possibly gaining a competitive advantage over Basel II banks in subprime markets. The end result of such disparate capital treatments could be a migration of high risk credits away from Basel II banks and toward non-Basel II banks. We must monitor this potential change very carefully from a safety and soundness perspective as well as monitor changes in the exposure of the insurance funds.

In order to advance a full dialogue of the competitive concerns associated with changes to the capital framework, the agencies issued the Basel I–A ANPR that outlines potential changes to risk-based capital regulations for all U.S. banks. The agencies are soliciting comments on how to achieve greater risk sensitivity for capital in a way that does not create undue burden for insured institutions and is consistent with safety and soundness objectives.

The FDIC is aware that competitive equity concerns are not the same for all banks. Some community banks choose to maintain large amounts of risk-based capital—not because they operate in a risky manner, but rather because they have lower risk appetites or tolerances. Therefore, we are requesting comments in the Basel I–A ANPR concerning the possibility of allowing these types of institutions to opt out of proposed changes.

In addition to addressing potential competitive inequities and recognizing industry advances in credit risk measurement and mitigation techniques, the Basel I–A ANPR will also propose ways to modernize the risk-based capital rules for all U.S. banks. Key components of the ANPR ask for comment on:

- Increasing the number of risk-weight categories for bank credit exposures.
- Expanding the use of external credit ratings as an indicator of credit risk for externally rated exposures.
- Expanding the capital reductions available from the use of collateral and guarantors.
- Adopting loan-to-value ratios and credit score measures to assign risk weights to residential mortgages.

We believe that most, if not all, of these proposals can be applied using information that is readily available to banks. However, we have asked for comment on whether the trade-off of a more risk-sensitive capital framework is justified by any possible burden generated by its implementation.

Finally, we are asking for comment on any concerns not addressed by the agencies in the ANPR. The FDIC is confident that by listening to the needs and concerns of the banking community and other commenters, a revised capital framework can be put in place for non-Basel II banks that will mitigate many of the competitive equity concerns.

Conclusion

Going forward, the FDIC plans to issue the Basel II NPR, and coordinate its issuance with a Basel I–A Notice of Proposed Rulemaking (this will follow the ANPR) in a manner that will allow for some overlap in the comment period for the two notices of proposed rulemakings. This process will allow the two proposals to be compared side-by-side so that the public can fairly determine the possible competitive implications of the overall package of proposed changes to U.S. capital regulation.

We are working diligently to ensure that, as originally envisioned, the new regulatory capital framework articulated by Basel I–A and Basel II enhances the safety and soundness of the U.S. banking system. The U.S. agencies must continue to work

closely together, share information, reach conclusions on important changes to the proposed framework, and reassess the impact of any such changes. The FDIC is working with the other agencies to develop a framework that achieves this broad objective and preserves a set of straightforward minimum capital requirements to complement the more risk-sensitive, but also more subjective, approaches of Basel II. We also want to maintain competitive equity and achieve results under Basel II that are less extreme and more consistently applicable across banks.

The FDIC, like the other banking agencies, will proceed with the implementation of Basel II in an appropriately deliberative manner and with full consideration of the comments of all interested persons.

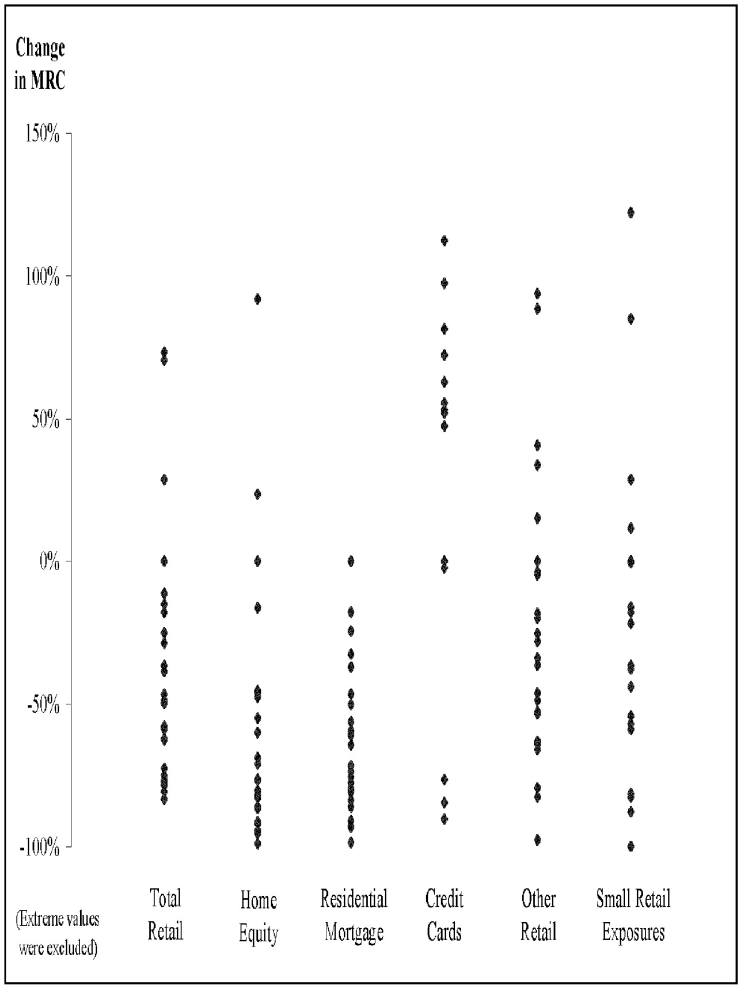
APPENDIX A

Ranges of Minimum Required Capital (MRC) Changes for Various Credit Portfolios As Indicated by QIS-4 Results

Portfolio	Average % Change in MRC	Largest % Decline in MRC	Largest % Increase in MRC
Corporate, Bank, Sovereign	-22	-80	56
Small Business	-27	-81	30
High-Volatility Commercial Real Estate	-33	-60	110
Income-Producing Real Estate	-41	-79	30
Aggregate Wholesale Credit	-25	-80	56
Home Equity	-74	-99	92
Residential Mortgage	-61	-99	-18
Credit Card	66	-90	416
Other Consumer	-7	-98	94
Retail Business	-6	-100	204
Aggregate Retail Credit	-26	-83	73
Equities	7	-94	78
Other Assets	-12	-47	0
Securitization	-18	-70	56
Change in Effective MRC	-15	-47	56

Exhibit 2: Range of Minimum Required Capital (MRC) Changes for Wholesale Portfolios

Exhibit 3: Range of Minimum Required Capital (MRC) Changes for Retail Portfolios



APPENDIX B

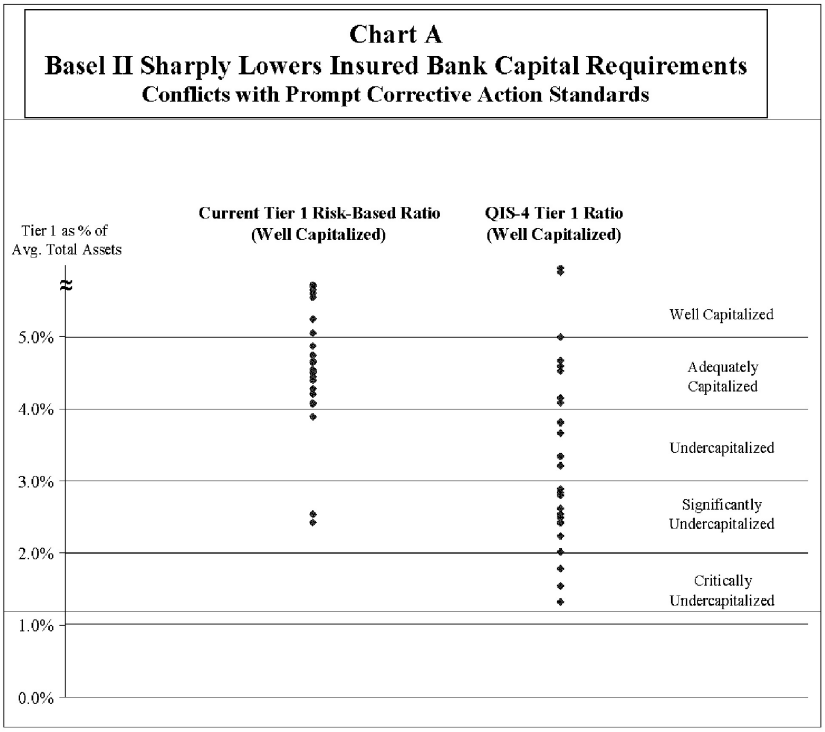
QIS-4 Results: The Need for Minimum Leverage Ratios

Basel II sets regulatory minimum risk-based capital requirements, but under the U.S. Prompt Corrective Action (PCA) rules, banks are required to substantially exceed their regulatory minimums in order to be deemed well capitalized ("substantially exceed" in effect means to exceed by 25 percent). This includes both a leverage test and a risk-based capital test. The leverage test requires that to be well capitalized, a bank must have tier 1 capital of at least 5 percent of its adjusted total assets (deemed to substantially exceed the regulatory minimum 4 percent). The risk-based test requires that to be well capitalized, a bank must have a risk-based capital ratio (total capital to risk-weighted assets (RWA)) of at least 10 percent, substantially exceeding the 8 percent minimum. Of this 10 percent well capitalized requirement, at least 60 percent of that ratio must consist of tier 1 capital. The risk-based test thus requires that to be well-capitalized, a bank's tier 1 capital ratio (tier 1 capital to RWA) must be at least 6 percent. Basel II changes risk weights, and so the absolute level of tier 1 capital that will be necessary to satisfy the well-capitalized risk-based standard will change.

The question we ask, then, is how much the current well-capitalized risk-based standard would change under Basel II? Does it change in a broadly neutral way with some institutions seeing an increase and some a decrease, or is the change more one-directional? We ask these questions in the context of insured institutions' capital requirements, which operate under a clearly articulated set of PCA requirements governing capital adequacy.

PCA rules apply at the insured institution level, but QIS-4 results were collected at the holding company level. To estimate the implied bank leverage ratios consistent with QIS-4 risk-based capital requirements, we used the ratio of total insured bank RWA to holding company RWA under current capital rules for each participating company. The estimate of insured bank QIS-4 RWA would thus be the company's total QIS-4 RWA, multiplied by the estimated insured bank share of RWA just described. The risk-based test for the insured entities to be well capitalized would then be 6 percent of estimated insured bank RWA. The leverage test to be well capitalized, of course, remains the same at 5 percent of the insured banks' adjusted total assets.

Chart A, below, shows how the Basel II risk-based capital requirements for well capitalized institutions compare to current risk-based capital requirements and to existing PCA leverage-based capital categories. The first column of observations in this chart shows the distribution of implied leverage ratios for the current risk-based capital requirement. The second column of observations shows the distribution among the 26 QIS-4 companies of the implied leverage ratios that would result if these companies were allowed to operate under their QIS-4 risk-based well capitalized requirement.



The results in Chart A show that, under current Basel I rules, 7 of the 26 organizations at the QIS-4 report date would have tier 1 minimum risk-based requirement more than 5 percent of assets, indicating that for them the risk based capital requirement was more binding than the leverage ratio. For the other 19 organizations, the leverage ratio was more binding, to varying degrees. For 16 of the 26 organizations, the tier 1 risk-based requirement was between 4 and 5 percent of assets; for one organization the tier 1 risk-based requirement was between 3 and 4 percent of assets; and for two organizations the tier 1 risk-based requirement was between 2 and 3 percent of assets. Stating these numbers another way, 23 of the 26 organizations could operate at their current tier 1 risk based capital requirements, and still be considered adequately capitalized or better on a leverage basis.

In contrast, the second column of observations in Chart A shows that under Basel II, 17 of the 26 organizations would be undercapitalized, or worse, on a leverage basis if they operated at their QIS-4 tier 1 risk-based well-capitalized requirement. Nine of these 17

would be significantly undercapitalized on a leverage basis, and 3 of the 17 would be critically undercapitalized.

In short, the QIS-4 does not depict a Basel II framework that is broadly neutral relative to capital adequacy, nor is it a framework that shows a moderate easing of capital standards. Instead, Basel II appears to represent a fundamentally lower standard of capital adequacy that sharply conflicts with the PCA framework. Indeed, in terms of overall capital requirements, a 5 percent leverage ratio essentially makes the Basel II framework inoperative.

The magnitude of the departure from current U.S. norms of capital adequacy is illustrated by the observation that a bank operating with tier 1 capital between one and two percent of assets could face mandatory closure, and yet, according to Basel II, it has 25 percent more capital than needed to withstand a 999-year loss event.[2] For 17 of the 26 organizations to be represented under Basel II as exceeding risk based minimums by 25 percent, when they would face mandatory supervisory sanctions under current U.S. rules if they were to operate at those levels of capital, is evidence that Basel II represents a far lower standard of capital adequacy than we have in the U.S. today.

Future Capital Impact of Basel II

Some have suggested that any concerns attached to the decline in capital requirements reported in QIS-4 should be allayed because of bank data quality and business cycle considerations. It is widely believed that QIS-4 results are based on poor quality bank data, and data capture is expected to improve through time. Others suggest that QIS-4 data are consistent with the best of times (today) so that future capital requirements under Basel II might be expected to be higher. For example, if the aggregate behavior of capital is down 6 percent during a recession (QIS-3) and down 16 percent in the best of times (QIS-4), then perhaps a range of down 6 to down 16 over the cycle is not that alarming.

An analysis of these explanations does not support the idea that future capital requirements under Basel II would be higher than reported in QIS-4. Analysis of historical loss experience suggests just the opposite—that minimum capital requirements under an "up and running" Basel II would be, in aggregate, lower than those reported in QIS-4. While QIS-4 was conducted during optimal economic conditions, the loss estimates reported by the participants were in fact reflective of banking crisis levels, generally far exceeding most participants' loss experience since 1992. The FDIC applauds conservatism by banks in computing their risk-based capital requirements. However, just as banks can hold more capital than regulatory minimums, they can make QIS-4 assumptions that are more conservative than what the Basel II framework would require, and hence far overstate the minimum capital that would be required if the

[2] We have not analyzed the distinction between tier 1 capital and tangible capital, the capital definition required to be used for mandatory closure purposes.

framework were up and running. This appears to be what has happened with many of the banking organizations that participated in QIS-4.

We examined the amount of net credit losses that these 26 organizations in aggregate, and individually, incurred each year as a percentage of their loans and leases at the beginning of that year. We compared those numbers to the expected annual credit losses (EL) the 26 banks reported in QIS-4 as a percentage of their drawn credit exposures.

If a bank operates for some reasonably long period of time in accordance with Basel II expectations, and were able to dynamically update its probability of default (PD), loss given default (LGD) and exposure at default (EAD) inputs to reflect either current conditions or some through-the-cycle measure of expected loss experience, one might expect its ELs to track, on average, its actual credit losses reflected in net charge offs. If it were incorporating an element of stress into its LGD one might expect its ELs to somewhat exceed its charge-offs on average (but ELs would probably not exceed average charge offs on its entire credit portfolio by more than a few percentage points, given the limited scope and modest magnitude of stress LGDs contemplated by almost all the members of the Basel Committee). Another qualifier to our analysis is that net charge-offs reflect accounting losses and not the all-in credit losses ELs should theoretically represent. Because of this difference between accounting and economic losses, a bank that operated according the letter of the Basel II framework during some period of time might be expected to have ELs that are somewhat above its average net charge offs during that time.

The issues regarding stress conditions and economic loss, to the extent they were incorporated by a Basel II bank, would be incorporated in its LGDs. There is a great deal of softness and lack of data around the LGD numbers banks used in QIS-4 and it is difficult to quantify how much the ELs under the framework would exceed realized charge-off rates over time. The more ELs exceed historical charge-offs, however, the less plausible it becomes that the ELs are fair representations of the requirements of the Basel framework.

Some comment is also needed about the possibility of using the allowance for loan and lease losses (ALLL) as a benchmark for evaluating the conservatism of ELs. The aggregate allowance reported by the 26 companies in QIS-4 totaled about $55 billion, and exceeded their aggregate EL, and this comparison might suggest the ELs were not particularly conservative and could be expected to increase. We do not believe this would be a valid inference. The ALLL is determined based on a methodology that measures losses imbedded over a non-specific future time horizon. Basel II ELs, in contrast, are intended to represent expected one-year credit losses. Basel II in effect requires the allowance to exceed the EL (otherwise there is a dollar for dollar capital deduction to make up for any shortfall). More important, the Basel II framework contains no suggestion that if the EL is less than the ALLL, then the EL needs to be

increased—on the contrary this situation is encouraged, up to a limit, with tier 2 capital credit.

Given these considerations, we regard the comparison of ELs to average charge offs as a proxy for the degree of conservatism imbedded in PD and LGD estimates. ELs that are in excess of loss experience in effect imbed a cushion into QIS-4 capital requirement, and suggest that when the system goes live, lower capital requirements could be supported consistent with the standards prescribed by the framework.

QIS-4 expected loss estimates clearly imbed substantial conservatism compared to point in time credit conditions. Using the numbers assumed by the 26 organizations, their QIS-4 expected credit losses over the 12 months starting at their respective report dates (in most cases September 30, 2004) totaled $43.7 billion—more than double the full year 2004 total net charge-offs for these companies of $21.5 billion. This additional conservatism does not appear to reflect any near term risks on the horizon: in aggregate, credit conditions for insured institutions are improving.

Almost assuredly, then, a point-in-time Basel II capital calculation accurately reflecting conditions at September 30, 2004, would have produced capital requirements far lower than those reported in QIS-4. One might argue that while the QIS-4 ELs did not reflect point in time conditions, they are more reflective of through the cycle losses. The table below, however, shows that QIS-4 ELs as a percent of drawn credit exposure far exceed any reasonable concept of a through the cycle net-charge off rate.

12-Month Credit Losses as a Percent of Drawn Credit Exposures

Estimate	**Actual**		
QIS-4	2004	1995-2004	1985-2004
1.28	0.69	0.55	0.93

Note: "Actual" refer to the 26 QIS-4 organizations' insured subsidiaries' net charge-offs as a percent of total loans and leases, merger adjusted. Insured subsidiaries during 2004 accounted for 93 percent of the 26 companies' net charge-offs.

This analysis supports the conclusion that if banks use PDs, LGDs, and EADs that are consistent with, or even substantially more than, long run loss experience, capital requirements under Basel II would be lower than what is reported in QIS-4. This conclusion is reached without considering the fact that supervisors have argued that QIS-4 does not fully reflect the capital benefits of guarantees and hedging. It also does not consider the future capital benefits of banks' expanded use of own models to estimate exposures on OTC derivatives and repo-style transactions allowed under the capital standards issued in July 2005 by the Basel Committee and the International Organization of Securities Commissions.

PREPARES STATEMENT OF JOHN M. REICH

DIRECTOR, OFFICE OF THRIFT SUPERVISION

NOVEMBER 10, 2005

Introduction

Good morning, Chairman Shelby, Ranking Member Sarbanes, and Members of the Committee. Thank you for the opportunity to discuss the views of the Office of Thrift Supervision on the development of the Basel II capital framework in the United States for our largest U.S. financial institutions and the parallel modernization of Basel I for our other institutions.

The development of Basel II has been underway, internationally, for a number of years. In the United States, the four Federal Banking Agencies (FBA's) commenced the formal rulemaking process with the issuance of an Advanced Notice of Proposed Rulemaking (ANPR) in 2003. The parallel modernization of domestic risk-based capital requirements stemming from Basel I (our current risk-based capital standards), aimed at institutions that will not adopt Basel II, has been discussed among the regulators for some time. It formally began, however, only a few weeks ago with the issuance of an ANPR.

The goal of Basel II is to produce a risk-based capital system that promotes effective risk management, maintains capital adequacy, and increases the transparency of risks undertaken by our largest, internationally active institutions. The goals of the FBAs are to ensure that Basel II, as implemented in the United States, and the parallel modernization of our current risk-based capital standards, will enhance the risk management, capital adequacy, and risk transparency of all our financial institutions, while maintaining the safest and soundest banking system in the world. OTS will endorse the implementation of systemic changes to our capital rules only if they advance these goals.

Although we are more than 2 years from the start of a proposed 4-year phase-in of Basel II, there are significant hurdles to overcome before we can represent to you, Mr. Chairman, that it is ready to be implemented. This is underscored by a recent quantitative impact study, QIS–4, conducted by the FBA's. QIS–4 indicated that further, significant revisions are needed before we can implement Basel II in the United States. We also need to resolve difficult policy issues in the modernization of our current risk-based capital standards. We remain committed to meeting the challenges raised in the development and implementation of both capital systems.

Today, I will address some of these issues and provide an update on the approach to risk-based capital contemplated by Basel II, as well as issues that our U.S. institutions are expected to face under a revised Basel I-based framework.

Given that the banking and thrift industries are profitable and well-capitalized, with few troubles in recent years, you may reasonably ask what is broken and why do we need to fix it? The answers start with the growing exposure of large and internationally active institutions to steadily increasing risks that are not captured very well—if at all—under our current risk-based capital framework.

Much of the public debate about Basel II has been about changes in minimum regulatory capital; however, the new framework goes beyond that. It focuses first and foremost on enterprise-level risk management, and encourages ongoing improvements in risk assessment capabilities. Basel II also provides for governance changes, induding board of director accountability for risk management. Basel II may allow for reduced minimum risk-based capital requirements for certain institutions, where a reduction is justified and commensurate with real and verifiable risk exposure. That would only be available, however, where an institution can demonstrate—to the satisfaction of its primary regulator—that its risk management capabilities and resultant risk reduction merit such a change in capital requirements.

There is also a need to modernize Basel I risk-based capital requirements in order to minimize competitive effects of adopting Basel II and to better align capital requirements with the wide range of risk profiles of domestic financial institutions.

Overview and Background of the Basel Process

Basel I

Basel I, issued 1988 by the Basel Committee on Banking Supervision (BCBS), provided a set of capital principles designed to strengthen capital levels at large, internationally active banking organizations, and to foster international consistency and coordination.[1] Although Basel I applied only to the largest, internationally active

[1] The BCBS identified two fundamental objectives at the heart of its work on regulatory convergence under Basel I. As the BCBS stated, first, "the new framework should serve to strength-

banks in G-10 countries (countries outside the G-10 were encouraged to adopt it for their banks operating internationally), the themes of Basel I were intended to apply to all banking organizations worldwide, of any size and activity.

While OTS did not participate in developing Basel I, we applied it to the institutions we regulate, along with the other FBA's. Throughout implementation of Basel I, the FBA's developed risk-based capital standards consistent with its underlying principles, but with modifications intended to enhance risk sensitivity and conform to the unique needs of the U.S. banking system.

When Basel I was issued, the BCBS recognized that it was only a start, and that more refinement would take place over time. In today's sophisticated financial marketplace, Basel I is a relatively simplistic framework. For example, it makes no distinction between a well-underwritten commercial credit to a strong borrower and a relatively weak commercial credit to another borrower. Both are assigned the same (100 percent) risk weight. Similarly, residential mortgages, which can vary widely in quality, are assigned either a 100 percent risk weight or, if prudently underwritten, a 50 percent risk weight (most 1–4 family residential mortgages). Currently, even the lowest credit risk residential mortgages are subject to a 50 percent risk weight; whereas the highest credit risk residential mortgages are subject to no more than a 100 percent risk weight.

As stated by the BCBS, advances in risk management practices, technology, and banking markets have made the 1988 Accord's simple approach to measuring capital less meaningful for many institutions. Likewise, improvements in internal processes, more advanced risk measurement techniques, and more sophisticated risk management practices have dramatically improved the monitoring and management of risk exposures and activities. In short, the static rules of the 1988 Accord have not kept pace, and in fact, were not designed to keep pace with advances in risk management.

Basel II

As financial instruments, systems, and products became more complex, the BCBS began designing a new regulatory capital framework. This framework, Basel II, incorporates advances in risk measurement and management practices, and attempts to assess capital charges more precisely in relation to risk, and in particular, credit risk and operational risk. The international agreement articulating these principles was issued in June 2004.

Basel II calls for institutions to measure and maintain internal data about different loan types for credit and operational risk. These requirements help to promote improved risk management systems. The FBA's also expect institutions to continue to develop and improve their internal economic capital models to more accurately measure their own unique enterprise risk. While Basel I focused on measuring risk exposure on an asset-by-asset basis, placing assets into simple, broadly defined risk buckets, Basel II focuses on enterprise-wide risk management, and encourages institutions continually to evaluate and assess their risk exposure.

There are numerous reasons for our U.S. banking system to move forward to a more sophisticated, risk-based framework for evaluating capital adequacy in institutions implementing Basel II. At the same time, it is important to identify ways to improve our Basel I-based system for the thousands of institutions that will not adopt Basel II. We believe that these objectives are not mutually exclusive, but rather mutually dependent in order to prevent potential competitive inequities between Basel II adopters and non-adopters.

Implementation of Basel II in the United States

While OTS supports the concepts, principles, and stated goals of Basel II, implementation in the United States will occur only when the FBA's are confident that it can be achieved in a manner that affirmatively strengthens and does not undermine our financial system. This requires us to maintain the safety and soundness of Basel II adopters and implement a modernized Basel I-based system that treats all U.S. institutions fairly and consistently regardless of the risk-based capital regime that they follow.

The FBA's recently revised the proposed Basel II timeframes to allow more time consistent with these principles. In addition to delaying the start to 2008 and adding an additional phase-in year, the FBA's provided for greater supervisory control

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en the soundness and stability of the international banking system; and [second,] the framework should be fair and have a high degree of consistency in its application to banks in different countries with a view to diminishing an existing source of competitive inequality among international banks."

over individual institutions at each step of Basel II implementation,[2] along with progressively less binding capital floors until fully implemented in 2012.[3]

While the FBA's have agreed to proceed with these safeguards in place, the Basel II implementation process remains dynamic. The FBA's are currently working on a Notice of Proposed Rulemaking (NPR) as a precursor to issuance of a rule implementing the Basel II framework in the United States.

In conjunction with issuance of an NPR, the FBA's plan to issue comprehensive proposed guidance consolidating previously issued guidance on retail, corporate, and operational risk and including issues not previously addressed, such as securitization, credit risk mitigation, equity exposures, and various wholesale transactions. Industry reaction and comment on the consolidated guidance will be very important since it will be the first iteration of U.S. regulatory policy on some of these subjects. In addition, this will be the first opportunity for the industry to assess the adequacy of the guidance based on the standards enumerated in the NPR. The FBA's plan to make additional adjustments to the guidance after receiving industry comments and to ensure consistency with a final rule.

The FBA's are currently working toward issuance of a final rule in mid-2007, which is a critical timing issue for U.S. financial institutions to have sufficient lead-time to prepare for a 2008 parallel run. We recognize that the 2007 final rule may not even be the last word on Basel II. Rather, we anticipate that further rulemakings may be necessary to refine the Basel II framework for use in the United States based on our experiences during the parallel run and subsequent implementation stages.[4]

Modernization of Our Current Risk-Based Capital Standards

On October 19, 2005, the FBA's issued an ANPR announcing the start of the rewrite of Basel I-based domestic capital standards. OTS was an early advocate of revising and modernizing the existingstandards. We strongly support amending our current risk-based capital standards simultaneously, or in close proximity to, Basel II. Our view is that these revisions should encompass meaningful reforms, while avoiding imposing costly analytical processes on smaller banks and thrifts. Modifying the existing rules with more accurate riskweights allocated to a wider range of asset buckets will significantly improve the current framework. Applying commonly used risk criteria for identifying different levels of risk will further enhance the existing framework. This would provide a more granular, risk-sensitive system of determining appropriate levels of capital, by asset type, and within asset type.

Modernization of Basel I -based capital standards will also mitigate potential competitive inequities that may arise with the implementation of Basel II.

In considering revisions to our current capital rules, five general principles have guided the FBAs. These are:

- Promoting safe and sound banking practices and maintaining a prudent level of regulatory capital;
- Maintaining a healthy balance between risk sensitivity and operational feasibility;
- Avoiding undue regulatory burden;
- Creating appropriate incentives for banking organizations; and

[2] The new timeframes provide for a nonbinding "parallel run" of the Basel II framework starting in 2008; however, institutions may enter the parallel run only with the permission of their primary regulator. This will require an institution to demonstrate to its regulator that it has accurate and reliable systems in place for enterprise-wide risk management. During the parallel run phase, institutions seeking to implement the Basel II framework would also be required to comply with existing Basel I requirements. Throughout implementation, institutions would be subject to close supervisory scrutiny and a strict leverage ratio requirement.

[3] The phase-in schedule provides that, in the first year (as early as 2009), an institution's capital reduction is subject to a floor of 95 percent of the level calculated for risk-weighted assets under Basel I. Reductions in risk-weighted assets would be limited to a 90 percent floor in the second year of implementation (as early as 2010), and an 85 percent floor in the third year (as early as 2011). Supervisory approval is required in each successive year to go to the next floor. During implementation, an institution's primary regulator will closely monitor its systems for gathering and maintaining data, calculating the Basel II capital requirement, and ensuring the overall integrity, and safety and soundness, of the application of the Basel II framework.

[4] It is also important to note that OTS, like the OCC, is subject to Executive Order 12866, which requires executive agencies to determine whether a proposed rule is a "significant regulatory action." OTS has determined that the Basel II NPR will be a significant regulatory action based on the potential effects of the rule. Thus, OTS is required to prepare a regulatory impact analysis of the NPR, including an analysis of the need for regulatory action, the costs and benefits of the NPR and alternative approaches, and the potential impact on competition among financial services providers. Pursuant to the Executive Order, the NPR and accompanying regulatory impact analysis will be submitted to the Office of Management and Budget for review prior to publication of the NPR.

- Mitigating material distortions in the amount of regulatory risk-based capital requirements for large and small institutions.

The recently issued ANPR for modernizing our domestic risk-based capital standards focuses on a number of potential modifications. These include increasing the number of risk weight categories for credit exposures; using loan-to-value (LTV) ratios, credit assessments, and other broad measures for assigning risk-weights to residential mortgages—a particularly important issue for OTS; modifying the risk-based capital requirements for certain commercial real estate exposures; and increasing the risk sensitivity of capital requirements for other types of retail, multifamily, small business, and commercial exposures.

Two additional issues particularly important to OTS are expanding the number of risk weight categories to which credit exposures may be assigned;[5] and continuing to consider private mortgage insurance (PMI) in the risk-weighting of residential mortgages.

As we consider modernizing our current risk-based capital requirements to increase its risk sensitivity and minimize potential competitive inequities, we realize that some banking organizations may prefer to operate under the existing Basel I framework, unchanged, to determine their minimum risk-based capital requirements. The ANPR anticipates this option and expressly invites comment. We expect additional comment about flexibility, and balancing safety and soundness with regulatory burden concerns.

The QIS–4 Survey

There have been a series of structured and coordinated information gathering exercises conducted internationally, referred to as Quantitative Impact Studies (QIS). The most recent data collection, QIS–4, was an important milestone in U.S. development of the Basel II framework. The FBA's initiated QIS–4 to gauge the potential impact of Basel II in the United States. Before discussing the results of QIS–4, it is important to note its inherent limitations.

In October 2004, the FBA's released the QIS–4 materials, and 26 institutions responded to the study. The initial results of QIS–4 revealed a material drop in required risk-based capital compared to Basel I requirements, and significant dispersion among the respondents with regard to the Basel II minimum risk-based capital requirement. As a result, this past April the FBA's delayed the planned 2005 issuance of the Basel II NPR in order to provide time to conduct additional analysis on the QIS–4 data.

Several important factors likely influenced the overall quality of the QIS–4 data. These include unsettled and/or incomplete guidance on Basel II from the FBA's, as well as the fact that many institutions are still developing the data and systems required to fully implement Basel II. The QIS–4 process was instructive, however, on the state of readiness of—and need for additional preparation by—both the regulators and the industry.

Notwithstanding these factors, several aspects of the data bear further scrutiny. Chief among these was a material difference in required risk-based capital levels among respondents that was not fully explained by differences in their enterprise risk profiles. We are particularly concerned with analyses indicating materially disparate capital charges for credit exposures that generally pose comparable levels of credit risk.

Another unsettling aspect of QIS–4 was a material drop in overall risk-based capital. In fact, every category of credit risk showed declines in capital requirements except for credit cards. This is clearly an issue that requires further study to ensure that the Basel II capital standards are adequate.

With respect to mortgage lending, the QIS–4 results demonstrated large capital reductions for mortgage and home equity lending. While this is an especially important result because of commercial banks' existing concentration in mortgage-related assets,[6] some of the decline in capital for prime mortgage lending was expected because QIS–4 did not address interest rate risk—typically, one of the most significant risks for prime mortgage lending. In fact, the drop in capital for prime mortgages

[5] Current categories are 0, 20, 50, 100, and 200 percent, and possible new and additional categories for consideration are 10, 35, 75, 150, and 350 percent.

[6] Since 1995, commercial banks have increased their holdings of residential-related mortgages 174 percent in real dollars, from $991 billion to $2.72 trillion. As a percentage of assets, commercial bank holdings of residential-related assets have increased 40 percent, from 23.0 percent of assets in 1995 to 32.3 percent of assets today. By contrast, thrifts have increased their holdings of residential-related mortgages in real dollars by 62 percent, but as a percentage of assets thrift holdings are actually 4 percent lower than in 1995, from 75.6 percent of assets in 1995 down to 72.5 percent of assets today.

highlights the importance of realigning risk-based capital requirements to more closely correspond to actual credit risks, while also taking into account interest rate risk-a critical element in evaluating appropriate capital levels.[7]

In recognition of the substantial interest rate risk associated with many forms of mortgage lending, OTS has developed a rigorous interest rate risk model. It is our experience, working with our interest rate risk model for well over a decade, that savings associations have modified their interest rate risk-taking behavior based on information and tools provided by our model. How interest rate risk is ultimately treated under Basel II is an important issue for OTS and the thrift industry, as well as for banks that focus on mortgage lending activities.

A disturbing result from QIS–4 was the sizable reduction in required capital for horne equity lines of credit. Since the end of 2000, home equity lines of credit on institution balance sheets have grown by an extraordinary 354 percent, to $534 billion. This is due, in large part, to the low interest rate environment of the last several years for mortgages and mortgage-related products. We are concerned that the study results may reflect only our recent experience, and not accurately portray risks present in a full economic cycle. This remains an area deserving of additional attention as we move forward with our rulemaking and the development of guidance on Basel II.

The results of QIS–4 suggest that Basel II remains a work in progress in the United States, both for the PBA's and institutions that intend to implement it. The PBA's are committed to creating a regulatory framework that resolves the concerns raised by QIS–4. There is a significant amount of work remaining to create a regulatory structure that ensures risk sensitive results, promotes fair competition, and ensures the continued safety and soundness of the U.S. financial system.

Public Policy Concerns with Basel II and the Modernization of Current Risk-Based Capital Standards

Timing

Implementing a more risk sensitive capital framework in the United States is an important objective, but we must be vigilant not to harm our existing banking system. Longstanding capital adequacy standards combined with a well-established and highly respected supervisory structure have delivered a banking system that is healthy and robust. OTS supports Basel II, provided its implementation enhances our existing banking system. It is important that we review this objective at each step of the way toward Basel II implementation.

As we take the steps necessary to move to a more advanced and risk sensitive capital framework, it is important to exercise caution and allow for sufficient time to consider how best to proceed in implementing Basel II in the United States. The safeguards we recently added, including a parallel run year, followed by 3 years of capital floors, and ongoing regulatory and supervisory review, will help us proceed prudently toward Basel II implementation.

Competitive Considerations

Implementing more risk-sensitive capital requirements (without undue burden) is as important for small community banking organizations as it is for large, internationally active institutions. Achieving greater risk sensitivity for one part of the banking system and not the whole will create competitive distortions. While global capital standards are important, we must avoid potential negative effects on U.S.-based institutions not operating internationally.

It is important to maintain comparable, although not necessarily identical, risk-based capital standards for all U.S. institutions with respect to lending activities that have the same risk characteristics. Although our largest institutions should receive capital treatment commensurate with their ability to reduce risk via diversification and technology, community banking organizations should not be competitively disadvantaged in the process. Competitiveness issues raised by Basel II necessitate an across-the-board examination of capital standards for all our institutions. This provides an opportunity to reexamine our current risk-based capital standards, and to take any appropriate steps to reduce potential competitive inequities for community banking organizations.

OTS is pleased that the modernization of Basel I-based capital standards, an initiative we championed, has evolved into a commitment by all the FBA's. The goal

[7] By their very nature, conservatively managed mortgage lenders typically have substantially lower credit risk exposure than lenders concentrating in other retail lending activities. A major risk for mortgage lenders, interest rate risk, is also greatly reduced by the presence of sound and prudent interest rate risk management practices, including access to the secondary mortgage market.

of this initiative is to achieve greater risk-sensitivity without undue complexity. We believe this can be accomplished by, among other things, increasing the available asset "risk-buckets" first enunciated under Basel I, and by applying commonly understood criteria for assessing the relative risk within and among various loan types.

As previously described, while Basel II includes minimum risk-based capital requirements for credit and operational risk, it does not include specific capital requirements for interest rate risk. OTS believes that this significant risk, especially important in mortgage products, should be addressed by the FBA's consistently. If the Basel II construct for interest rate risk is maintained, it will be important to prepare comprehensive interagency guidance on how we expect this risk to be measured and managed by U.S. institutions implementing Basel II.

Leverage Requirements, Prompt Corrective Action, and other Safeguards

An issue garnering significant attention under Basel II is the interrelationship—and tension—between a risk-insensitive leverage ratio and risk-based capital requirements. On the one hand, the increased risk sensitivity offered by Basel II is intended to align risk-based capital requirements more closely with a banking organization's own internal capital allocation. A leverage requirement is fundamentally different, however, in that it constrains the extent to which an institution can leverage its equity capital base. In effect, a risk-insensitive leverage requirement—a backstop protecting the Federal deposit insurance funds—potentially operates as a disincentive for an institution to invest in the least risky assets, while not constraining its investment in high-risk assets.

Prompt corrective action (PCA), which includes the leverage ratio constraint, was instituted in the late 1980's in response to the need for more aggressive and timely supervisory intervention in the face of stressed and declining capital levels. PCA provides a graduated capital structure for identifying categories of capital adequacy based on both leverage ratio and risk-based capital.[8]

PCA and its leverage ratio are based on institution-wide levels, rather than individual asset risks as prescribed by Basel II. Notwithstanding Basel II's focus on risk sensitivity, an institution with a concentration of low risk assets will be constrained by the leverage ratio; as a result, its capital will not be risk sensitive. Conversely, the leverage ratio may impose no restraint on a relatively high-risk institution, yet that institution would be constrained, presumably, by an effective risk-sensitive standard. Thus, a risk-insensitive leverage ratio works against a financial institution's investment in low-risk assets.

Today's expanding universe of off-balance-sheet activity also goes untouched by existing leverage requirements. Thus, a regulatory capital system with a leverage ratio not sensitive to risk operates as the principal binding capital constraint on financial institutions, rather than a backstop measure. Such a system may perversely motivate low credit risk lenders to pursue riskier lending.

Along with other prudential safeguards, leverage is an important capital buffer. OTS remains firmly and unequivocally committed to maintaining an appropriate leverage ratio that is sufficiently rigorous and also flexible enough to address the unique operating characteristics of all types of lenders.

Conclusion

OTS supports the goals and objectives of Basel II, and we are committed to implementing a more risk-sensitive capital framework for all our regulated institutions. While it is important that the United States continue to move forward on Basel II, we should proceed in a cautious, well-studied, and deliberate manner. The revised timeframe for Basel II is consistent with this goal; however, it is critical that all interested parties—including the industry, Congress and the regulators—continue an active, open, and thorough dialogue regarding Basel II. We will continue to work together with the Members of this Committee, the other FBA's, and with our international colleagues on these issues.

We stand ready to make any necessary adjustments to ensure that domestic implementation of Basel II, in conjunction with the modernization of Basel I-based capital standards, appropriately enhance capital adequacy and risk management in the United States. Most importantly, we will continue to seek assurance, Mr. Chairman, that these efforts not yield unintended consequences to our U.S. institutions.

[8] The FBA's currently define a "well-capitalized" institution as having Tier 1 capital of 5 percent, "adequately capitalized" is set at 4 percent, "under-capitalized" at less than 4 percent, "significantly undercapitalized" at less than 3 percent, and "critically under capitalized" at less than 2 percent Tier 1 capital.

Thank you, Mr. Chairman and Ranking Member Sarbanes, for holding this important hearing, and for the continued interest and hard work of you and your colleagues and staffs on these important issues. We will be happy to provide any additional information that you may require regarding the ongoing Basel II and Basel I rewrite processes.

PREPARED STATEMENT OF L. WILLIAM SEIDMAN

FORMER CHAIRMAN, FEDERAL DEPOSIT INSURANCE CORPORATION

FORMER CHAIRMAN, RESOLUTION TRUST CORPORATION

NOVEMBER 10, 2005

Mr. Chairman and Members, thank you for inviting me to this important hearing. I have not been before this distinguished Committee for a long time, so please excuse me if I am a little rusty.

Basel II has been billed as an important safety and soundness initiative that is needed to correct the deficiencies of Basel I. Basel II will force banks to hold capital, it is said, for the hidden and undercapitalized risks Basel I allowed them to take.

I was a part of the delegation at Basel I, which had as its *principal objective* creating common capital minimums for banks around the world. It has achieved that objective. Now Basel II wishes to improve that minimum standard through use of economic models to evaluate risk.

This is a good sentiment—however, unfortunately, as the agencies announced in April 2005, the results of a quantitative impact study (QIS–4) of proposed Basel II showed material reductions in minimum required capital for the population of U.S. institutions that submitted their capital estimates for the study. The study showed a 15.5 percent decline in the average bank's minimum required capital and more than half of the participating banks posted declines in excess of 26 percent. Subsequent studies produced by the Federal Deposit Insurance Corporation suggest that minimum risk-based capital standards at many Basel II eligible banks could fall far below the leverage standards set by prompt corrective action (PCA) for well-capitalized banks. The original intent of Basel II was to more closely align minimum regulatory capital with actual risk, not to materially reduce overall capital levels within the banking system.

The QIS–4 study also showed a significant amount of dispersion in minimum capital requirements across institutions and across different portfolio types. Some dispersion in capital results may be expected because the Basel II framework allows for a significant degree of subjectivity in developing inputs to the capital risk formulas. However, the substantial variance shown in QIS–4 results for categories that should be fairly similar among different institutions—retail lending for example—raise questions as to the prudence of adopting a capital regime that results in such *a wide range of perceptions of risk across banking institutions.*

It is far from certain that the risk measurement systems in banks have become so precise that they can operate safely at reduced capital margins mandated by Basel II and calculated by banks in the QIS–4 study. Compared to Basel I, the Basel II capital standard may better align capital with the risks taken by banks, but the new standard is far from foolproof. The Basel II standard omits some significant risks faced by banks. *Interest rate risk was a key part of the early stages of banking and the thrift crises of the 1980's, yet the Basel II standards do not cover interest rate risk. The Basel II capital standard is also based on estimates from the banks' own data. Make no mistake, these are estimates and are subject to errors.* Moreover, Basel II uses these imperfect estimates in a capital formula that, while complicated and derived from financial theory, is almost certainly an oversimplification of the actual risks taken by banks. So can we be reasonably sure that the Basel II standards would provide sufficient capital for banks? *Not in my judgment.*

We learned a number of lessons during the bank and thrift crisis years of the late 1980's and early 1990's. One of these lessons is that even sophisticated models can prove to be wrong when faced with unanticipated volatility and changing conditions that invalidate bank model assumptions. Models calibrated to fit performance in good times often will perform badly when market conditions deteriorate. Model risk, an unavoidable by-product of sophisticated risk measurement practices, underscores the importance of retaining capital safeguards, such as the leverage ratio and prompt corrective action minimum equity capital standards.

While the details of the agencies' QIS–4 analysis have not yet been made public, there are some publicly disclosed Basel II minimum capital level results that can be compared to existing regulatory benchmarks, and these comparisons should raise

concerns. My specific concerns focus on minimum capital requirements for residential mortgages. You are aware no doubt that some prominent officials in the banking regulatory community have been vocal about the need to raise minimum regulatory capital requirements for the housing GSE's, Fannie Mae and Freddie Mac, which currently are about 2.5 percent for mortgages held on the GSE balance sheets. There seems to be a growing consensus in these halls that the safety and soundness of the financial system may be enhanced by increasing the minimum capital position that GSE's are required to maintain. At the same time that bank regulators have weighed in on GSE regulation, a recent study by the Federal Reserve Board [1] stated that the Basel II minimum capital requirement for GSE conforming mortgages held in banks would be *below 50 basis points.* I fail to understand how a bank regulator may reconcile these two positions. Common sense dictates that if 2.5 percent is too low for mortgages held in the GSE's, then it must also be too low for mortgages held in banks.

I am concerned by reports that Basel II may result in significantly lower risk-based capital requirements for many of the largest U.S. banks. The Basel II process requires banks to calculate expected defaults and losses from these defaults. Regulatory guidance notwithstanding, it seems possible that Basel II banks' may use their experience over the past few very good years to make these assessments and this may lead a regulatory capital minimum that is too low in the case of bad times. My experience taught me that the minimal equity ratios prior to the banking crisis, then around 4 percent in large banks, were grossly inadequate for the problems that followed. At least two of our largest banks would have failed if there had been the slightest reduction in capital minimums. I do not know where Basel II capital levels will actually be, but I fear that using the extraordinarily benign recent period to calculate future risk will result in banks that are systematically undercapitalized when troubles arise.

To their credit the regulators are saying they are not comfortable with these QIS–4 results and would not allow banks to operate at these levels of capital. The regulators indicate they will keep the leverage ratio and get around to fixing the Basel II formulas later.

Maybe they will. Meanwhile, we are going to see a lot of screaming from U.S. banks because they are putting systems in place—at great expense—that will be, for most of them, irrelevant to determining their overall capital. U.S. financial institutions believe they are already constrained by our leverage ratio, unlike their foreign counterparts. The regulators do not believe low capital is a competitive advantage, quite the opposite. Our banks are not only well capitalized, but they also earn record profits year after year. But those banks who do measure performance by their current return on equity probably are going to believe we have given the rest of the world's banks a huge advantage.

That is why I fear Basel II is putting in place a dynamic that cannot be controlled, and will ultimately lead to significant reduction in the capital of our banking system, and significantly increase the cost of the Federal safety net. I do not doubt the good intentions of the regulators today who say they will keep this process under control. However, they cannot control the actions of future agency heads. In addition, those agency heads are going to be under tremendous pressure because of what the regulators are doing today.

PREPARED STATEMENT OF WILLIAM M. ISAAC

FORMER CHAIRMAN, FEDERAL DEPOSIT INSURANCE CORPORATION
AND CHAIRMAN, THE SECURA GROUP

NOVEMBER 10, 2005

Mr. Chairman and Members of the Committee, it is a distinct honor and privilege to appear before you today to discuss the implications of the proposed Basel II capital accord currently under consideration by U.S. regulators and those in other major countries.

I will explain my rationale below, but let me say up front that I have grave reservations about the proposed Basel II capital regime. I believe it carries the potential to do enormous harm to the U.S. banking system, which is the strongest, most profitable, and most innovative banking system in the world.

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[1] "An Analysis of the Potential Competitive Impacts of Basel II Capital Standards on U.S. Mortgage Rates and Mortgage Securitization," by Diana Hancock, Andreas Lehnert, Wayne Passmore, and Shane M. Sherlund (HLPS).

No regulator, legislator, or banker who lived through the banking crisis of the 1980's in this country can ever forget the lessons of that period—one of which is that capital very much matters. U.S. regulators and bankers have spent the last quarter century building the best banking system in the world. We should not risk everything we have worked so hard to create by relying on theoretical risk models to determine the appropriate level of capital for our banks.

International regulators developed risk-based capital rules (called Basel I) in the late 1980's to apply to all banks. They offered two primary justifications for Basel I: (a) capital rules should apply uniformly to banks throughout the world in order to level the playing field, and (b) capital requirements should correspond to the level of risk in individual banks. One could hardly quarrel with these objectives, although it was far from clear that Basel I was the most appropriate way to achieve them.

Despite its stated objectives, Basel I has not come close to fostering parity in worldwide capital standards. At year-end 2004, the 20 largest banking companies outside the United States had a median capital-to-assets ratio of 3 percent compared to the 6 percent median ratio (excluding goodwill) of the 20 largest U.S. banking companies.

The capital level of these foreign banks was below where the capital of large U.S. banks was in the late 1970's, before U.S. regulators began a major push to increase large bank capital levels. Only 2 of the 20 largest foreign banks met minimum U.S. standards at year-end 2004.

Despite their overwhelming use of leverage, the median return on equity of these large foreign banks was comparable to the median return of major U.S. banks. In short, large U.S. banks have much stronger balance sheets and enjoy much higher operating margins than their foreign counterparts.

Most career regulators in the United States were skeptical about Basel I from the beginning. They were reluctant to place too much faith in rigid formulas and doubted the claims that Basel I would bring about international parity.

As a result of these concerns, U.S. regulators overlay on Basel I a minimum capital to assets standard (*that is,* leverage ratio) to guard against potential flaws in Basel I and to prevent capital from falling too sharply. Moreover, U.S. regulators retained the ability to override the Basel I standards and demand more capital whenever warranted. I have no doubt that the comparative strength of the U.S. banking system today is due in no small part to the fact that U.S. regulators did not succumb to the pressure to lower their regulatory standards to international norms.

Almost from the day Basel I was adopted, the Basel Committee at the Bank for International Settlements began agitating for a more "sophisticated" version of the regime, which has come to be known as Basel II. The rationale behind Basel II is that the largest banks in the world are too complex for the relatively simple capital standards of Basel I. Champions of Basel II believe the largest and most sophisticated banks have the ability to construct models to assign capital to their various risk exposures and that these models will be superior to any rigid tests the regulators might apply.

Basel II is very controversial, as one might imagine. My major concerns about Basel II are that:

- *Basel II is based on inadequate and unreliable data.* No large bank has detailed information on losses going back as much as 10 years. It is virtually impossible to build reliable models with such a paucity of information, particularly when the decade that the available information covers is the most prosperous in banking history. Moreover, most of the large banks barely resemble what they looked liked 10 or 15 years ago. They are amalgamations of countless mergers of disparate cultures, businesses, and information systems. How one could build a reliable model based on the performance of a business that did not exist 15 years ago is difficult to fathom. Adding to the confusion, Basel II expects banks to build models for "operational risks." There are two categories of operating risks: (a) those you can predict, price, and insure against, and (b) those that are not predictable. Losses of the first type have never been a systemic problem in banking, and losses in the second category cannot be modeled.
- *Basel II will be used to reduce large bank capital ratios and either place smaller banks at a competitive disadvantage or force regulators to lower smaller bank capital ratios. Neither option is acceptable public policy.* The regulators conducted a Qualitative Impact Study (QIS–4) on Basel II earlier this year, which produced some very disturbing results. QIS–4 indicated that Basel II would allow capital levels to drop by at least 26 percent at half of the big banks, some falling by as much as 50 percent. The regulators responded to this, in part, by rushing out with proposed revisions to Basel I, which will presumably allow small-bank capital to decline. Alice in Wonderland would love it, but no self-respecting bank supervisor

should. I do not believe a compelling case has been or can be made for reducing capital in the banking system.

- *Basel II is so complex it cannot be adequately understood by senior bank managements, boards of directors, regulators, or the public.* I have been in the banking world all of my adult life and served at the FDIC for nearly 8 years. Moreover, I have served on the boards of three financial institutions. I think I know something about what it takes to run a bank right and why banks fail. The good ones have very good and experienced managements, strong and independent boards of directors, and a healthy respect for what can go wrong. They diversify their risks, put in place strong control systems, maintain solid balance sheets, and are always asking themselves what will happen if their assumptions are flawed. Running a successful bank (and successfully regulating banks) is an art that uses modeling and other forms of science as tools. Basel II employs exceedingly complex models (constructed largely by economists and mathematicians who have never made, much less collected, a loan), which very few people in any bank or any regulatory agency will understand. Making matters worse, Basel II will likely foster complacency and a false sense of security, as some bank managers and boards of directors and even some analysts place unwarranted reliance on the models. If we allow Basel II to elevate questionable science well above the art of management, someday somewhere we almost certainly will pay a big price. We need look no further than the debacle at Long Term Capital Management in 1998 to see what mischief can be caused by "brilliant" mathematicians and Nobel Prize winning economists who are given free rein to make huge bets based on their models. The Federal Reserve found it necessary to pressure 14 banks and brokerage firms to invest nearly $4 billion in new equity to prevent LTCM's collapse and avert a possible panic in the worldwide financial markets.

All models, of necessity, look backward—*that is,* they use historical data to predict future events. They are accurate, most of the time, if properly constructed and manipulated. But they can result in spectacular failures when they are poorly constructed, use inadequate data, or rely on false assumptions.

Large banks pronounced with great certitude in the 1970's and early 1980's that loans to less developed countries were riskless because sovereign nations could not afford to default and thereby lose their access to international credit markets. Had Basel II existed then, I suspect the risk weighting assigned to sovereign debt would have been close to zero.

I participated in serious and urgent interagency planning in 1984–1985 on how to handle the potential simultaneous collapse of the largest U.S. banks in the event of widespread defaults on sovereign debt. Later in the 1980's Citibank, alone, charged off some $3 billion of LDC loans in one fell swoop. So much for theories and models.

In important ways, Basel II is *déjà vu.* The regulators developed a three-tier system for capital adequacy in the 1970's. Community banks were required to maintain capital equal to at least 8 percent of assets. Regional banks were allowed to go as low as 6 percent on the theory they were better managed and more diversified, and their size made them less vulnerable to catastrophic fraud losses. Money center banks had no minimum standard—they were OK so long as they did not get out of line with their peers.

Believe it or not, the theory advanced by both banks and top regulators was that capital was not particularly relevant in banks as large and sophisticated as the money center banks. The typical money center bank had capital in the range of 3 percent during this period, with a couple falling below 3 percent.

The FDIC, during my tenure, regarded it as fundamentally unfair to require smaller banks to maintain more capital than larger banks. Of even greater concern was the increasingly heavy reliance of larger banks on volatile money market sources of funding. We were concerned that at the first sign of trouble this money would flee, rendering a bank helpless. We believed that a strong balance sheet was of even greater importance in banks with volatile funding.

The debate among banks and regulators was heated, not unlike today. The theories went out the window in 1984 when Continental Illinois, the eighth largest bank in the country, with one of the lowest capital ratios, lost nearly half of its funding virtually overnight.

It was all the FDIC and Federal Reserve could do to stem the outflow and keep the infection from spreading to banks throughout the world. Together, these two agencies advanced in the range of $20 billion to Continental Illinois, and the FDIC took the unprecedented step of guaranteeing that no creditor of Continental Illinois would suffer any losses or even any delay in receiving its money.

Capital was no longer a theoretical exercise. The regulators quickly agreed that no bank, no matter how seemingly strong and well-run, would be allowed to maintain less than 5 percent tangible equity to assets. Banks would be required to maintain capital above that level based on a case-by-case evaluation of risk through the bank supervisory process.

Basel I was developed a few years later to quantify capital measures to a greater extent. While I have never been a fan of Basel I, at least U.S. regulators maintained a minimum capital to assets standard and Basel I did not discriminate based on the size of the bank.

Some argue that a U.S.-imposed capital floor places U.S. banks at a disadvantage vis-à-vis foreign banks. This argument was advanced in the 1970's and 1980's, particularly with respect to the Japanese banks, which were growing with reckless abandon and comprised nearly all of the 10 largest banks in the world. We hear little about the Japanese banks today, except that they are a drag on the Japanese economy. They operated with little capital, had very low profits, and pursued growth for growth's sake. This business model cannot be sustained indefinitely.

I have not found a single professional bank supervisor who is enthusiastic about Basel II. For that matter, I have not found a single bank CEO who is enthusiastic about Basel II. Indeed, I have spoken with large bank CEO's who complain that Basel II is inferior to their own procedures, which give great weight to seasoned bankers using their judgment. They will implement Basel II if required to do so by their regulators, but they intend to continue to rely on their own models and procedures, which have withstood the test of time through various business cycles.

Capital regulation, in my judgment, should be simple and easily understood. It is foolhardy to adopt a capital regime that will be virtually impossible for senior managements, boards of directors, regulators, and market participants to understand.

There is nothing wrong with the current capital regime in the United States that cannot be fixed with some relatively simple modifications to Basel I. Moreover, it is critically important that the leverage ratio and other capital tests be maintained at their current levels.

This is not to say that the Basel II exercise has been for naught. Basel II-type models no doubt provide useful information to the managements of banks and their regulators. Banks should be encouraged to develop and improve such models. But the last thing U.S. regulators should do is engage in a "competition in laxity" with supervisors in other countries by lowering U.S. capital standards to international norms.

I thank you again for providing this public forum on one of the most profound public policy issues currently confronting our Nation's banking system.

PREPARED STATEMENT OF GEORGE G. KAUFMAN

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NOVEMBER 10, 2005

Mr. Chairman, it is a pleasure to testify before this Committee on the public policy implications for the health and safety of the banking system and the U.S. macroeconomy of the proposed Basel II capital standards. My bottom line is that Basel II represents only minor improvement over Basel I as a public policy tool for enhancing financial stability in the United States and has the potential for weakening the more comprehensive structure that is currently in place in the United States.

The Basel proposals will apply to banks (depository institutions) in both the United States and many other countries in order to achieve greater harmonization in capital standards among countries. If adopted in the United States, the proposal will be incorporated within our system of structured early intervention and resolution (SEIR), which includes both prompt corrective action (PCA) and a legal closure rule at positive capital at which point a bank is placed in receivership. But most other countries do not have such a system effectively in place and Basel needs to be evaluated on its own merits. For my remarks, I will focus primarily on the United States, but periodically refer to other countries.

To evaluate Basel II objectively, it needs to be compared to an alternative structure for enhancing bank stability. Such an appropriate alternative is the system of SEIR, which was introduced in the United States in FDICIA in 1991 in response

to its banking crisis of the 1980's. Unfortunately, much of the discussion of Basel II in the United States has neglected to incorporate the existence of this structure.

Basel and SIER/PCA have different histories. Each should be evaluated on the basis of what it was initially intended to do and not necessarily as a substitute for the other. Unfortunately, the different underlying histories often appear to be forgotten and each tends to be evaluated on a basis for which it was not primarily designed. Currently, in the United States, this confusion may be setting up a battle with possible serious adverse consequences for long-term financial stability. For the rest of the world, the proposed reliance on Basel may be taking attention away from developing more effective means of enhancing financial stability.

Basel (the Basel Committee on Banking Supervision, which meets at the facilities of the Bank for International Settlements in Basel, Switzerland) developed in the 1970's from a need to facilitate the sharing of information among bank regulators and supervisors in different countries on internationally active banks operating in their countries, which were expanding rapidly (Herring and Litan, 1995). In large measure, this need was initially motivated by the large international costs related to the collapse of the medium-sized Herstatt Bank in Germany, that operated heavily in the foreign exchange market and lost. The bank was legally closed by the German authorities at the end of the business day in Germany after it received payments from its foreign counterparties, many of whose business day closed later, for foreign exchange transactions, but before it paid these counterparties at the end of their business day. Ironically, the international repercussions reflected primarily a regulatory and not a market failure. The timing of the closure effectively shifted losses from German depositors and the German deposit insurance agency to banks outside Germany. Basel's objectives were expanded in the 1980's to developing international capital standards to promote both safety among large internationally active banks in light of large losses from LDC lending and competitive equality across countries with respect to capital ratios. The latter was aimed particularly at Japanese banks, which were expanding their foreign market share rapidly on perceived very low capital bases. This was viewed as giving them a competitive advantage.

The capital standards constructed in Basel I (1988) effectively resembled guidelines at the time for "best practices" in bank capital management, in particular with respect to incorporating credit risk exposures. Individual assets were weighted by one of four risk classification weights (buckets) and summed. The resulting risk-weighted assets were then divided into capital to obtain risk-based capital ratios. The minimum suggested overall capital ratio for a bank was set at 8 percent, which most banks were then able to satisfy. But the scheme provided no provisions for enforcing this capital standard, replenishing shortfalls, or resolving an insolvent institution at least or even low cost. Thus, the usefulness of the structure for public policy was limited, although it did increase the sensitivity and knowledge of bank managers and bank regulators to measuring and managing risk.

In contrast, in the United States at the same time, emphasis was not on developing best practices schemes for banks but on developing public policy measures to prevent a reoccurrence of the large-scale failure of thrift institutions and commercial banks in the 1980's, which imposed high cost on their insurance agencies and, for thrift institutions, also on the taxpayers (Benston and Kaufman, 1994). The structure was designed to turn troubled institutions around before insolvency, primarily through
recapitalization or merger with healthier institutions, and, failing that, as a last resort to legally close and resolve them at lowest cost to the insurance agency and potentially taxpayers. This is to be achieved through increasing both market discipline and regulatory/supervisory discipline.

Market discipline was enhanced by increasing the number of *de facto* at-risk claimants through severely curtailing the use of the misnamed "too-big-to-fail" (TBTF) policy—which, in reality, dealt not with failure but with protecting *de jure* uninsured claimants (Kaufman, 2004b). TBTF was transformed into a harder to invoke "systemic risk exemption" (SRE). Supervisory discipline was enhanced by establishing SEIR with PCA, a legal closure rule at positive capital, and least cost resolution with enforcement provisions that affect both the regulators and the banks.

Capital is the primary, but not the only, measure that triggers regulatory sanctions on troubled institutions, which are structured both to resemble the sanctions typically imposed by the market on floundering firms in nonregulated industries and to become progressively harsher and more mandatory as the condition of the bank deteriorates, culminating in legal closure and receivership. These provisions make it more difficult for regulators to forebear and force speedier actions to replenish capital if it declines below minimum target levels. Capital is viewed as the owners' funds that they "have to play with". The less capital, the more restrictive the

game becomes and as capital approaches zero, the legal closure rule is invoked, the game is declared over, and least cost resolution is commenced.

The usefulness of capital to absorb losses in this framework is related to the size of the bank. The usual measure of firm size is its total assets. Capital divided by the bank's total assets is the so-called leverage ratio. Under FDICIA, PCA specifies three capital ratios—tier 1 (basically equity) leverage ratio, tier 1 Basel risk-based ratio, and total capital Basel risk-based ratio—and five capital tranches or zones ranging down from "well capitalized" to "critically undercapitalized." (The major provisions are summarized in Table 1.) The minimum capital levels necessary to be classified "adequately capitalized" are set at 4 percent, 4 percent, and 8 percent for the three capital measures, respectively.

The development of the Basel II was primarily motivated by a desire to correct two perceived weaknesses in Basel I. In the process, the number of pillars was expanded from one to three. The recommended changes are intended to:

- Enhance the accuracy of risk-based capital (Pillar I), and
- Introduce means for enforcing minimum regulatory capital ratios (new Pillars II and III).

But both improvements are relatively weak.

Risk-based capital determined by market weights and forces is necessary for managing banks efficiently, but it is difficult for regulators to replicate accurately. The revised capital requirement in Pillar I attempts to do so for credit risk primarily for large banks. In the United States, with the approval of their regulators, these banks will be permitted to use their own internally generated credit risk ratings (including probability of default and loss if default) to compute their risk-based capital from a model provided by the regulators. (I will not comment on the Basel proposal for smaller banks or the recently modified proposal by U.S. regulators for most U.S. banks. Many of these banks maintain such high capital ratios that they will be effectively unaffected by these plans.) But, as has been discussed in a number of recent statements by the Shadow Financial Regulatory Committee, by increasing complexity, Pillar I does not necessarily make the regulation more accurate (Shadow 2000, 2002, and 2003). Increased complexity is likely, however, to both increase compliance costs and reduce understanding, particularly by the bank CEO, board of directors, and possibly even the CFO and by bank supervisors. Simplicity often trumps complexity in producing desirable outcomes through greater understanding. Furthermore if the risk weights are incorrectly selected, as is likely, the opportunity for gaming by the banks increases. Bank management and supervisors may be outgunned by highly technical Ph.D. model builders. The revision also introduces capital charges on a bank's operational risk for the first time.

As noted, Basel II introduces two new pillars—Pillar II: Supervisory Review and Pillar III: Market Discipline—to increase the public policy usefulness of the structure (Kaufman, 2004a). However, Pillar II contains few specifics. It is intended to supplement Pillar I in determining appropriate capital for credit risk exposure and to expand regulatory concern to interest rate risk. But it focuses primarily on general principles and does not consider the wide variation in supervisory competence across countries. Most importantly, Pillar II contains neither mandatory PCA type measures to replenish capital and turn troubled institutions around before insolvency nor a legal closure rule and least-cost resolution provisions to guide the supervisors' actions. Much talk and little required action.

Pillar III is not really about market discipline, but rather about creating transparency and disclosure. Mandatory disclosure would not be as necessary if there were more truly at-risk claimants, who would be expected to demand more transparency and exert more market discipline. Indeed, Pillar III would be far more useful in enhancing market discipline if it focused on increasing *de facto* at-risk claimants. This could be achieved by reducing the likelihood of invoking TBTF/SRE through making it more difficult to do, as in the United States since FDICIA, and by encouraging or requiring banks to issue truly at-risk subordinated debt (Shadow Financial Regulatory Committee, 2000). Nor does Pillar III introduce any cost-benefit criteria to evaluate whether the benefits of each additional item to be disclosed exceeds the costs of collecting and processing it.

As a result, Basel II provides only partial and flawed improvements over Basel I as a tool for public policy to achieve the goal of enhanced financial stability. Pillar I remains basically a "best practices" guide for internal bank management and not a public policy instrument.[1] Indeed, while there is substantial empirical evidence of a negative relationship between leverage ratios and bank insolvency, there is no

[1] Indeed, a recent article argues that the internal ratings model underlying the regulation is outdated even as it is being proposed (Thomas and Wang, 2005).

such evidence between risk-based capital ratios and bank insolvency (Evanoff and Wall, 2001). In no other industry do analysts compute risk-weighted assets or risk-based capital ratios for individual firms. But they do compute and investors use leverage ratios. Risk-weighted assets are an inferior scaler to total assets to gauge how much capital is available to a bank before the value of its assets declines below the value of its liabilities and it becomes insolvent. In sum, Pillars II and III are vastly inferior to PCA/SEIR with a strong legal closure rule at positive capital to minimize both the number and cost of bank failures.[2]

Unfortunately, Basel II may be on the verge of causing major mischief in the United States that could weaken financial stability over the longer-term for large banks intending to use the advanced internal ratings approach. It appears that the 4 percent risk-based tier I capital requirement ratio can be achieved under Basel II for many of these banks with lower capital than currently is required both under Basel I and is required to be classified as an "adequately capitalized" bank according to the 4 percent tier I leverage ratio.[3] Consequently, the leverage ratio is likely to become the binding constraint for these banks and prevent a reduction in required regulatory capital. The FDIC has recently concluded that "U.S. policymakers will be confronted with a choice between ignoring the results of Basel II or substantially weakening the PCA requirements" (FDIC, 2004). Although almost all U.S. banks currently maintain capital ratios at well above the regulatory requirements—indeed, the FDIC reported that bank equity capital ratios at midyear 2005 climbed to their highest level since 1939, more than twice the ratio required to be adequately capitalized—some banks appear to be lobbying U.S. regulators to lower the numerical threshold capital leverage ratio to qualify as adequately capitalized to below 4 percent, say to 3½ percent or lower. Congress in FDICIA delegated to the appropriate Federal regulators the setting of the numerical thresholds for all tranches but the minimum critically undercapitalized closure trigger of 2 percent equity capital. Some large banks are also arguing that the current leverage ratio requirements put them at a disadvantage with their competitors in the rest of the world, who are not subject to these ratios.

For U.S. regulators to cave in to such pressure in order to have Basel II adopted would be a big and costly mistake both for the U.S. macroeconomy and for the banks themselves. Considerable evidence suggests that even a 4 percent equity leverage ratio is lower than that maintained by almost all domestic nonbank competitors of banks, who are not similarly regulated nor covered by a safety net (Kaufman, 1992 and Kwast and Passmore, 1999). When industry leverage ratios decline below 6 percent bank failures increase, particularly when the economy is in a recession. Indeed, on the whole, there is a negative relationship between leverage ratios and defaults in all industries (Molina, 2005). With respect to individual large banks, there is no evidence either that equity capital increases the bank's overall cost of funds or that there is an inverse relationship between bank capital ratios and bank return on either assets or equity.

A time series analysis for U.S. banks shows a weak positive relationship between bank capital and profitability (Berger, 1995). A cursory cross-section analysis across the world's largest banks also shows a positive relationship between capital and profitability since the 1980's. Recently, United States, United Kingdom, Australian, and Spanish banks have both high capital ratios and high profitability, while German, Swiss, and Japanese banks have both low capital ratios and low profitability, although some adjustment may need to be made for the possibility of simultaneity in the direction of causation (Table 2). Nevertheless, this helps to explain why capital ratios actually maintained by U.S. banks are considerably higher than the regulatory requirements. They are signaling strength to both depositors and borrowers. Among the largest 1,000 banks in the world in 2003, U.S. banks accounted for only 15 percent of aggregate assets, but 22 percent of aggregate tier 1 capital and fully 37 percent of aggregate pretax profits. For Japan and the EU countries, capital accounted for a lower percentage of aggregate capital for all 1,000 banks than did their assets as a percent of aggregate assets and profitability even less. For the remaining countries, capital was at least as high a percentage of the aggregate as were assets and was about the same percentage as profitability (Table 3).

The results of the recent quantitative impact studies for large banks by the U.S. regulators raise concerns not only because they show, on average, lower regulatory capital requirements than currently but also because they show a large variance among individual banks. This suggests that the individual bank models generating credit risk weights may have flaws in construction and that they are very sensitive

[2] A similar conclusion appears to have been reached by Goodhart (2004).

[3] This occurs because 4 percent times a bank's risk-weighted assets yields a tier I capital number which, when divided by the bank's total assets, may be less the 4 percent.

both to the quality of data available for each bank and to the sample time period over which they are empirically tested. The models may not yet be ready for prime time!

In sum, adoption of Basel II for large banks in the Unites States is likely to have little effect on the banks and the economy if the current numerical threshold values for the leverage ratios for adequately and well-capitalized banks in PCA are not reduced and if market forces operate to maintain current capital ratios. If, however, because the new Basel II risk-based requirements can be met, on average, with lower leverage ratio numbers, the numerical definitions for adequately and well-capitalized banks were reduced, there are likely to be adverse longer-term consequences for both the banks themselves and the economy as a whole. The integrity of SEIR and PCA should not be compromised for the sake of harmonizing bank capital standards across countries.

Adoption of Basel II by itself in other countries could undermine their adoption of better public policy structures and thereby increase both the likelihood and costs of financial instability. It is time, therefore, for these countries to reconsider the benefit-cost tradeoff of Basel versus a U.S.-type of structure resembling SEIR and PCA. But the Basel process has not been totally negative. It has greatly improved the measurement and management of risk by both bankers and regulators and thus enhanced financial stability worldwide. Basel should be maintained as an ongoing process to develop ever better bank best practices schemes for internal management purposes, but it should not be halted and put in place. It is the process, not the end result, that will provide the major benefits.

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Table 1

SUMMARY OF PROMPT CORRECTIVE ACTION PROVISIONS OF THE FEDERAL DEPOSIT INSURANCE CORPORATION IMPROVEMENT ACT OF 1991

			Capital Ratios (percent)		
			Risk Based		Leverage
Zone	**Mandatory Provisions**	**Discretionary Provisions**	**Total**	**Tier 1**	**Tier 1**
1. Well capitalized			>10	>6	>5
2. Adequately capitalized	1. No brokered deposits, except with FDIC approval		>8	>4	>4
3. Undercapitalized	1. Suspend dividends and management fees 2. Require capital restoration plan 3. Restrict asset growth 4. Approval required for acquisitions, branching, and new activities 5. No brokered deposits	1. Order recapitalization 2. Restrict inter-affiliate transactions 3. Restrict deposit interest rates 4. Restrict certain other activities 5. Any other action that would better carry out prompt corrective action	<8	<4	<4
4. Significantly undercapitalized	1. Same as for Zone 3 2. Order recapitalization* 3. Restrict inter-affiliate transactions* 4. Restrict deposit interest rates* 5. Pay of officers restricted	1. Any Zone 3 discretionary actions 2. Conservatorship or receivership if fails to submit or implement plan or recapitalize pursuant to order 3. Any other Zone 5 provision, if such action is necessary to carry out prompt corrective action	<6	<3	<3
5. Critically undercapitalized	1. Same as for Zone 4 2. Receiver/conservator within 90 days* 3. Receiver if still in Zone 5 four quarters after becoming critically under-capitalized 4. Suspend payments on subordinated debt* 5. Restrict certain other activities				<2

* Not required if primary supervisor determines action would not serve purpose of prompt corrective action or if certain other conditions are met.
SOURCE: Board of Governors of the Federal Reserve System.

Table 2

LARGE BANK CAPITAL RATIOS AND PROFITABILITY BY COUNTRY

Country	Equity Capital ÷ Total Assets	Pre-tax Profits ÷ Total Assets	
	2002	2002 (Percent)	2000-02
United States	6.34	1.66	1.67
Spain	5.07	0.93	1.15
Australia	4.91	1.49	1.61
Italy	4.68	0.48	0.81
United Kingdom	4.49	1.11	1.34
Canada	7.32	0.61	0.93
France	3.94	0.58	0.72
Japan	3.15	0.04	-0.25
Germany	2.63	0.05	0.29
Switzerland	2.18	0.08	0.49

Source: Federal Deposit Insurance Corporation, FYI: An Update on Emerging Issues in Banking, p.1 and **Bank for International Settlements, Annual Reports, 2001-2003.**

Table 3

**TOP 1,000 CAPITALIZED BANKS IN THE WORLD, 2003
BY GEOGRAPHIC REGION AND SHARE OF TOTAL ASSETS, TIER 1 CAPITAL,
AND PRETAX PROFITS**

Region	Total Assets	Tier 1 Capital (Percent of total)	Pretax Profits
United States	15	22	37
European Union	48	41	37
Japan	15	12	4
Rest of Asia	11	12	8
Rest of Europe	5	5	6
Middle East	2	3	2
Latin America	1	2	2
Rest of World	3	3	4
Total	**100**	**100**	**100**

Source: *Banker Magazine*, July 2004.

PREPARED STATEMENT OF DANIEL K. TARULLO

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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 1980's. 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, 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 1980's. 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 toward 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 nonfinancial 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 1980's 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 nonbanking 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 1990's. 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 reorienting the revision of the Accord toward 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 1980's. 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 3 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 se-

curities 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 I–A 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.

PREPARED STATEMENT OF KATHERINE G. WYATT

HEAD, FINANCIAL SERVICES RESEARCH UNIT,
NEW YORK STATE BANKING DEPARTMENT

NOVEMBER 10, 2005

Good morning, Chairman Shelby, Senator Sarbanes, and Members of the Committee. My name is Katherine Wyatt. I head the Financial Services Research Unit at the New York State Banking Department. I have followed the development of Basel II for the Department since 2000, studied the possible effects of the simpler approaches under Basel II, and worked with my Federal counterparts in analyzing

banks' implementation programs for Basel II. I appreciate the opportunity to testify today, and ask that a copy of my written statement be included in the record.

I am speaking to you today because I am very concerned that adhering to the proposed timetable for implementation of Basel II in the United States will lead to far-reaching changes in the how we measure capital without sufficient understanding of their possible consequences.

Although the New Basel Capital Accord (Basel II) has been discussed in the United States since 1999 (at least) there has been insufficient study of its impact on the U.S. banking system, in part because the proposal itself has changed over time, and in part because the Federal banking agencies decided to restrict its implementation to the most complex approach and to impose it on only the largest internationally active banking organizations. For example, the best study we have, the fourth Quantitative Impact Study, involved about 20 large internationally active banks and used a version of the Basel II proposal that did not have important details that have been promised for the Basel II NPR, due in Q1 2006.

The banking system in the United States comprises about 9,000 different institutions and is rich in different-sized banks with different business models. Because we have only considered Basel II in terms of large complex internationally active institutions, we do not know what the competitive impact of Basel II will be. We do not know what the effect of large banks calculating capital requirements one way, while smaller banks in the same market calculate requirements another way will mean. We do not know what the effect on smaller banks that are public companies and are concerned with return on equity will be if their competitors are allowed to hold less capital. We must carry out a comprehensive impact study—across the entire banking system—before regulations are adopted that could have far-reaching effects for banks and their borrowers.

The Federal agencies plan to finish the rulemaking process for Basel II, conduct a year of parallel run of current requirements and Basel II, and to have Basel II in effect, all by January 1, 2009. They also aim to have the Domestic Capital Modifications for non-Basel II banks (Amended Basel I) in effect on January 1, 2009. I am afraid that pushing ahead to complete the rulemaking process for two complex proposals in less than 3 years will not allow time for essential review of either.

The Basel II Notice of Proposed Rulemaking will have been in development for 2½ years when it is released; we need sufficient time to study this complex proposal. It will be very important to look at Basel II and the Amended Basel I proposals side-by-side, and to study their impact on the U.S. banking system. I am concerned that supervisors will not have enough time to consider the possible consequences of these sweeping changes before they become effective—and before revision is much more difficult.

It is true that the agencies have included 3 years of "floors" in their implementation schedule. There will be graduated limits on capital requirements, and banks will be able to move fully to Basel II only at the end of these "floor" years. However, I believe it will be very difficult to make fundamental changes in Basel II after the January 2009 effective date. Banks that adopt Basel II in 2009 will already have made substantial investments in systems and data collection processes, and will surely object strongly to making changes after the effective date.

The Agency projection also assumes that all the necessary documentation for supervision of banks following these revised regulations—guidance, reporting requirements, and examination procedures—will be developed in this very short period of time.

I believe that there are two large gaps in our understanding of the impact of Basel II that must be addressed before we move to a Final Rule for either Basel II or Amended Basel I.

First, we do not know what the actual level of capital will be under Basel II for any given bank, or across all Basel II banks. Preliminary QIS–4 results showed a broad range of required capital amounts, even for similar portfolios. Also, Basel II has changed over time; the agencies' timetable seems to involve going ahead with implementation without an impact study of the fully specified proposal. Even more importantly, since capital requirements under Basel II are based on outcomes of mathematical models, we need time to develop rigorous technical guidelines for parameter estimation and tests of data sufficiency, to ensure that required levels of capital are adequate.

The second large gap in knowledge comes from the fact that we have not addressed the changes that may be brought by Basel II (and Amended Basel I) across the entire banking system. Basel II's impact in the United States has been studied primarily on large complex banking institutions. However, we have not fully studied the competitive effect of Basel II on the close to 9,000 non-Basel II banks in the United States. The Amended Basel I proposal for non-Basel II banks was released

only last month, and it is essential that the effects of these two proposals be studied side-by-side.

Use of Models in Calculating Capital Requirements

I would like to speak first about banks' Basel II capital calculations. Under Basel II, capital requirements for credit exposures are based on the outcomes of a particular mathematical model of default specified by supervisors. This supervisory model is applied to complicated portfolios, with a host of adjustments, specifications, exclusions, and exceptions that grew out of attempts to reconcile the model results with existing bank portfolios and existing international bank regulation. (The final U.S. version of these adjustments and specifications should be released early next year.) Basel II banks provide their own estimates of probability of default, loss given default, exposure at default, and maturity as inputs to the Basel II formulas; these parameter estimates depend on the data and other models used by the bank.

A key premise of implementation of Basel II is that banks will have enough reliable data to produce rigorous results from the model. I think many would agree with me that this is often not the case. The variation in required capital estimates for similar exposures found in QIS–4 is quite possibly due to problems of insufficiency of data. We also need to make sure that the modeled capital requirements are adequate when times are bad—the history of the last several years in the United States is of good times.

In contrast to the treatment of credit risk, Basel II allows banks to choose their own model to calculate capital requirements for operational risk. Here, even more variation in results is possible, particularly since there are even fewer data for operational loss events than for credit losses. The Basel II ANPR advises banks to use "expert opinion" scenarios to fill out data points in their modeling, thus providing even more opportunities for selection in modeling techniques.

Unfortunately, Basel II could be gamed by choosing the modeling techniques and data sets that will produce the lowest capital requirements. As well as a very broad range of required capital, preliminary QIS–4 results showed decreases as great as 74 percent for some bank portfolios. The strong possibility exists, also, that as the distance between risk-based capital requirements and current leverage ratio under prompt corrective action (PCA) capital requirements grows, there will be increased pressure on bank regulators to drop the leverage ratio requirements. For many large banks, satisfying the well-capitalized leverage ratio is already the constraining capital requirement, rather than meeting risk-based capital ratios.

The bank supervisors I have talked with are very worried at the prospect of dropping PCA requirements—they remember other times when banks' predictions about the future did not come true. They also point to their experience that well-capitalized banks are profitable banks, can enjoy lower costs of funding, and more easily weather economic downturns.

I am concerned that without direction from supervisors, capital requirements could differ widely according to the parameter estimation methods used by banks, and depending on banks' own data sources. It is essential that the schedule for implementation allows enough time for supervisors to work with bank models, to understand different parameter estimation techniques, and to gauge sufficiency of data. Supervisors will then be able to develop necessary technical guidelines for the estimation process and to set the restrictions and constraints necessary to ensure adequate required capital. If this time is not allowed, there is a real danger that the estimation techniques "most large banks choose" will become the de facto "best practices."

Allowing this supervisory review period will also ensure that the necessary examination procedures and guidance will be developed, both for Basel II and Amended Basel I. We need time to understand and assess these proposals, and once they are accepted, we need time to develop examination materials, to provide necessary training for examiners, particularly in the supervision of Basel II banks, and to provide support for bankers.

It can take several years for a bank to develop the systems necessary for adoption of Basel II. Some of the largest banks have already begun this process, in order to be able to adopt Basel II at its effective date. I am concerned that maintaining the current timetable will intensify pressure to keep the Basel II proposal "open" enough so that banks that have begun implementation projects will not have to make radical changes. This could make it very difficult to institute material changes in the future, when banks have committed even more sizeable resources to their Basel II systems. We do not know enough now about the consequences of Basel II to go ahead, in an attempt to justify the expenditures a few banks have already made.

Impact of Changes in Capital Requirements across U.S. Banking System

Both bankers and supervisors are concerned about the impact of Basel II on the U.S. banking system. As pointed out in a letter sent by the Conference of State Bank Supervisors to the Federal Agencies in September of this year,

> Implementing the risk-based capital requirements depicted in the recent studies could have profound competitive implications and significantly harm the banking industry in general and non-Basel II banks in particular. As proposed, Basel II creates significant differences between capital requirements of banks that adopt Basel II and those that do not. The current approach reduces the capital large institutions hold for mortgages and small business loans, among other assets. In a very practical sense, the reduced capital requirements would provide a pricing advantage for the larger institutions. It will be difficult for smaller banks to compete for mortgages and small business loans and certainly difficult for these institutions to hold such assets in their portfolio. In a competitive economy, eventually market forces will likely drive these assets from smaller banks toward the Basel II adopting banks, requiring nonadopting banks, the vast majority of which are small community banks, to move to higher-risk areas of banking.
>
> In addition, with substantially lower capital requirements, larger institutions could acquire community and mid-tier banks without much cost involved by immediately lowering the acquired bank's required capital to a level that is allowed by Basel II banks. The lower capital requirements and the magic of the current Basel II mathematics promote the incentive for consolidation within the banking industry.

CSBS strongly urged the Federal banking agencies "to conduct further analysis of potential capital changes that would ensue from adopting the current Basel II proposal."

I am afraid that the publicly available analysis does not adequately answer these concerns. The Federal Reserve has posted on its website several "White Papers," covering some Basel II portfolios and some of the competitive issues raised by the original "bifurcated" regime proposed by the agencies. However, these papers are based on Basel II circa 2003, and both the Basel Committee and the Federal agencies have made changes to their proposals since then. The new Amended Basel I proposal, of course, is not considered at all in this research. The "White Papers" suggest that the impact on non-Basel II banks may be minimal, but these papers are not definitive, and other authors have disagreed with their findings.

We need to have a much better understanding of the consequences of Basel II before it is implemented. We should take the time now—both Federal and State banking regulators—to fully test the impact of Basel II and Amended Basel I proposals. In this way, we can work to safeguard the soundness and profitability of the banking system and ensure that U.S. borrowers will continue to have the access to capital that a strong U.S. banking system affords them.

I hope that these remarks are helpful to the Committee and would be pleased to answer any questions that you have.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SHELBY FROM SUSAN SCHMIDT BIES

Q.1.a. Basel II would impose new demands on bank regulators. It would require bank regulators to not only approve banks' internal assessments of their risks, but also to make judgments on whether banks are holding enough capital in light of all the risks banks face. This means bank regulators are going to need personnel who are well trained in risk analysis.

How many additional personnel does your agency expect it will need to hire in order to implement Basel II? What type of expertise will your agency need to obtain? Do you foresee any problems in recruiting?

A.1.a. The Federal Reserve has been preparing for the implementation of Basel II for some time. Preparation includes planning for reallocations of existing staff, hiring of new staff, and planned training enhancements, all started as far back as 2001. It is difficult to quantify exactly the number of personnel associated with Basel II as our planning is tightly integrated with broader continuing initiatives to expand and augment System expertise in areas such as risk management and quantitative analysis. That is, we are not hiring supervisory staff only for Basel II implementation purposes. In fact, even without the movement to an enhanced risk-based capital framework, supervisors have, for some time now, been addressing the implications for Federal Reserve staffing and specialized training of quantitative risk management models and techniques as their use at financial institutions has grown around credit, operational and other risks.

With regard to expertise, staffs at Reserve Banks are working with staff of the Board of Governors to support Basel II and risk-related policy requirements. Quantitative risk units have been established within the Federal Reserve System to serve the System's need for specialized expertise in this critical area. Specific expertise includes staff with risk management, quantitative analysis, and modeling skills, and technically trained industry experts with market and operational risk, corporate credit, and retail credit risk experience.

In an effort to appropriately prepare Federal Reserve System staff for the implementation of the Basel II framework, a number of training programs are already in place to ensure that supervisors will be ready to meet the challenges posed by U.S. implementation of the framework at the local level. Also important are coordination efforts across Federal Reserve districts to maximize the efficient deployment of experts and cooperative interagency training efforts to share expertise among banking supervisors.

Recruiting in a competitive environment will continue to be a challenge. This would have been the case even without Basel II as use of quantitative models at banking organizations continually expands. The Federal Reserve is prepared to use all tools in place to ensure that qualified staff with the requisite skills are recruited and retained and that there is sufficient investment in training for existing staff, as further elaborated in responses 1b and 1c.

Q.1.b. Will your agencies be able to successfully compete against banks in the recruitment of personnel? Do you have any concerns

that banks will simply be able to hire the best Ph.D.'s in risk modeling and outgun their regulators?

A.1.b. The need to ensure successful recruiting and retention of specialized staff—not only for overall supervision but also for Basel II as well—has consistently been a focus for the Federal Reserve. The quality and effectiveness of our supervisory efforts depend most importantly on the quality and knowledge of our staff. Over the years, we have been successful in recruiting and retaining the staff necessary to carry out our responsibilities in an effective manner, despite growing demand and competitive salary pressures for our well-regarded and highly skilled examiners and staff. Basel II, of course, has been a key focus for the last 24–36 months. As the private sector has come to recognize the value of these skills, the demand for specialists with risk-management skills has increased the total compensation packages that our staff can earn in the private sector. The "value proposition" of working at the Nation's central bank in a policy and public service role, in addition to factors such as competitive benefits packages and work/life balance options are partial offsets to external market pressures. Recruiting for specialized expertise, especially quantitative modeling and analysis, is necessarily expensive, and pushes the limits of existing pay structures. Successful recruits will typically command the upper end of the pay scale in some cases. The research staffs at the Federal Reserve Banks and the Board provide a significant pool of internal expertise in areas such as risk modeling and quantitative analysis. As in times past, we will use research staff with quantitative expertise to assist risk specialists and examiners on the supervision staff, as needed.

Q.1.c. How much in additional annual costs do you expect to incur in implementing Basel II? Other than personnel costs, what other costs will your agency incur in implementing Basel II? Are there any large one-time costs?

A.1.c. Over a 5–10-year timeframe, the Federal Reserve will make considerable investments related to Basel II, including the cost of course development and training hours for examiners. There will also be some costs associated with collection and analysis of new data related to the Basel II implementation.

The total training requirements will depend, in part, on how many banks opt-in to Basel II. As noted in our response to 1a, these efforts have been in progress for several years and are integrated tightly with broader initiatives to ensure our supervisors are well-trained to meet the complexities and rapid change in supervised organizations. In addition, both Reserve Banks and Board supervision functions are continually reprioritizing resources to address our most pressing concerns including the effective supervision of the most complex organizations. As a result, we have reallocated staff development funds to augment our training programs around risk-management techniques including those related to an enhanced risk-based capital framework. Two courses have been developed for examiners and quantification experts at the Reserve Banks related to credit risk measurement and quantification for corporate and retail activities. A third course, developed jointly with the Office of the Comptroller of the Currency, the Federal De-

posit Insurance Corporation, and the Office of Thrift Supervision, focuses on operational risk and provides a description of the range of advance measurement approach (AMA) practices, including specific examples of how banks might implement their AMA processes. An agreement with the BIS Financial Stability Institute for online learning provides a wide variety of tutorials on subjects related to capital adequacy and will require a modest outlay of funds over the next 2 years. We do not currently anticipate any large one-time expenses related to Basel II. However, we are finding it necessary to use enhanced compensation and benefits to attract and retain staff with critical skills in quantitative risk-management techniques and other important supervisory skills areas.

Q.2.a. In his testimony, Dr. Tarullo posed several questions that he believes need to be answered by U.S. banking agencies before implementation of Basel II begins. Please provide answers to his questions with respect to your agency, which are as follows:

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

A.2.a. For most banking organizations, minimum regulatory capital levels today are adequate. However, for our largest, most complex banking organizations, Basel I-based capital rules have become increasingly inadequate and do not provide supervisors with a conceptually sound framework for assessing overall capital adequacy in relation to risks, including which institutions are outliers, and how capital adequacy may evolve over time. That said, we do know that, for some individual banking organizations minimum regulatory capital levels required to be held against some of the assets they hold, and the inherent risks in those assets and operations, may be too high. Similarly, there are also some banking organizations whose assets and operations are riskier than average and thus, for particular assets, their minimum capital requirements may be too low. The current framework does not distinguish between those organizations that are taking on greater risk versus those that are not. That is one of the limitations of Basel I and why a more risk-sensitive approach is needed for our largest, most complex banking organizations.

One should remember that simplifying assumptions are built into minimum regulatory capital requirements, such as Basel I, so that they can apply to a wide range of institutions. Accordingly, they cannot get to a level of granularity that will provide a tight linkage between risks that are being taken and the amount of capital needed for every single banking organization. For the largest, most complex banks, Basel II attempts to provide more granularity and risk sensitivity, but it still only looks explicitly at three types of risk in Pillar l—credit, market, and operational. As such, there are still risks that are not explicitly accounted for in the Basel II risk-based minimum capital numbers, such as liquidity, concentration, interest rate, and legal-compliance risks. That is why Basel II has a component of capital evaluation in Pillar 2.

Minimum regulatory capital requirements simply cannot explicitly reflect all the risks that every banking institution undertakes. To do so would, indeed, be excessively burdensome and not cost effective. Minimum regulatory capital measures provide floors below

which capital should not fall. The agencies have instead relied significantly on the supervisory process to supplement minimum regulatory capital requirements and ensure that a banking organization holds an amount of total capital that is adequate in relation to all the risks faced by the organization. Pillar 2 of Basel II reinforces the importance of a bank's internal and supervisory assessments of its overall capital adequacy. The agencies also have relied, and will continue to rely, on a minimum leverage ratio requirement to supplement the risk-based capital requirements for both Basel I and Basel II.

Successful internal capital adequacy processes (economic capital) at the largest banking organizations emphasize the need to identify and measure all relevant risks. Most institutions maintain a "cushion" above internally generated capital measures for various reasons. The actual total capital a bank holds above the regulatory minimum reflects bank management's assessment of risks the institution faces, and the related amount of capital the institution needs to cover all of its unexpected losses. Sometimes investors, counterparties, and customers demand a stronger credit rating at the bank than that implied by the minimum regulatory capital requirements. Many banks also want to remain prepared to promptly pursue mergers and new business expansion opportunities as they arise, which requires maintaining capital above the regulatory minimum. Banks may also wish to hold additional capital in anticipation of reduced ability to raise it in future periods. Such justifications for holding capital above the regulatory minimum are entirely appropriate, indeed necessary for determining the appropriate level of total, rather than minimum regulatory, capital for an individual institution. In the supervisory process, we check to see that all minimum regulatory capital requirements are met, but we also analyze a banking organization's total capital and its rationale and plans for maintaining that capital in order to assess whether its capital is adequate given its risk profile.

Q.2.b. "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?"

A.2.b. The Basel II implementation plan for the United States has incorporated from the outset an ongoing process for evaluating both the quantitative impact of Basel II on banks' minimum risk-based capital requirements and the quality of banks' systems for calculating Basel II risk parameters. One element of this process has been several quantitative impact studies (QIS) conducted over the past several years. The most recent QIS exercise, QIS–4, provided valuable insights into banks' minimum regulatory capital relative to their risk profiles, the varying methodologies used to measure risk, and where banks' risk-measurement and -management capabilities are stronger or weaker relative to their peers.

Consistent with the agencies' expectations, QIS–4 provided somewhat limited insights into what would be the minimum required capital under Basel II when fully implemented. Like its predecessors, QIS–4 was conducted on a "best-efforts" basis without close supervisory oversight, and it reflects only a point-in-time look at

banks' portfolios and risk-measurement and -management systems (in this case, as of the second or third quarter of 2004). An important finding was that banks' systems for estimating Basel II risk parameters were only partially developed at the time of QIS–4 and would not meet supervisors' expectations for reliability. As a result, the QIS–4 results may not represent accurately the minimum capital charges that would be generated by Basel II when banks' systems are fully compliant with their risk measurement and management standards. Indeed, QIS–4 showed that while banks have been making steady progress in improving the quality of these systems, no institution would have been qualified to implement Basel II at the time of QIS–4.

Uncertainty surrounding the precise quantitative impact of Basel II has been incorporated into the agencies' implementation plan for the United States as outlined in our September 30, 2005, press release. The plan recognizes explicitly that the agencies cannot be certain about the quantitative impact of Basel II until banks have fully implemented the systems needed to support the framework. Yet, banks cannot build up these systems until the agencies have released a notice of proposed rulemaking (NPR) and accompanying examination guidance setting forth our qualification standards. There may also be additional changes in the final rule that banks will need to take into account. More precise estimates of the quantitative impact of Basel II should become available during the "parallel run" period (beginning January 2008) and the transition years (from 2009 to 2011). The agencies will periodically review and analyze data collected from the Basel II banks during these periods, as we continue to evaluate the quantitative impact of Basel II. The agencies will use this information to determine whether any modifications to the Basel II framework, particularly to Pillar 1, are needed, for example, to preclude any unwarranted decline in banks' minimum risk-based capital requirements. To ensure adequate time to make such adjustments, over the 3 years following the parallel run, Basel II would be phased-in by constraining each bank's consolidated risk-based capital charge to be at least 95 percent, 90 percent, and 85 percent of Basel 1 levels in 2009, 2010, and 2011, respectively. In addition to these transitional safeguards, the current prompt corrective action (PCA) framework and minimum leverage ratio requirement will remain in place. Taken together, we believe these measures will ensure that banks maintain prudent capital levels throughout the transition period and beyond.

Q.2.c. "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 the significant portions of certain kinds of assets likely to migrate out of the banks into the unregulated sector? If so, might new risks of financial disruption be created?"

A.2.c. It is important to note that one of the motivating factors for pursuing capital reform is to reduce existing financial market distortions that are the result of banks' efforts to arbitrage Basel I-based rules, such as by securitizing high-quality assets and retaining lower-quality, yet higher-yielding, assets. That said, the Federal Reserve takes the potential effects produced by Basel II

very seriously. Throughout the Basel II process, we have remained vigilant about the impact of our decisions. This includes conducting analyses, such as our series of white papers about the effects of Basel II on certain aspects of the U.S. banking system. We have also remained very attentive throughout the Basel II process to comments from the industry, the Congress, and other interested parties about the potential effects of Basel II on the financial system. When information from any of these sources or evidence from risk models in use identified modifications that should be made, we have pushed for adjustments to strengthen the proposed capital requirements of Basel II.

To the extent that Basel II better reflects risk-taking by banks, minimum regulatory capital should be more consistent with the view toward risk and capital that rating agencies and investors have been using both for banks and their competitors. In general, it is our view that there will not be disruptions to the financial system as a result of Basel II, nor should there be a sizeable migration of assets outside the banking system to non-bank entities. But, as with any change in capital rules, bankers will evaluate options and optimize their use of capital, so some adjustments are likely. For example, the introduction of PCA in the early 1990's encouraged even the largest banks to hold more additional excess capital so they would qualify to be deemed "well-capitalized".

In most cases, our analysis suggests that it is usually not minimum regulatory capital levels that significantly affect where assets are held, but rather the capital allocations that banks (and others) make internally within their organization, so-called economic capital. Moreover, most banks, and especially the smaller ones, hold capital far in excess of regulatory minimums for various reasons (as outlined in question 2a, above). Thus, in normal circumstances, changes in a bank's own minimum regulatory capital requirements for particular assets generally would not have a sizeable effect on the level of actual capital the bank chooses to hold and would not necessarily have sizeable affects on internal capital allocations. In short, we do not expect Basel II to significantly change the market realities among banks, or between banks and non-bank financial entities.

Naturally, if we see evidence that distortions might arise from Basel II, we will seek to review and analyze the specific situation and make adjustments to the U.S. capital proposals accordingly. As you know, the agencies have embedded in their plans for United States implementation of Basel II a number of safeguards, given some of the uncertainty that still remains about Basel II's ultimate effects. These include the parallel run period, 3 years of transitional floors, and additional rulemakings. And, as noted elsewhere, we will perform periodic reviews and analysis of the quantitative impact of Basel II on individual banks and in the aggregate.

Q.2.d. "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?"

A.2.d. As noted in question 1 above, the Federal Reserve has been preparing for some time to prepare for policy and implementation requirements associated with Basel II. We already have considerable expertise and experience related to evaluation of quantitative risk models in the supervision of our largest and most complex banking organizations. As you know, U.S. supervisors are still developing their Basel II proposals, associated supervisory guidance, and proposals for Basel II data collection. These taken together will provide a lot of detail to both the examination staff and the banking organizations using Basel II, and will support consistency across U.S. supervisors and clarify our standards to other countries.

To address concerns about inconsistent application of the Basel II framework across countries, the Basel Committee several years ago established the Accord Implementation Group (AIG), made up of senior supervisors from each Basel member country. The AlG gathers regularly to share best practices and develop ways to foster consistent application of Basel II across national jurisdictions. As discussions about implementation become more detailed and more focused on specific banking groups, they move out of the AIG and evolve into bilateral supervisory relationships dealing with practical details. The AIG has also published a substantial amount of information so that other supervisors and bankers can benefit fTom some of the AIG's discussions and have a better sense of the expectations of AIG members. No doubt there will be some differences in application of Basel II across banking systems with different institutional and supervisory structures. All AIG members, and certainly the Federal Reserve, would remain alert to this issue and work to minimize differences in application. However, it is helpful to remember that issues relating to cross-border supervision already exist today, and U.S. supervisors have extensive experience in addressing such issues. With Basel II, as is currently the case, host supervisors will still examine the legal entities in their country. Accordingly, U.S. bank subsidiaries of foreign banks would be operating under United States rules and foreign bank subsidiaries of U.S. banks would be operating under foreign host-country rules. As part of our home-host communication, we will keep foreign supervisors informed about how operations outside their jurisdiction affect the entities they supervise, and do this with a minimum of burden on the consolidated organization. We expect the reverse to be true as well. And, of course, we continue to maintain an ongoing dialogue with institutions for which we are the home or the host supervisor. The sooner that institutions raise specific issues of concern with us, the quicker we will be able to work on solutions and the smoother the transition is going to be.

Q.2.e. "Have the banking agencies consulted with institutional investors, rating 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? [If so, what were the views of these market actors as to the adequacy of the contemplated disclosure requirements?]"

A.2.e. The Pillar 3 disclosures were issued for public comment, both formally and informally, on several occasions. In addition, rep-

resentatives of the agencies consulted with market participants in developing the disclosures. In general, market participants, such as debt and equity analysts, support enhanced public disclosures of risk information and capital adequacy by banking organizations. The version of Pillar 3 included in the June 2004 text from the Basel Committee balances the desire for additional disclosures by market participants and the reporting burden associated with such disclosures. This version leverages off of the information institutions will need in order to implement Basel II and is substantially streamlined from earlier Pillar 3 proposals.

Q.2.f. "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?"

A.2.f. The agencies, on an ongoing basis, consider ways to improve the existing risk-based and leverage capital regimes. Over the past 15 years or so, the agencies have adopted over 28 modifications to the existing risk-based and leverage capital regime. In addition to this ongoing incremental maintenance and refinement, the Basel II process is one example of developing an entirely new approach to capital regulation—part of this process has included considering alternative approaches and reaching consensus on the approaches determined to be most appropriate. Further, the Federal Reserve has ongoing dialogue with other agencies and standard setters such as the SEC and FASB to consider ways to enhance or refine our regulatory approaches.

With regard to market discipline, the Federal Reserve Board and Treasury submitted a report to Congress on "The Feasibility and Desirability of Mandatory Subordinated Debt" in December 2000. The link to the report is: *http://www.Federalreserve.gov/boarddocs/rptcongress/debt/subord*__debt__2000. pdf.

In that report, we noted that the Board will continue, and explore opportunities to enhance, its use of data from subordinated debt, equity, and other markets to evaluate the current and expected future condition of large depository organizations. With respect to subordinated debt, the Board will continue, as part of the supervisory process, to monitor both yields and issuance patterns of individual institutions.

The Federal Reserve System continues to study market discipline and the use of market data and has an ongoing program of regularly reviewing market data, including subordinated debt spreads, credit default swap premiums, and stock price data, as part of our off-site surveillance program.

With regard to "precommitment"-based proposals, the agencies did evaluate proposals incorporating this concept prior to the adoption of the Market Risk Amendment. However, the agencies decided not to incorporate such proposals given various shortcomings, including that supervisors would be required to impose higher capital requirements on firms after the fact, rather than ensuring that there is adequate capital on an ex-ante basis.

Q.3. Although Basel I–A aims to reduce any competitive advantage Basel II may confer on large banks, have you conducted any analysis to determine whether Basel I–A itself creates any competitive

issues within the subset of banks that are intended to be covered by it? If not, do you intend to do so?

A.3. In the Basel I ANPR, the agencies articulate five broad principles to guide the developing revisions. These principles are to (1) promote a safe and sound banking system, (2) maintain a balance between risk-sensitivity and operational feasibility, (3) avoid undue regulatory burden, (4) create appropriate incentives for banking organizations, and (5) mitigate material distortions in the amount of minimum risk-based capital requirements for large and small institutions. As you know, the Basel I changes are still in the developmental stage and as work progresses, competitive equity issues will continue to be a primary area of focus—not only between the Basel I and Basel II frameworks, but also within each of those frameworks. Staffs have done some preliminary analysis using existing Call Report data to understand the potential impacts of various risk-weight changes and combinations of risk-weight changes. As the proposed Basel I modifications continue to evolve, additional analyses will be performed to ensure that the agencies understand the possible effects of each modification that the agencies consider proposing.

Q.4. What consideration has been given to the fact that there are huge differences between the 7,000 or so banks that will participate in the Basel I–A framework?

A.4. The agencies' existing risk-based capital rules generally apply to banks, thrifts, and bank holding companies of all types and sizes. As we continue developing modifications to the current rules, with the guiding principles set forth in the response to question 3 in mind, we will endeavor to develop a package of revisions that enhances risk sensitivity without being unnecessarily burdensome. The current regime is a broad-brush approach that results in a modestly risk-sensitive framework that can be used by a variety of institutions. We expect that a modified Basel I-based set of rules also will be applicable to a wide range of institutions with different risk profiles and management and measurement approaches. As part of the Basel I ANPR issued last year, the agencies specifically sought comment on whether the proposed modifications should be applied to all non-Basel II banks or whether some or all non-Basel II banks should be given a choice of applying the existing risk-based capital rules or the risk-based capital rules that emerge from the process to amend Basel I.

Q.5. In Dr. Kaufman's testimony, he stated that there is "substantial empirical evidence of a negative relationship between leverage ratios and bank solvency," but "no such evidence between risk-based capital ratios and bank solvency." Do you agree with Dr. Kaufman? If so, does this conclusion undermine the Basel II framework?

A.5. The Federal Reserve does not believe this is an accurate application of extant research as it relates to Basel II. Research employing the Basel I capital ratios is not at all relevant for evaluating fundamentally different risk-based capital ratios that are designed to be significantly more risk-sensitive than Basel I, such as those under Basel II when fully implemented. In this regard, the Basel II framework should provide better insights into banks' overall cap-

ital adequacy on an aggregate and individual basis, and how this evolves over time, thus reinforcing the goal of the PCA regime to intervene as early as possible at problem institutions. Accurate data for assessing the efficacy of the Basel II capital ratios, however, will not be available until banks have fully implemented the systems needed to support the Basel II framework and have access to more detailed information about supervisory expectations for various aspects of Basel II that will be included in the NPR and associated supervisory guidance.

Fortunately, minimum capital ratios are only one supervisory tool the banking agencies use to monitor and assess the overall condition of U.S. banking organizations. We have tailored risk-focused examination practices that will continue to be applied to ensure we have a solid and accurate understanding of each institution subject to the agencies' jurisdiction. In both Basel I and Basel II, supervisors are able to intervene to require stronger capital above the minimums when internal controls, weak earnings performance, or loss exposures are a concern.

Q.6. Have you undertaken any analysis of the initial start-up costs and annual compliance costs that Basel II will impose on banks?

A.6. Most of the information we have to date is anecdotal. On-site supervisory examination teams have ongoing dialogue with institutions that are expected to be moving to the Basel II advanced approaches to get a sense of the cost implications. That information seems to change periodically. Further, some institutions have reported to us that the delay in issuing the NPR and modifications to the framework will increase their costs.

In addition, through the QIS–4 supervisory questionnaire process, some institutions answered questions about compliance costs related specifically to ongoing compliance as well as start-up and recurring costs but the responses that were received were not comprehensive or easily comparable across institutions and therefore were not included in the QIS–4 results.

Finally, much of the infrastructure development needed for Basel II is consistent with supervisory expectations for advanced risk measurement and management in general, so some element of cost, while consistent with, is not necessarily exclusive to Basel II. As a continuing part of the Basel II process, the agencies will seek to obtain more complete and reliable information.

Q.7. To what degree will the significant costs necessary to comply with Basel II act as a barrier to entry that prevent banks from growing and becoming a bank large enough to qualify to use Basel II? In effect, will Basel II cement the market positions of the largest banks? If not, why?

A.7. When evaluating the costs to U.S. banks of adopting Basel II, it is important to note that all large or complex banks need to have in place appropriate systems for measuring and managing their risks. Banks that are not large and do not have complex products or portfolios do not need complex measures of risk-taking either for sound risk management purposes or for minimum regulatory capital requirements. Much of the cost of adopting Basel II is associated with developing and implementing such systems for internal management purposes, and so we would expect such costs to be in-

curred by a large bank even in the absence of Basel II. Indeed, the risk-management approaches underlying Basel II, including economic capital precepts, reflect the general direction that large, well-managed banks have been moving to since the mid-1990's.

The issue is the same for a non-core (that is, opt-in) bank. As an existing supervisory issue, regardless of whether there is a Basel II, we would expect a large and growing bank, especially one nearing the size criteria that is envisioned in the Basel II context, to have risk measurement and management systems appropriate for their size and risks, including internal economic capital methodologies for managing their businesses. What Basel II does is ask them to make sure that, as they build more robust risk management systems, those systems can also generate various risk parameters to permit calculation of risk-based capital using the supervisory formulas. So as a bank continues to grow toward the Basel II criteria, it should be both improving its risk management and preparing to have its systems generate required Basel II criteria. Improving risk management systems as a bank grows in size or complexity should be considered as a cost of doing business.

There may also be concerns that Basel II will reduce the capital requirements for some banks and not others. That is one of the reasons why the banking agencies have proposed to amend Basel I so that competitive effects can be minimized. As noted above, the Federal Reserve recognized that competitive effects were possible and undertook several studies designed to assess the possibility that adoption of Basel II would provide adopters with a substantial competitive advantage over non-adopters. While these studies point to a few areas in which some competitive effects may occur, their overall findings strongly suggest that competitive effects of Basel II are likely to be modest. One study examined whether a reduction in regulatory capital requirements resulting from adoption of Basel II would prompt large adopting banks to acquire smaller, non-adopting banking organizations. A second study addressed whether changes in regulatory capital requirements brought about by Basel II would provide large adopting banks with a competitive advantage in small business lending; the third and fourth studies addressed similar questions as they apply to mortgage lending and credit card lending, respectively. A fifth study addressed the likely effect of explicit operational risk charges on processing banks that adopt Basel II. And even though anticipated effects are likely to be modest, because these studies, public comments, and other factors pointed to some unintended competitive consequences from the implementation of Basel II, the U.S. banking agencies are developing a revised Basel I that is partially aimed at addressing such concerns.

Q.8. Please explain the type of information that banks will be required to disclose under Pillar 3 with respect to how banks calculate their capital requirements? Will banks be required to disclose proprietary capital requirement models?

A.8. Consistent with the Pillar 3 disclosure requirements in the Basel Committee 2004 mid-year text, the agencies will be proposing, at about the same time as the NPR, to collect information, both qualitative and quantitative, related to scope of application

(that is, what entities within an organization are using the Basel II-based capital rules), an institution's capital structure, capital requirements as calculated under the rules, as well as disclosures related to specific risk areas including: Certain credit risk-related exposures, credit risk mitigation, securitization, market risk, operational risk, equities and interest rate risk. Under the Pillar 3 requirements, banks will not be required to disclose propriety information related to their capital models.

Q.9. If Basel II is implemented, do you favor at any point in the future reducing the leverage ratio for well-capitalized and adequately capitalized banks or reducing the statutory capital thresholds for prompt corrective actions?

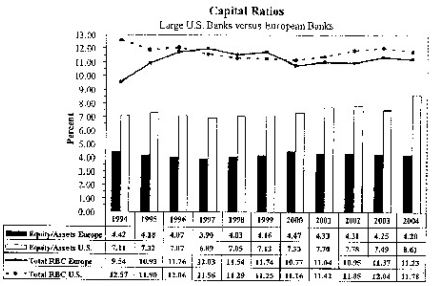
A.9. The Federal Reserve is not in favor of any attempt to reduce or eliminate the leverage ratio, nor to reduce or eliminate statutory thresholds for PCA. These existing requirements would provide additional protection against possibly unfavorable outcomes in Basel II implementation. From a minimum regulatory capital perspective, not all risks have been explicitly incorporated into the Basel II-based framework in terms of a specific capital charge. To be clear, we believe that the leverage ratio and PCA rules should remain in place for banks operating under both Basel I and Basel II rules.

The Federal Reserve also would note that all of the banking agencies would need to concur before bank leverage requirements and PCA thresholds could be eliminated. Moreover, since Congress has mandated some aspects of these requirements for banks, changing them would require an act of Congress.

Q.10. In his testimony, Mr. Isaac points out that compared to European banks, "large U.S. banks are much better capitalized and far more profitable in terms of their operating margins." Do you agree or disagree with Mr. Isaac's observation, and what is your rationale for your position?

A.10. The strength and sustained earnings power of the U.S. banking industry over the past several years have indeed been remarkable. U.S. banks have regularly delivered record profits and higher shareholders' equity. In this setting, most comparisons of U.S. banking organizations with many foreign banks will favor the U.S. institutions. The chart below reports aggregate capital measures for the seven U.S. bank holding companies and 28 private-sector European banks with assets greater than $200 billion, based on public disclosures and shown on a merger-adjusted basis. Crude equity-to-assets ratios (shown as bars) were significantly higher for the U.S. banking organizations. Gauged by the total risk-based capital ratio, however, capital levels at the largest American and European banks were roughly comparable over the last decade. During the 10 years ending in 2004, U.S. banks reported a total risk-based capital ratio of 11.63 percent on average, only 29 basis points above that for European banks. Although in most of these years the average ratio for U.S. banks was higher, in others (1997 to 1999) the average ratio for European banks exceeded that for U.S. banks. Both sets of results contrast sharply with data for 1994, which show sharply higher capital ratios for U.S. banks that reflected buttressing at many U.S. banks against still-significant

asset quality problems and a buildup of capital ratios at European banks during the early years of the Basel I regime.

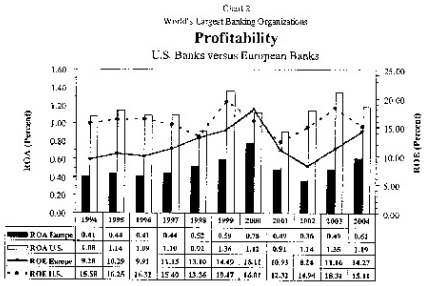


Although there are many differences between the balance sheets and risk profiles of U.S. and European banking organizations, the difference that seems to be most important to this comparison of capital ratios is that the European banks tend to have relatively higher concentrations in government bonds and other assets that receive low risk weights under the current Basel standards. The risk-based capital ratios take account of this difference in risk profiles—albeit crudely—while the equity-to-assets ratios do not.

All 35 of the large institutions in the data above, and indeed nearly all banking organization in these countries, hold capital well in excess of their current regulatory minimum requirements and are judged to be adequately capitalized—or better—by their regulators. As such, the differences in capital levels are best understood as the result of choices made by the organizations' management rather than a competitive advantage or disadvantage. Minimum capital requirements are just one of many factors bank managements consider in developing their capital policies. Banks may choose the size of their capital "cushions" with many objectives in mind, including positioning themselves as desirable counterparties, managing funding costs, optimizing their risk profile, and taking advantage of potential growth opportunities. Market discipline plays an especially significant role for these 35 institutions because all are active in global financial markets and are thus subject to the scrutiny of their counterparties around the world. Supervisors review the capital cushions and their rationale as part of the larger assessment of capital adequacy, but the size of the cushions is based on managements' own assessments and judgments.

Turning to profitability, the chart below displays aggregate return on average assets (ROA, a reasonable proxy for overall operating margins) for the same group of large U.S. and European banking organizations, showing that on this basis U.S. banks indeed have generated consistently higher profit margins. Market participants and supervisors generally prefer to measure profitability as return on equity, that is, as the ultimate return to shareholders. On this basis, a differential in profitability is still evident although less pronounced and not present in every year.

Since 1994, return on equity averaged roughly 16 percent for U.S. banks versus 12 percent for European banks.



Q.11. Do you believe that U.S. banks are operating at a significant disadvantage vis-á-vis foreign banks due to the higher capital requirements imposed on U.S. banks? If you do, please explain in detail and quantify the competitive effects on U.S. banks, including giving your assessment of how low U.S. capital requirements would need to go in order to level the playing field with large foreign banks.

A.11. Minimum regulatory capital requirements imposed on internationally active U.S. and foreign banks have been substantively the same since the implementation of the 1988 Basel Accord. The 1988 Accord was intended to bring global commonality to the assessment of capital adequacy and to promote stronger capital positions in banks globally. There exist some differences in implementation across local jurisdictions that arise in large part from differences in banking system structures, accounting practices, and capital instruments. Nonetheless, the risk-based capital ratios provide reasonably comparable indicators of capital adequacy.

Such assessments and comparisons between U.S. and local jurisdiction requirements are performed routinely by the Federal Reserve as part of its responsibility to supervise State-chartered branches and agencies of foreign banks operating in the United States. Foreign banks intending to do business in the United States are expected to meet the same general standards, experience, and reputation as required for domestic institutions.

As noted in the response to question 10, large banking organizations in the United States and Europe—and indeed nearly all banks in these countries—have operated at capital levels well in excess of these regulatory minimum standards for many years. The size of these capital cushions is chosen by these institutions' management after considering a number of factors, including the demands and expectations of the banks' counterparties and customers, and investors, the needs of the institutions' particular business strategies, the institutions' funding mix and costs, the overall risk posture of the institutions, and flexibility to accommodate future business growth or acquisitions. Supervisors review the capital cushions and their rationale as part of the larger assessment of capital adequacy, but the size of the cushions is based on managements' own assessments and judgments.

Despite the convergence of capital standards and guidelines for meeting capital equivalency for foreign banks operating in the United States, there remains the perception that higher capital requirements are imposed on U.S. banks, placing domestic banks at

a competitive disadvantage vis-á-vis foreign banks. Such perception may be based on the additional leverage requirement for U.S. banks based on the ratio of Tier 1 capital to total assets. These additional requirements support the safety, soundness and resilience of the U.S. banking system. Actual capital adequacy ratios remain well above all regulatory minimum levels, including Tier 1 leverage requirements and standards for being well-capitalized under PCA, at essentially all U.S. banks and all of the largest European institutions. As such, there is no indication that capital adequacy requirements have significant effects on the competitive balance between U.S. and foreign banks.

Q.12. If capital standards are reduced for the largest U.S. banks, do you believe that will place U.S. banks that do not implement Basel II at a competitive disadvantage vis-á-vis banks that do implement Basel II? If so, how do you suggest that competitive inequity be remedied?

A.12. The Basel I ANPR presented options to make minimum regulatory capital more reflective of risk. The regulators are proposing to recalibrate capital by portfolio type to reflect higher or lower risk exposures based on current information. A better alignment of capital to risk in Basel I would mitigate the potential differences between that framework and the more risk sensitive Basel II framework. As noted earlier, one of the objectives of the amended Basel I ANPR was to begin the process of making enhancements to the existing minimum risk-based capital rules for all banking institutions operating in the Unites States, in part, to mitigate competitive inequities that may arise between organizations using the Basel I-based rules and those using the Basel II-based rules. Overall, we believe that potential competitive inequities arising from the two sets of rules will be limited. As we go forward, we want to ensure that institutions not moving to Basel II have fair opportunities to pursue business initiatives and are not adversely affected. We will continue to work on these initiatives in tandem and will be seeking input from the industry, Congress, and others along the way, particularly related to the potential effects of both initiatives.

Q.13. Have you considered requiring the largest U.S. banks to implement Basel II-type models as part of their risk management programs without making Basel II a capital-regulation device? If you have considered and rejected such an approach, please explain why you rejected it.

A.13. We have considered whether we can just continue to encourage the improvement in risk modeling at banks and stop there, that is, not tie risk models to capital. While improvements in the methodology of risk models and the transparency of better risk modeling in business decisionmaking are very useful, it is our view that one cannot stop there. Banks that have similar models of risk can have very different inherent levels of risk. That is, each institution has to decide what level of risk it is willing to accept to run its business. Some organizations are willing to take on much greater levels of risk than others. Some lines of business and some products are inherently riskier than others, while some organizations may be more adverse to accept risk than others.

For safety and soundness reasons, bank supervisors must be sure that a bank with greater exposure to riskier lines of business, products, and customers holds more capital than a bank that is more risk adverse and designs its business plan to minimize risk-taking. That is, just looking at risk models and not tying capital to the measured risk exposures does not provide the backstop that supervisors need to ensure that each institution has the appropriate capital in place before the unexpected loss occurs. Capital should be based on risk exposures, and the evolving risk-modeling methodologies provide improved tools to better determine the appropriate level of capital.

That is why the Basel II framework contains minimum regulatory capital requirements in Pillar 1, to tie risks to levels of capital. In Pillar 1, the framework seeks to achieve a balance between risk sensitivity and prudence by building on certain firm-specific inputs, but deriving capital outputs from a regulatory prescribed capital model. Pillar 1 is, of course, complemented by Pillar 2 (supervisory review) and Pillar 3 (market discipline). Together, the three pillars should provide banks with the appropriate incentives to move toward leading risk-measurement practices and provide supervisors and the marketplace with a conceptually sound framework for assessing how capital and risk evolve over time, which institutions are outliers, and, ultimately, whether the banking system is becoming more or less sound from a capital adequacy perspective.

Q.14. Have you compared the capital requirements for the participating banks that came out of your Quantitative Impact Study with the judgments of your professional bank examination staff on the capital needs of those same banks? How closely correlated were the results?

A.14. The QIS–4 exercise involved not just Basel II experts from within the U.S. banking agencies, but also members of the on-site teams responsible for day-to-day supervision of the entities participating. On-site supervision staff received and reviewed the information submitted in QIS–4 by their respective institutions. But, they did not review the measurement systems and methodologies used by the banks to construct the information. The incorporation of on-site teams into the QIS–4 process is consistent with our overall objective of "normalizing" Basel II work into regular supervision for relevant institutions as we move closer to implementation. A major portion of the QIS–4 exercise was a qualitative questionnaire filled out by participating institutions, in which they described what stood behind the numbers they produced (the data sources, methodologies, etc.). On-site teams were asked to compare their knowledge and understanding of the institution with what was contained in the questionnaires.

In general, on-site supervision staff agreed with the conclusions of Basel II experts about the QIS–4 results namely, that the *drop* in QIS–4 required minimum risk-based capital was largely due to the favorable point in the business cycle, and the *dispersion* among institutions was largely due to the varying risk parameters and methodologies they used. Importantly, we also learned that some of the data submitted by individual institutions was not complete;

in some cases banks did not have estimates of loss in stress periods or used ad hoc estimates, which might have caused minimum regulatory capital to be underestimated. As we have said before, we would not be comfortable qualifying any institution for Basel II based on QIS–4 results, since it was just a point-in-time look at how banks are progressing and was conducted on a "best-efforts" basis, rather than in "full compliance" with the Basel II rules, without the benefit of additional supervisory oversight. In the future as banks move to the parallel run and prepare to qualify for Basel II certification, the supervisory oversight process will play a significant role in determining whether the measurement and risk management systems used by the participating banks are consistent with the Basel II requirements. There is obviously more work to be done. The recognition of the amount of work still required is reflected in the U.S. agencies' plan for a one-year delay before Basel II is implemented and a one-year extension of transitional floors once it is.

Q.15. Basel II represents an attempt to apply the same formulas for measuring commercial loan credit, consumer loans, and commercial real estate loan risk to banks in the United States and to banks in other developed countries. What evidence do you have that the formulas will assure that U.S. banks will hold sufficient capital to see them through a variety of economic scenarios, such as those that have occurred in the United States over the last 25 to 50 years? Are the markets and economic environment similar enough that the same formulas can be applied safely to large banks from the United States, Canada, the United Kingdom, France, Germany, Japan, etc.?

A.15. The Basel II framework contains formulas for calculating risk weights based on bank inputs. In developing Basel II, it was necessary to create "average" risk-weight functions to apply across countries that plan to implement it. While these formulas do not necessarily fully capture each institution's risk profile perfectly, they are the best approximation at this time for producing similar capital requirements given similar risks across a range of institutions. One of the key features of the Basel II framework is that many specifics with respect to implementation are left to national discretion. As a result, certain aspects of the framework, which could include some parts of the formulas, will be tailored to national jurisdictions. Moreover, to the extent that there are differences in the risk-taking of banking institutions across the major developed countries, the Basel II framework was designed to take these differences into account through the resulting differences in bank-provided risk parameters, including estimates of probability of default, loss given default, and exposure at default.

Given that the Basel II framework is risk sensitive, minimum regulatory capital requirements should be expected to fluctuate to a certain extent as economic conditions change. This aspect of the framework is necessary and desirable, sending signals to both banks and supervisors about changing credit conditions and potentially aiding the evaluation of the relationship between actual and minimum capital levels at any point in the economic cycle. That said, the Federal Reserve is working diligently to ensure that U.S.

banks will hold sufficient capital to see them through a variety of economic scenarios. Indeed, the framework has been constructed with safeguards in Pillars 1, 2, and 3 to help ensure that minimum capital requirements remain prudent at all points in the economic cycle. As we gain additional experience from banks' implementation of the revised framework, we will continue to assess the adequacy of the framework, including the behavior of minimum capital requirements over the economic cycle. We also will have other supervisory tools to use in conjunction with Basel II, things like the leverage ratio and PCA.

As part of the U.S. rulemaking process, the U.S. agencies are seeking comment on the entire framework, including its formulas, to determine its appropriateness for U.S. institutions. The U.S. agencies have already demonstrated their willingness to deviate from other countries' implementation strategies by extending the start date for Basel II in the United States and calling for an additional year of transitional floors. And, should it become necessary, the Federal Reserve would be prepared to consult with our colleagues at home and in other Basel member countries to make changes to the framework itself, in keeping with the objective of ensuring the safety and soundness of the U.S. banking system.

Q.16. The agencies' current transitional plan for implementing Basel II contemplates allowing capital levels to fall to an 85 percent "floor". How can the agencies know, even before the "parallel run" contemplated for 2008, that a drop of 15 percent in the capital of banks would be consistent with safety and soundness considerations?

A.16. It is important to remember that the floors described in the Basel II proposals apply to individual institutions, not the banking system as a whole. The floors require a financial institution to hold capital at the higher of the minimum regulatory capital determined by its risk models or the transition floor. It is only when an individual institution can demonstrate to supervisors that it has a lower risk profile than Basel I implies, that supervisors will then consider allowing that institution's minimum regulatory capital to decline to the floor levels proposed under Basel II. And after the 3 years of floors, supervisors will continue to monitor institutions' risk profiles to see if the declines in minimum regulatory capital are still warranted. Of course, for some institutions, minimum regulatory capital may increase under Basel II—reflecting the greater risk sensitivity of the new framework.

Additionally, the implementation of Basel II will progress in stages, and only after supervisors achieve comfort at the end of each stage will we move on to the next. The agencies' response to QIS–4 is a good example of how we took extra time before moving forward, and then did so with a revised plan. We expect to use the same type of prudence for the period of transitional floors, and by that time we will have much more information than today about Basel II and its effects. Even before moving to the transitional floors, banks will have to demonstrate their ability to produce credible Basel II minimum capital measures; that is, they will be able to move to the first year of floors only if the primary supervisors are satisfied with what they see during the parallel run. The first

year of floors is set at 95 percent (implying at most a 5 percent decline for any given institution). If the primary supervisors are not comfortable with a bank moving to the second-year floor (at 90 percent), they might retain the 95 percent floor for that institution. Similarly, primary supervisors will have to give approval for an institution to move from the 90 percent to the 85 percent floor. The primary supervisors will also have to approve a banking institution moving from the 85 percent floor to full implementation without a floor.

Q.17. Basel II's capital formulas are based on highly complex models that are to be implemented on a bank specific basis. While Basel I has been criticized for its oversimplification, the sheer complexity of Basel II has raised some very serious concerns. In his written testimony, Mr. Isaac states, "Basel II is so complex it cannot be adequately understood by senior bank managements, boards of directors, regulators, or the public." Professor Kaufman states, "Increased complexity is likely, however, to both increase compliance costs and reduce understanding, particularly by the bank CEO, board of directors, and possibly even the CFO and by bank supervisors." Do you share Mr. Isaac's and Professor Kaufman's concerns? If you share their concerns, what recommendations do you have for the regulators as to how to fix this problem?

A.17. Basel II is designed to reflect the risk-management practices of large, internationally active financial institutions. These institutions have become more complex in the sophistication of their services and business practices, as well as in their organizational structures. As a result, effective risk management has been evolving to support these innovative financial structures. Indeed, Basel II may not look that complex to many of the risk managers at institutions today. Most banking organizations involved in complex financial instruments should already possess an understanding of advanced risk concepts and should have implemented effective risk-measurement and -management practices. Indeed, the largest, most complex institutions in the United States are already employing models as complex as, or more complex than, those in Basel II, underscoring the need to move to a capital adequacy framework that is more closely aligned with how banks measure and mange risk internally.

As prudent supervisors, all of the U.S. banking agencies require any organization employing sophisticated financial practices or using complex financial instruments to have adequate risk management to address its risk positions, as well as governance and control structure commensurate with those activities. This includes having knowledgeable staff to set risk limits effectively, and clearly communicate risk positions and risk-management strategies to executive management and boards of directors.

The advanced approaches of Basel II are complex and have many moving parts, which is one of the reasons that in the United States we are proposing to require only the largest, most sophisticated financial institutions to adopt Basel II. For these organizations, the incremental cost of adopting Basel II advanced approaches, while admittedly significant, should be relatively modest compared with

the significant risk-management investments they have already made.

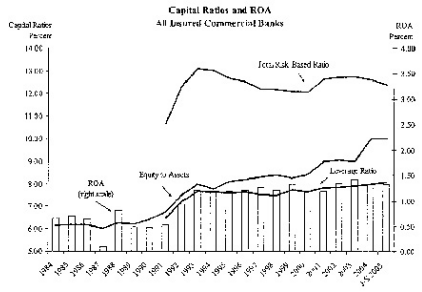
It is our view that via increased disclosures as part of Pillar 3, Basel II will actually augment the general understanding of banks' capital adequacy in relation to underlying risks by providing increased information on banks' risks and how they are measured and managed.

Q.18. According to FDIC data, the equity to capital ratio of insured U.S. financial institutions reached a low of slightly above 5 percent in the late 1980's, during the S&L crisis, and then rose steadily through the 1990's reaching the level of over 10 percent, at which it stands today. Profits—as measured by return on assets—which had fallen dramatically during the period of low capital, also began a steady rise in the 1990's, rising to well over 1 percent for the last decade, reaching record levels. When looked at together, it becomes clear that large profits and strong levels of capital can coexist. Do you agree that strong levels of banks capital can and do coexist with strong bank profitability?

A.18. Profitability has a direct relationship to capital levels. As banks' profits recovered in the early 1990's, the amount of earnings retained after paying out dividends also rose. Retained earnings contribute significantly to increased levels of equity and total capital.

Profitability and healthy capital levels are both important to a safe and sound banking system. Earnings and capital adequacy are two components of the FFIEC's CAMELS supervisory rating system. Strong and consistent profits provide competitive returns to shareholders and allow for internal generation of capital while healthy capital levels allow banks to weather potential adverse conditions, protecting the deposit insurance funds and aiding funding and liquidity by making the bank more attractive to market participants as a counterparty. Moreover, strong capital means that bank owners have a significant stake in ensuring that the institution is managed in a prudent manner. Consistently strong earnings and capital also suggest that institutions have prudently balanced their appetite for risk-taking with return, an objective that the Federal Reserve believes will be further advanced by the Basel II framework.

The chart below depicts aggregate capital ratios and profitability (measured as return on assets, or ROA) for insured commercial banks in the United States since 1984. The lines in the chart show three capital measures, including a simple equity-to-assets ratio and, since the implementation of the 1988 Basel Accord (which took effect in 1992), the more risk-sensitive total risk-based capital ratio and the Tier 1 leverage ratio.



In the late 1980's, the simple equity-to-assets ratio was just a little over 6 percent. The implementation of the Basel Accord and the PCA framework in the United States were part of a broader supervisory emphasis on strengthening capital positions. The positive results of this emphasis are borne out by steady increases in equity-to-assets and leverage ratios over time, and aggregate risk-based capital ratios that are well in excess of minimum standards. Implicit in the aggregate data shown here is that nearly all insured commercial banks have consistently maintained regulatory capital ratios that exceed minimum standards for being well-capitalized under the PCA framework.

Profitability also improved in the 1990's for many reasons, including recovery from the downturn in commercial real estate in the 1980's, innovation and the growth of new business lines, expansion of bank activities in the capital markets arena, and improved operating efficiency.

On balance, strength in both profitability and capital levels is important to the soundness and resiliency of a banking system. During the most recent economic downturn, capital and reserve levels provided a cushion for banks to absorb losses and weather the credit cycle. Banks that are strongly capitalized may enjoy greater flexibility and a broader range of choices in how to handle adverse credit or operational conditions. That ultimately may have a beneficial impact on their long-term profitability.

Q.19. Under the Administrative Procedure Act, agencies are required to consider public comment prior to issuing new final regulations. How can the agencies fully comply with this requirement? Doesn't the fact that the agencies reached an international agreement on the new capital framework effectively limit their ability to fully consider public comment and modify proposed regulations in light of that comment?

A.19. The Federal Reserve has been, and intends to continue, complying fully with the letter and spirit of the Administrative Procedure Act (APA) in connection with the pending U.S. rulemaking to implement Basel II. Although not required by the AP A, the US. banking agencies issued an ANPR on the U.S. implementation of Basel II in August 2003 to ensure that any proposals by the agencies to implement Basel II in the United States would reflect comments from banking organizations, Members of Congress, and

other interested parties.[1] Comments received on the ANPR influenced significantly the June 2004 Basel II document agreed to by the U.S. banking agencies and other G–-10 bank supervisory authorities and will influence in important ways the forthcoming NPR on the United States implementation of Basel II. We note that the Basel II framework has changed considerably since the first proposal by the Basel Committee in the late 1990's, in material part due to the valuable comments of U.S. financial institutions and other interested parties in the United States.

The June 2004 Basel II document is not a binding agreement that has the force of law in the United States. In addition, while it lays out important principles, it leaves to national discretion much of the specific details regarding implementation. The U.S. agencies expects that the forthcoming NPR would be generally consistent with the June 2004 Basel II document but likely will vary in some of its details from the June 2004 Basel II document to accommodate some special features of U.S. banking organizations and the U.S. financial markets. In addition, if comments received on the NPR suggest that changes should be made to the June 2004 Basel II document or to any U.S. final rule that implements Basel II, the Federal Reserve will work with the appropriate parties to make those changes.

Although not required by the APA, the Federal Reserve and the other U.S. banking agencies also have sought public comment on a draft of the supervisory guidance that would accompany any U.S. rule that implements Basel II.[2] The agencies have revised this draft guidance to reflect comments from U.S. banking organizations and intend to seek a second round of comments on the guidance soon after issuance of the NPR. The agencies have endeavored, and will continue to endeavor, to be as transparent as possible about all aspects of Basel II implementation in the United States, including the important risk-measurement and -management infrastructure requirements of the Basel II framework.

Finally, it is useful to remember that Basel I has been amended 28 times in the United States since it was introduced, often in order to keep up with advancements in the industry; the recent changes relating to certain securitization transactions are a good example. Today's U.S. Basel I rules differ from Basel I rules in other countries, appropriately reflecting the characteristics of national banking systems. We expect to tailor Basel II rules to the U.S. environment in a similar fashion.

Q.20. The Basel II framework ignores a significant risk: Interest rate risk. Many banking assets, such as mortgage servicing rights, are extremely sensitive to changes in interest rates, and the value of assets such as these may fluctuate dramatically when interest rates change. How do you propose to take interest rate risk into account under the Basel II framework?

A.20. The Basel II framework addresses interest rate risk substantively as part of the Pillar 2 process. Specifically to support the Pillar 2 approach, the Basel Committee issued in July 2004 a paper, "Principles for the Management and Supervision ofInterest

[1] 68 Federal Register 45900 (August 4, 2003).
[2] 68 Federal Register 45949 (August 4, 2003: 69 Federal Register 62748 (October 27, 2004).

Rate Risk." This paper combines a principles-based approach along with a quantitative benchmark. The first 13 principles address the need for effective interest rate risk measurement, monitoring and control functions within the interest rate risk management process. Principles 14 and 15 address the supervisory treatment of interest rate risk in the banking book.

The paper provides guidance to help supervisors assess whether internal measurement systems are adequate. If supervisors determine that a bank has insufficient capital to support its interest rate risk, they must require either a reduction in the risk or an increase in the capital held to support it, or a combination of both. Supervisors are cautioned to be particularly attentive to the capital sufficiency of "outlier banks"—those whose interest rate risk in the banking book leads to an economic value decline of more than 20 percent of the sum of Tier 1 and Tier 2 capital following a standardized interest rate shock or its equivalent. Individual supervisors may also decide to apply additional capital charges to their banking system in general.

In practice, the approaches developed in this paper, supporting Pillar 2, are consistent with the existing supervisory practices of the Federal Reserve and other Federal banking and thrift regulators. Additionally, if the agencies begin to see evidence that the existing treatment of interest-rate risk in Basel II is inappropriate, inaccurate, or inadequate, they can propose changes.

Q.21. Due to the tremendous devastation caused by Hurricanes Katrina and Wilma this fall, it is estimated that over 100,000 homes have been lost. Would the Basel II framework have provided institutions with enough capital buffer to handle a calamity of this magnitude?

A.21. Over the past several years, as part of broader risk-management improvements, banks have been upgrading business continuity and contingency planning for natural disasters or other large-scale events. Preparations for Y2K, lessons learned from September 11, and experience with recent natural disasters have aided in these efforts. We believe that Basel II would provide even more benefits to institutions in this particular area because of its expected risk-management enhancements. These enhancements would likely apply to managing both operational risks and credit risks. For example, institutions should plan for the possibility that their business operations could be disrupted by a natural disaster in a certain location. Similarly, as they estimate possible losses during stress conditions, institutions should take into account their credit risk concentrations and the possibility that obligors in an entire geographic area could be adversely affected and suffer economic and financial difficulties. In fact, as part of their work related to Pillar 2, institutions should conduct analyses of the buffer they hold above minimum regulatory capital levels to ensure that actual capital held reflects all risks to which that individual institution is exposed. In general, Basel II should provide institutions with a better sense of the capital needed to support risks associated with natural disasters or other large-scale stress events than they currently have, as well as an improved ability to manage those risks.

Q.22. Last week, on November 18, 2005, the *Financial Times* published an editorial by Harold Benink and Jon Danielsson titled, "There is a Chance to Correct the Defects of Basel II." Harold Benink is Professor of Finance at RSM Erasmus University in the Netherlands. Jon Danielsson is Reader in Finance at the London School of Economics. They concluded: "Instead of requiring bank capital to be risk sensitive, banking regulation should simply require the use of high quality risk models in banks without using their output to determine capital. Minimum capital is better calculated as a simple fraction of bank activity in broad categories." What is your response to this suggestion?

A.22. See response to question 13. Regarding the suggestion that minimum regulatory capital is better calculated as a simple fraction of bank activity in broad categories, this is essentially what the current Basel I capital framework does. However, the Federal Reserve believes that this simple framework has become increasingly inadequate for large, internationally active banks offering ever-more complex and sophisticated products and services. Today's capital framework, left unchanged, could eventually undermine the safety and soundness of the financial system. It encourages banks to hold on to high-risk assets and shed low-risk assets and does not provide incentives for better risk-management techniques and processes.

Basel II builds on the risk-management approaches of well-managed banks and creates strong incentives for banks to move toward leading risk-measurement and -management practices. It establishes a coherent relationship between how supervisors assess regulatory capital and how they supervise the banks. Thus, it will enable examiners to better evaluate whether banks are holding prudent capital levels, given their risk profiles, and to better understand differences across institutions. For safety and soundness purposes, prudential supervision requires that sound bank management requires the ability to model and measure risk, and that minimum regulatory capital reflect the amount of risk exposure that the individual institution chooses to accept.

Q.23. In his testimony, Mr. Isaac states, "I have not found a single professional bank supervisor who is enthusiastic about Basel II." We have also heard of a similar lack of enthusiasm on the part of the supervisors who will actually be responsible for supervising Basel II. What is your response? Separately, what gives you confidence that regulators will be up to the task of understanding and policing Basel II?

A.23. In our view, most U.S. bank supervisors are enthusiastic about risk-management improvements expected through the application of Basel II and fully support the concepts behind the framework. In fact, supervisors already work with bankers at large, complex institutions to advance their ability to employ more sophisticated and quantitative risk measures and corresponding risk-management practices. While this is the first time that we are using bank inputs as determinants of minimum regulatory capital requirements for credit and operational risk exposures, we do have the experience of the Market Risk Amendment, which has been implemented successfully in terms of promoting better risk manage-

ment and measurement of market risk exposures. That said, bank supervisors, as a group, are skeptical and cautious-indeed, they are trained to be so. So it not surprising that some bank supervisors would have some reservations about immediately adopting a new capital framework whose full effects are not yet known. Furthermore, U.S. bank supervisors will want to ensure that the risk-measurement and -management improvements expected through the application of Basel II actually prove fruitful before allowing institutions to use internal inputs for regulatory capital.

Accordingly, the U.S. agencies are taking a careful and deliberate approach to adopting Basel II in this country, and will continue to review and analyze its potential impact with each successive step in the process. The extensive comment period, the parallel run, the transitional floors, the opportunity for additional review and analysis, and additional rulemakings all indicate that we will not move to Basel II unless we have solid evidence that it is meeting its objectives and promoting safety and soundness of the U.S. banking system. During each of these stages, supervisors will have full access to institutional information, including data sources and methodologies, in order to render a judgment about banks' preparedness. The input from these supervisors will continue to be a critical component of the judgments about elements of the Basel II proposal as well as individual bank's readiness to move to Basel II.

We should also note that U.S. bank supervisors have for many years been involved with analyzing and examining sophisticated risk-measurement and -management practices at large, complex organizations. At many levels, our examination staff has experience with practices similar to or even more sophisticated than those described in Basel II. Our knowledge and experience gives us some confidence in both the banks' abilities to achieve the risk-measurement and -management enhancements expected in Basel II, as well as confidence in our own ability to supervise banks under Basel II. But as always, we, as good supervisors, will still need to see actual results before we can be completely comfortable.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SHELBY FROM DONALD E. POWELL

Q.1.a. Basel II would impose new demands on bank regulators. It would require bank regulators to not only approve banks' internal assessments of their risks, but also to make judgments on whether banks are holding enough capital in light of all the risks banks face. This means bank regulators are going to need personnel who are well-trained in risk analysis.

How many additional personnel does your agency expect it will need to hire in order to implement Basel II? What type of expertise will your agency need to obtain? Do you foresee any problems in recruiting?

A.1.a. The FDIC's staffing needs relative to Basel II derive from two roles: (i) its role as primary Federal banking supervisor of insured depository institutions that opt-in to Basel II, or that otherwise adopt Basel II by virtue of being bank subsidiaries of organizations that are required to adopt Basel II; and (ii) its role as deposit insurer of other banks adopting Basel II.

It is anticipated that most of the staffing needs relative to Basel II derive from the first role. There are roughly 20 FDIC-supervised insured banks that have either expressed an interest in opting in to Basel II or are subsidiaries of mandatory banking organizations. Basel II implementation for these banks will involve a hybrid supervisory approach whereby traditional examiner judgment and risk analysis skills will be supplemented with targeted quantitative review of risk management models.

Our approach to meeting our Basel II staffing needs is to reallocate and train existing examiners that already possess sound risk analysis and judgmental capabilities, and target other specialists to address non-traditional examination functions. This has been supplemented with a limited amount of external hiring of individuals with academic or practitioner backgrounds in quantitative risk measurement. Appropriate staffing levels, as well as the efficiency and effectiveness of internal processes, will continue to be monitored on an on-going basis. We anticipate additional staffing requirements as the implementation process goes forward.

Q.1.b. Will your agencies be able to successfully compete against banks in the recruitment of personnel? Do you have any concerns that banks will simply be able to hire the best Ph.D.'s in risk modeling and outgun their regulators?

A.1.b. In part because of their ability to offer more lucrative compensation packages, large banks will indisputably enjoy certain advantages in recruiting qualified and motivated risk modeling professionals both from the private sector and from regulatory agencies. This is by no means a new issue created by Basel II, but it may become more pronounced in the coming years as banks build out required Basel II systems.

Two countervailing considerations must be kept in mind, however. First, the agencies have traditionally been able to attract and retain highly qualified individuals, in both traditional examination disciplines and more quantitative disciplines, for whom public service is a satisfying career path. Second, it must be emphasized that the evaluation of proprietary bank models will be a defined and narrow subset of overall Basel II implementation activities. Traditional examination functions of assessing overall risk, adequacy of banks systems, internal controls, and management oversight will continue to play a lead role in the overall supervisory process.

Q.1.c. How much in additional annual costs do you expect to incur in implementing Basel II? Other than personnel costs, what other costs will your agency incur in implementing Basel II? Are there any large one-time costs?

A.1.c. It is difficult to isolate implementation costs related to Basel II, in part because Basel II represents only one aspect of the overall increasing complexity associated with the supervision and insurance assessment of large insured depository institutions.

Over the next few years, the FDIC's costs will be primarily associated with staff time devoted to the rulemaking processes, guidance development and training, industry outreach, and on-site examination processes. The cost associated with recruiting and retaining qualified staff will also likely increase in the coming years.

Q.2.a In his testimony, Dr. Tarullo posed several questions that he believes need to be answered by U.S. banking agencies before implementation of Basel II begins. Please provide answers to his questions with respect to your agency, which are as follows: "Do the agencies believe that, in general, minimum capital levels are too high and, if so, what is the basis for that belief?

A.2.a. The FDIC does not believe that minimum capital levels are too high. There is little evidence that the historically high capital levels in the United States have limited business opportunities for banks or the availability of credit. Indeed, the industry as a whole has had record earnings over the past few years.

Market analysts also do not believe that lowering capital standards would benefit the industry. For example, Standard & Poor's recently (November 30, 2005) released a report on "Bank Industry Risk Analysis: United States." In that report, the analysts observed that "A final uncertainty for the capital strength of the sector is the adoption of the Basel II capital accords. While Standard & Poor's wholeheartedly endorses efforts to link capital levels and risk, we do not believe that the industry as a whole is overcapitalized. For this reason, material reductions in capital would be viewed as a negative for the industry's strength."

Q.2.b. 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?

A.2.b. No. There are diverging views about the levels of capital that the A–IRB approach will ultimately require of large banks. There have been a number of major interagency studies of this issue in which potential adopters of Basel II provided their own estimates of specified risk parameters to lengthy and detailed spreadsheets designed to calculate the resulting A–IRB capital requirements. The results of such studies remain subject to considerable uncertainty, as discussed below.

The agencies have stated an expectation that capital requirements under the advanced approaches of Basel II would not, on average, be substantially less than current risk-based capital requirements, although capital requirements for individual banks might show more variation based on their risk profiles.

The two most recent Quantitative Impact Studies, QIS–3 conducted in 2002–2003, and QIS–4 conducted in 2004–2005, reported, based on banks own estimates, average reductions in risk-based capital requirements of 6 percent and 15.5 percent respectively for the participating U.S. banks.

A number of points need to be considered in evaluating these estimates. First, the data on which they are based is imperfect, based as they are on bank systems and models that are in various stages of development, and made in many cases without a clear understanding of what the Basel II systems requirements and supervisory expectations ultimately will be. Some observers have pointed in particular to a lack of compliance by QIS–4 reporters with requirements to incorporate stressed conditions and economic losses into estimates of loss given default, tending, at least from this consideration alone, to understate capital requirements.

Second, QIS–3 was conducted closer to a period characterized by recession conditions in the corporate sector while QIS–4 was conducted during more benign economic conditions. From this difference alone one would expect a greater reduction in capital requirements to be reported in QIS–4 than was reported in QIS–3. This, in fact, was the case.

Third, most QIS–4 banks reported their exposures as if they received no capital benefit from guarantees, collateral, or hedging, because their information systems were not yet configured to allow them to do so. Were the systems in place to allow the banks to benefit from the credit risk mitigation already in place, the reductions in reported capital requirements would have been greater, at least from this factor alone.

Fourth, the FDIC has published analysis that suggests that both QIS–3 and QIS–4 fundamentally overstated the capital requirements likely to be produced by Basel II, once it is actually up and running. This analysis has argued that participating banks in both studies used risk inputs that were, on average, more conservative than what the Basel II framework, taken literally, would appear to require. Details of this analysis are available in an article in the FDIC's "FYI" series published in December 2003, and in appendix B of Chairman Powell's November 2005 testimony before the Senate Committee on Banking, Housing, and Urban Affairs.

Finally, it should be noted that the magnitude of reduction in capital requirements depends significantly on both the capital concept being used and the measurement concept being used. The QIS–4 aggregate results described above refer to the average reduction—5.5 percent—in total capital requirements. The median reduction, in contrast, was 26 percent. The reductions in tier 1 capital requirements (tier 1 capital excludes loan loss reserves, most subordinated debt, and other elements not fully available to absorb losses on a going-concern basis) were greater. The average QIS–4 reduction in tier 1 capital requirements was 22 percent and the median reduction in tier 1 capital requirements was 31 percent.

Q.2.c. 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?

A.2.c. There is little research on the effect of regulatory capital standards on competition within the broader financial industry. It is difficult, if not impossible, to disentangle the effects of capital standards from other differences between segments of the industry. For example, over the past 5 or 10 years, securities affiliates of banks have gained market share at the expense of more traditional securities firms. The reasons for this shift are not clear but this trend at any rate does not suggest that these large banking organizations have suffered from a regulatory capital disadvantage to date. Going forward under Basel II, it is not clear whether there would be any important classes of assets that would be forced to be capitalized at higher levels within a bank than would be the case if those assets were financed outside the Federal safety net.

Q.2.d. 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?

A.2.d. It should be noted that "overseeing the use of bank models under A–IRB" will be but one aspect of Basel II reviews, and this process is not new to regulators (for example, market risk reviews). The FDIC has established examination programs and processes designed to assess all material risks within an institution. These existing processes will be tailored to incorporate Basel II qualification and ongoing validation through the implementation of appropriate guidance, procedures, and training, as well as recruitment or reallocation of specialized resources.

With regard to international processes, the FDIC and other U.S. regulatory agencies have fostered sound supervisory working relationships with many jurisdictions. The FDIC is actively involved in international working groups focused on Basel II implementation issues, such as the Accord Implementation Group (AIG), to ensure that high-level principles and protocols are established and that key issues are raised in an effort to reach convergence. Additionally, many jurisdictions, including the United States, have established "supervisory working groups" as a forum to vet key implementation issues at the staff level.

Q.2.e. 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? [If so, what were the views of these market factors as to the adequacy of the contemplated disclosure requirements?]

A.2.e. The agencies have consulted with investors, analysts, and ratings agencies regarding the disclosures for Basel II A–IRB banks through the Basel II ANPR and the Basel consultative papers which included solicitations for comment on the disclosure requirements. In addition, we encourage the industry to provide comment on market disclosures following the publication of the Notice of Proposed Rulemaking.

The agencies have previously sought input on the disclosure requirements through meetings with banks, ratings agencies, and other groups in connection with our participation on the Basel Committee's Transparency Group. The investor and rating agency communities have been generally supportive of the agencies' proposed disclosures. In addition, on June 4, 2002, the FDIC sponsored the "Enhancing Financial Transparency" symposium, which provided a forum for leading experts from the private and public sectors, including Wall Street experts, to discuss issues pertaining to market transparency and disclosure. Further, on July 31, 2002, the FDIC cosponsored the "Rise of Risk Management: Basel and Beyond" symposium with Credit Suisse First Boston that also included a discussion of disclosure policy as it relates to Basel II.

Q.2.f. 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?

A.2.f. In the Basel II Advance Notice of Proposed Rulemaking (ANPR) published in August 2003, the agencies indicated that if further analysis or comment suggested there would be significant unintended competitive ramifications as a result of the adoption of a bifurcated regulatory capital framework, the agencies would consider changes to both the general domestic capital rules as well as changes to the Basel II framework. The further analysis and comments received since that time have not caused the agencies to consider changes to the Basel II framework. Consequently, the agencies' efforts continue to be focused on the domestic rulemaking process for Basel II and the modification of current risk-based capital rules. Market discipline is included as one of the key aspects in the Basel II framework, the "third pillar" that requires public disclosures of Basel II information for each institution.

Q.3. Although Basel I–A aims to reduce any competitive advantage Basel II may confer on large banks, have you conducted any analysis to determine whether Basel I–A itself creates any competitive issues within the subset of banks that are intended to be covered by it? If not, do you intend to do so?

A.3. "Basel I–A" refers to the agencies' publication of an advance notice of proposed rulemaking (ANPR) that seeks industry comment on a wide variety of issues including competitive inequities and regulatory burden.

The ANPR proposes modifications to the existing risk-based capital rules where quantitative factors used to measure the risk associated with a given product or exposure can be readily articulated. However, there are certain areas where risk-measurement factors are not well-defined or universally applied, such as with unrated commercial loans and certain retail loans. The agencies have requested comments in those areas. As a result, the agencies will wait until the comments received on the ANPR have been thoroughly analyzed before more fully developed risk-based capital proposals can be considered. Until the ANPR comments have been analyzed and more definitive proposals developed, it is probably premature to speculate about competitive effects within the subset of banks operating under Basel I–A.

Notwithstanding, the FDIC is concerned with competitive issues among various Basel I–A institutions as well as between Basel I–A and Basel II institutions. To seek more information, the FDIC placed the following request in the Financial Institution Letter that transmitted the ANPR to FDIC-regulated institutions:

> The FDIC recognizes that the proposals under consideration might not be suitable to the entire universe of institutions that will most likely not adopt the Basel II approaches. Institutions vary considerably in size and capital levels. Some institutions may be more inclined to remain on the existing risk-based capital framework rather than adopt a more risk-sensitive framework.
>
> The FDIC encourages all commenters to carefully consider the implications of the proposals included in the ANPR. In addition to comments on the specific proposals set forth in the ANPR, the FDIC welcomes any alternatives or suggestions that would facilitate the development of fuller and more comprehensive proposals applicable to a range of activities and exposures.

The FDIC believes that the industry will provide significant feedback should the proposals included in the Basel I–A ANPR suggest that competitive equity issues may arise between Basel I–A institutions.

Q.4. What consideration has been given to the fact that there are huge differences between the 7,000 or so banks that will participate in the Basel I–A framework?

A.4. The FDIC believes that the Basel I–A framework should be designed to reduce the competitive inequities associated with Basel II while ensuring that capital remains adequate for the risks inherent in these institutions. However, since the beginning of the Basel I–A process, the FDIC has realized that these stated goals are difficult given the large disparity in asset size and operating complexity associated with the 8,000+ institutions that would apply the Basel I–A framework. The FDIC wants to ensure than any additional burden that could be generated by these proposals is commensurate with the benefit derived.

Therefore, in drafting the Basel I–A ANPR, the FDIC proposed that a great deal of flexibility be included in the proposals. For example, the ANPR sought comment on whether certain banks, especially community banks operating with capital ratios well in excess of their minimums, should be given the flexibility to opt out of the Basel I–A framework in whole or in part.

Q.5. In Dr. Kaufman's testimony, he stated that there is "substantial empirical evidence of a negative relationship between leverage ratios and bank insolvency," but "no such evidence between risk-based capital ratios and bank insolvency." Do you agree with Dr. Kaufman? If so, does this conclusion undermine the Basel II framework?

A.5. Dr. Kaufman is correct that there is "substantial empirical evidence" that banks with low leverage ratios are more likely to fail. There also is some academic evidence that banks with low risk-based capital ratios are more likely to fail, and some research at the FDIC has verified this result. However, it should be noted that most bank failures occurred before risk-based capital standards were implemented.

Q.6. Have you undertaken any analysis of the initial start-up costs and annual compliance costs that Basel II will impose on banks?

A.6. FDIC staff conducts routine outreach with regulated institutions that might be subject to Basel II. Cost estimates associated with designing and implementing systems and recruiting, training, or reallocating personnel are across the spectrum and are by no means firm at this juncture.

Q.7. To what degree will the significant costs necessary to comply with Basel II act as a barrier to entry that prevent banks from growing and becoming a bank large enough to qualify to use Basel II? In effect, will Basel II cement the market positions of the largest banks? If no, why?

A.7. The FDIC believes that the costs of implementing a qualified Basel II capital system would act as a significant barrier to adoption of the new framework for many institutions. In order to use the advanced internal risk-based approaches of Basel II, expensive data management systems and complex modeling must be employed; the cost of such systems would be too great for smaller and medium-sized banks to afford. The recently proposed modifications to the domestic risk-based capital rules attempt to partially miti-

gate this effect and even the playing field between Basel II and non-Basel II banks in the United States by establishing a more risk sensitive framework based on risk measures more suited to the operations of community banks.

Q.8. Please explain the type of information that banks will be required to disclose under Pillar 3 with respect to how banks calculate their capital requirements? Will banks be required to disclose proprietary capital requirement models?

A.8. The risks to which a bank is exposed and the techniques that it uses to identify, measure, monitor, and control those risks are important factors that market participants consider in their assessment of the institution. In addition to reporting their capital ratios and minimum capital requirements, the agencies expect banks to disclose information that includes the weighted average estimated probability of default, loss given default, exposure at default, and expected loss for each category of wholesale and retail exposures. The agencies also will request information on credit risk mitigants and off-balance-sheet exposures.

The Pillar 3 disclosure requirements as summarized above provide for an appropriate balance between the need for meaningful disclosure and the protection of proprietary and confidential information. Accordingly, the disclosure requirements have been structured in a manner that should limit the extent to which proprietary and confidential information is revealed. The agencies have solicited comments on the disclosure requirements though the Basel II ANPR process as well as through the issuance of Basel consultative papers. There is a need to strike a balance between obtaining sufficient information disclosure and protecting proprietary information and the agencies will carefully consider comments received on these issues. In addition, the agencies have previously sought input on the disclosure requirements through meetings with banks, ratings agencies, and other groups in connection with our participation on the Basel Committee's Transparency Group.

Q.9. If Basel II is implemented, do you favor at any point in the future reducing the leverage ratio for well-capitalized and adequately capitalized banks or reducing the statutory capital thresholds for prompt corrective actions?

A.9. No. The Basel II minimum capital measure fails to provide for any protection against interest rate risk, liquidity risk, and other material risks present in our banking system. Credit risk, market risk, and operational risk are modeled under Basel II, but such modeling is subject to a great deal of uncertainty. Given the existence of deposit insurance and other Federal bank safety net supports, clear constraints are needed on the proportion of a bank's activities that can be financed with debt.

The FDIC believes that the leverage ratio and the risk-based capital ratios are complementary measures that work well together, each compensating for the other's shortcomings. The leverage ratio sets the minimum amount of qualifying equity at stake in the financial institution. The risk-based capital ratio operates to establish limits on the amount of credit risk that a financial institution can undertake. Even in a situation where the risk undertaken by an institution is very low, moral hazard can still occur if

the amount that the equity holders have at risk is insufficient. Hence from the perspective of an insurer, the leverage ratio plays a predominant role in constraining moral hazard.

Q.10. In his testimony, Mr. Isaac points out that compared to European banks, "large U.S. banks are much better capitalized and far more profitable in terms of their operating margins." Do you agree or disagree with Mr. Isaac's observation, and what is your rationale for your position?

A.10. The FDIC agrees with Mr. Isaac's observation. Data presented by *The Banker* magazine in their annual review of the "Top 1000 World Banks" as well as data that are presented by Fitch Rating's international bank database, "Bankscope," generally indicate that large U.S. banks are better capitalized and have higher operating margins than many of their European counterparts.

Q.11. Do you believe that U.S. banks are operating at a significant competitive disadvantage vis-á-vis foreign banks due to the higher capital requirement imposed on U.S. banks? If you do, please explain in detail and quantify the competitive effects on U.S. banks, including giving your assessment of how low U.S. capital requirements would need to go in order to level the playing field with large foreign banks.

A.11. No. Given the many differences in the global financial system, such as tax, accounting, and legal frameworks, it is difficult to isolate the effects of regulatory capital requirements on international bank competition. This difficulty is compounded by the fact that the definition of which items constitute capital differs in each country to a greater or lesser degree. It is clear, however, as the question suggests, that U.S. banks face higher capital requirements than foreign banks face because of U.S. Prompt Corrective Action regulations (and because of a series of U.S. regulatory tightenings of the Basel I risk-based capital standards not emulated overseas). Yet, as indicated in the answers to other questions, this does not appear to have compromised U.S. banks' ability to prosper and compete effectively.

Q.12. If capital standards are reduced for the largest U.S. banks, do you believe that will place U.S. banks that do not implement Basel II at a competitive disadvantage vis-á-vis banks that do implement Basel II? If so, how would you suggest that competitive inequity be remedied?

A.12. Because the United States historically has maintained regulatory capital standards that have been, for the most part, the same for all banks, there is no historical evidence on which to base judgments about the competitive effects of applying vastly different regulatory capital regimes to different banks.

Our judgment is that Basel II could place community banks and thrifts at a competitive disadvantage vis-á-vis Basel II banks in the United States since the A–IRB approach available under Basel II would likely yield lower capital charges on many types of products offered, such as residential mortgage loans, retail loans, commercial loans, and commercial real-estate loans as reported in QIS–4. Without a change in the risk-based capital requirements imposed upon non-Basel II adopters, Basel II would appear to open up siz-

able gaps between the capital requirements of small and large banks for many activities. The potential exists that investors in small banks would receive suboptimal returns on these capital-disadvantaged assets compared to the returns that owners of large banks could earn on the same assets, resulting in a disequilibrium that would be corrected over time by the movement of those assets toward the large banks.

The ANPR was published in October to make capital requirements for the remaining 8,000 banks in the industry more risk sensitive. If this Basel I–A initiative ultimately proves to offer only modest capital reductions to most banks, and if Basel II proves to be as substantial a reduction in risk-based capital requirements as the QIS–4 results suggest, bank regulators will be faced with difficult decisions with regard to regulatory capital. The FDIC has expressed a preference in Congressional testimonies (May and November 2005) that these issues ultimately be resolved by finding ways to achieve less extreme results under Basel II, including recalibration of underlying formulas if results similar to QIS–4 persist during the parallel run and transition period.

Q.13. Have you considered requiring the largest U.S. banks to implement Basel II-type models as part of their risk management programs without making Basel II a capital-regulation device? If you have considered and rejected such an approach, please explain why you rejected it.

A.13. A number of large U.S. institutions currently employ internal economic capital allocation models to manage risk and make business line decisions, and have for some time. The regulators believe that banks' use of such models—the information they generate and the processes and internal controls around their validation—are of value to supervisors. Regulators' use of these approaches could take two fundamentally different directions. One is to base an explicit system of minimum capital requirements on these approaches. The other would be to retain the simpler existing capital requirements while making the validation of risk-measurement information generated by models a supervisory or "Pillar 2" requirement. Both approaches are conceptually defensible and, we believe, either can be made to work.

Q.14. Have you compared the capital requirements for the participating banks that came out of your Quantitative Impact Study with the judgments of your professional bank examination staff on the capital needs of those same banks? How closely correlated were the results?

A.14. FDIC examination staff was very much involved in designing, planning, and implementing QIS–4 and in analyzing the results. The FDIC remains concerned with the capital levels and the dispersion of results in QIS–4 data. Minimum tier 1 capital requirements reported by most of the 26 organizations were not at levels the FDIC would regard as consistent with safe and sound banking were banks actually to operate at such levels under an up-and-running system of capital regulation. QIS–4 results also reflected substantial dispersion of capital requirements for what appeared to be identical risks. Our expectation is that meaningful work remains to

be done during the parallel run and transition years to address these issues.

Q.15. Basel II represents an attempt to apply the same formulas for measuring commercial loan credit, consumer loans, and commercial real estate loan risk to banks in the United States and to banks in other developed countries. What evidence do you have that the formulas will assure that U.S. banks will hold sufficient capital to see them through a variety of economic scenarios, such as those that have occurred in the United States over the last 25 or 50 years? Are the markets and economic environments similar enough that the same formulas can be applied safely to large banks from the United States, Canada, the United Kingdom, France, Germany, Japan, etc.?

A.15. If we were faced with the prospect of sole reliance on Basel II as it now exists, without benefit of the leverage ratio, we would not have confidence that the formulas would require enough capital to see banks through a variety of scenarios. The preservation of the leverage ratio and the additional work that will be done during the Basel II transition years will be crucial, in our judgment, to ensuring the success of this framework.

With regard to cross-country comparisons, it should be noted that Basel II is not a treaty, and each country will implement the framework in its own way that makes sense given the various legal, tax, and accounting frameworks, and other differences. Also, while it may be technically correct that "the same formula" determines capital requirements across countries, its implementation leaves much up to the discretion of supervisors. It is a premise of the Basel II initiative that the supervisors will ensure adequate capital in each instance.

Q.16. The agencies' current transitional plan for implementing Basel II contemplates allowing capital levels to fall to an 85 percent "floor." How can the agencies know, even before the "parallel run" contemplated for 2008, that a drop of 15 percent in the capital of banks would be consistent with safety and soundness considerations?

A.16. The agencies' have stated the expectations, as described above, that Basel II might result in a modest overall aggregate reduction in capital requirements, with the impact on capital requirements at individual banks depending on risk profiles. We are not aware of any expectation that risk-based capital requirements will fall 15 percent or more in aggregate, and do not believe such a decline would be acceptable. The agencies have not ruled out a 15 percent reduction in risk-based capital requirements for individual banks if warranted by their risk profiles.

In this regard, it should be noted that the agencies have stated that the declines in capital requirements reported in QIS–4 are unacceptable, and if similar results persist throughout the transitional implementation period, further measures would be taken to remedy such declines.

Q.17. Basel II's capital formulas are based on highly complex models that are to be implemented on a bank specific basis. While Basel I has been criticized for its over simplification, the sheer

complexity of Basel II has raised some very serious concerns. In his written testimony, Mr. Isaac states, "Basel II is so complex it cannot be adequately understood by senior bank managements, boards of directors, regulatory, or the public." Professor Kaufman states, "Increased complexity is likely, however, to both increase compliance cost and reduce understanding, particularly by the bank CEO, board of directors, and possibly even the CFO and by bank supervisors." Do you share Mr. Isaac's and Professor Kaufman's concerns? If you share their concerns, what recommendations do you have for the regulators as to how to fix this problem?

A.17. The FDIC shares these concerns. Given its ambition to measure all forms of credit risk, operational risk, and market risk, the Basel II framework is, inevitably, complex. It is likely that there will be few individuals who will read and understand, in its entirety, the U.S. Notice of Proposed Rulemaking implementing Basel II. As discussed below, some of the adverse effects of this complexity may be mitigated through appropriate written supervisory guidance, through the retention of the leverage ratio requirements of U.S. Prompt Corrective Action regulations, and through a transparent approach to implementation of the framework.

First, supervisory guidance will be important in helping banks cut through some of this complexity—and supervisory guidance will follow the publication of any NPR.

Second, the leverage-ratio capital requirement that is part of the agencies' Prompt Corrective Action regulations will ensure that the need for a clear-cut minimum of regulatory capital is not lost in the complexity of Basel II. Basel II is a formula-driven regime that produces a capital requirement that some may portray as having the mantle of science. There is a danger that the complexity of this framework may obscure the reality that representations of its scientific certainty are incorrect.

Finally, a transparent approach to the implementation of Basel II may help mitigate the adverse effects of complexity. That means public dissemination of the results of risk-based capital calculations and summary views of the inputs to those calculations. It means sharing of supporting confidential detail behind the capital calculations among the agencies to promote consistency and best practices. It may ultimately, perhaps, involve some way for regulators to share with the industry some type of information about approaches that are being taken under the framework to the measurement of risk.

Q.18. According to FDIC data, the equity to capital ratio of insured U.S. financial institutions reached a low of slightly above 5 percent in the late 1980's, during the S&L crisis, and then rose steadily through the 1990's reaching the level of over 10 percent, at which it stands today. Profits—as measured by return on assets—which had fallen dramatically during the period of low capital, also began a steady rise in the 1990's, rising to well over 1 percent for the last decade, reaching record levels. When looked at together, it becomes clear that large profits and strong levels of capital can coexist. Do you agree that strong levels of bank capital can and do coexist with strong bank profitability?

A.18. As indicated in the answers to questions 2, 10, and 11, the FDIC agrees that strong levels of bank capital can and do coexist with strong bank profitability.

Q.19. Under the Administrative Procedure Act, agencies are required to consider public comment prior to issuing new final regulations. How can the agencies fully comply with this requirement? Doesn't the fact that the agencies reached an international agreement on the new capital framework effectively limit their ability to fully consider public comment and modify proposed regulations in light of that comment?

A.19. The Basel Committee is not a standard setting body but a committee of technical experts that makes recommendations from time to time about best practices. Individual countries consider these recommendations and may elect to act on them, or not, as appropriate. The U.S. agencies have made clear repeatedly at the Basel Committee the seriousness with which they take the notice and comment process in the United States.

The FDIC is committed both to fully consider all comments and to take action to address those comments as appropriate.

Q.20. The Basel II framework ignores a significant risk: Interest rate risk. Many banking assets, such as mortgage servicing rights, are extremely sensitive to changes in interest rates, and the value of assets such as these may fluctuate dramatically when interest rates change. How do you propose to take interest rate risk into account under the Basel II framework?

A.20. The FDIC, the Federal Reserve, and the OCC historically have not promulgated explicit capital regulations to cover the interest rate risk of banks' exposures held outside of trading accounts. This tradition continues with Basel II.

The Basel II framework establishes a "three-pillar" approach to bank capital regulation. Pillar 1 sets the standards for computing regulatory capital requirements, consisting of credit, market, and operational risk. Pillar 2 is a supervisory review process that examines factors not considered under Pillar I, such as board oversight, internal controls, and assessment of risk to ensure capital adequacy. As noted earlier, Pillar 3 encourages market discipline through a public disclosure process.

Interest rate risk is not captured in the minimum requirement calculation set forth in Pillar 1. Rather, supervisors plan to incorporate interest rate risk, and other risks such as liquidity and concentration risks, within the "assessment of risk for capital adequacy" process under Pillar 2. The FDIC is aware of the importance of interest rate risk when assessing the appropriate level of capital to an institution and directs its examiners to consider this risk in relation to capital adequacy. In fact, the "S" component of the CAMELS rating, which measures sensitivity to market risk, specifically takes into consideration a bank's interest rate risk.

Q.21. Due to the tremendous devastation caused by Hurricanes Katrina and Wilma this fall, it is estimated that over 100,000 homes have been lost. Would the Basel II framework have provided institutions with enough capital buffer to handle a calamity of this magnitude?

A.21. The current well-capitalized position of U.S. banks was a strength of the local banks impacted by the hurricane. It is our intention that Basel II not result in a significant decline in capital that would place U.S. banks in a position to cope less effectively with unforeseen circumstances.

With respect to mortgages, it must be noted that the QIS–4 reported extraordinarily large reductions in regulatory capital requirements. Without some type of clarification or regulatory refinement during the transition years, our concern is that Basel II will prove to undercapitalize substantially the risk inherent in mortgage portfolios.

Q.22. Last week, on November 18, 2005 *The Financial Times* published an editorial by Harold Benink and Jon Danielsson titled, "There is a chance to correct the defects of Basel II." Harold Benink is Professor of Finance at RSM Erasmus University in the Netherlands. Jon Danielsson is Reader in Finance at the London School of Economics. They concluded: "Instead of requiring bank capital to be risk sensitive, banking regulation should simply require the use of high quality risk models in banks without using their output to determine capital. Minimum capital is better calculated as a simple fraction of bank activity in broad categories." What is your response to this suggestion?

A.22. As indicated in the answer to question 13 above, relying on simpler measures of capital adequacy for regulatory purposes while using the supervisory process to promote the rigorous use of banks' internal capital models would be an alternative, and defensible, way for the agencies' supervisory programs to benefit from banks' use of internal models.

As we noted in response to question 9, the FDIC believes that both the leverage ratio ("the simple fraction of bank activity in broad categories" referenced above) and the risk-based capital ratios have important roles to play in ensuring safe and sound banking.

Q.23. In his testimony, Mr. Isaac states, "I have not found a single professional hank supervisor who is enthusiastic about Basel II." We have also heard of a similar lack of enthusiasm on the part of the supervisors who will actually be responsible for supervising Basel II. What is your response? Separately, what gives you confidence that regulators will be up to the task of understanding and policing Basel II?

A.23. As indicated in responses to previous questions, the FDIC has serious concerns about the impact on capital under Basel II as evidenced in the QIS–4 results. The FDIC, along with the other regulators, believes these results were unacceptable and must be addressed if Basel II implementation is to proceed.

Supervisors at the FDIC are committing significant resources to policy development and implementation strategies for Basel II. This includes collaboration with key FDIC research staff. The FDIC staff involved in this effort bring a level of engagement and professionalism to this task that gives the agency confidence that it will be up to the task of implementing the new framework while acknowledging the challenges that will be posed.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SHELBY FROM JOHN M. REICH

Q.1.a. Basel II would impose new demands on bank regulators. It would require bank regulators to not only approve banks' internal assessments of their risks, but also to make judgments on whether banks are holding enough capital in light of all the risks banks face. This means bank regulators are going to need personnel who are well-trained in risk analysis.

How many additional personnel does your agency expect it will need to hire in order to implement Basel II? What type of expertise will your agency need to obtain? Do you foresee any problems in recruiting?

A.1.a. OTS anticipates that it will need more examiners, quantitative experts, and other supervisory personnel with expertise in the support areas of finance, economics, accounting, and law. Although OTS cannot predict how the Basel II proposal may change as a result of the notice and rulemaking process, under the current draft of the Basel II NPR, OTS would be the primary Federal supervisor of one core banking organization, several that have indicated a desire to opt-in, and several subsidiaries of Basel II organizations, holding companies, or broker-dealers. While hiring has already begun, OTS is prepared to expand its staff of trained professionals throughout the period leading to the full implementation anticipated in 2012.

OTS believes it can meet the challenge with a combination of training programs and external staff recruitments. While the recruitment environment is and will continue to be competitive for such professionals, OTS has already demonstrated recruiting success, at both entry and senior levels, and we are confident we will continue to do so. OTS has begun and will continue to enhance both internal and external training for many of our current staff at all levels, in order to "retrofit" our current resources to the work of ensuring safety and soundness under capital rules as they are revised.

Q.1.b. Will your agencies be able to successfully compete against banks in the recruitment of personnel? Do you have any concerns that banks will simply be able to hire the best Ph.D.'s in risk modeling and outgun their regulators?

A.1.b. As stated in the answer to Question 1.a., OTS believes it will successfully meet its hiring needs in a competitive environment, and has already recruited talented professionals at many levels. OTS offers a stimulating work environment, and a competitive compensation package that includes excellent benefits and quality-of-life considerations when compared to the private sector. This should help OTS attract and retain additional staff in the necessary disciplines.

Q.1.c. How much in additional annual costs do you expect to incur in implementing Basel II? Other than personnel costs, what other costs will your agency incur in implementing Basel II? Are there any large one-time costs?

A.1.c. OTS estimates that it has incurred costs of nearly $4 million from fiscal year 2002 through fiscal year 2005 related to the devel-

opment and implementation of the new Basel II Accord and proposed NPR. For fiscal year 2005 alone, the cost approached $2 million, or between 1 percent and 2 percent of the OTS budget. While some part of the start-up costs may be characterized as a one-time investment, the annual expenditure, thus far, has increased each year. OTS anticipates that the annual cost should decline as the revised framework is established and the agency begins to reap economies of scale in building expertise around that framework.

In general, costs fall in four areas:

- Training. Development of internal training, as well as attendance at external training sessions.
- Travel. Both prequalification and qualification meetings will require travel, as will national and international regulatory meetings, on-site examinations, and other supervisory activities.
- Data systems. Development of data systems to handle new reporting requirements.
- Administrative. Rulemaking, guidance development, and industry outreach.

Q.2.a. In his testimony, Dr. Tarullo posed several questions that he believes need to be answered by U.S. banking agencies before implementation of Basel II begins. Please provide answers to his questions with respect to your agency, which are as follows:

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

A.2.a. OTS does not believe that minimum capital levels are too high. However, OTS believes that the current capital rules, which involve a relatively simple risk-bucketing system, are limited as tools for measuring risks of sophisticated and complex financial activities.

Q.2.b. 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 though studies that are well-conceived and executed?

A.2.b. QIS–4 was conducted on a best efforts basis. There were data quality issues that reflected institutions' various stages of development of their models and systems. In addition, the rulemaking and implementation processes were also in the early states such that the QIS–4 was done without institutions having a clear understanding of what the Basel II systems requirements and supervisory expectations would be.

OTS participated in QIS–4, which facilitated policy analysis regarding appropriate capital levels, and provided information for peer group capital comparisons between the core institutions. The QIS–4 results helped the agencies to better understand the impact of a more risk-sensitive approach for regulatory capital standards. This effort enabled the agencies to better gauge appropriate capital levels at banking organizations, but there are diverging views on the levels of capital that the A–IRB approach will ultimately require. Moreover, all aspects of the Basel II NPR will be subject to change as a part of the notice and comment rulemaking process, which may also impact the capital levels that are ultimately required. The agencies anticipate more studies in the intervening 6

years before a Basel II final rule is expected to be fully implemented in the United States.

Q.2.c. 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?

A.2.c. In the latest draft of the Basel II NPR, implementation would not occur until after a parallel run, which is projected to be in 2008. The parallel run would take place the first year after the final rule's effective date. After that time period, there would be 3 years of floor capital levels imposed—95 percent of the Basel I-based capital requirement the first year, 90 percent in the second year, and 85 percent in the last year. Of course, the parallel run, floor periods, and floor capital levels may ultimately change as a result of public comment on the Basel II NPR. However, it would be under these periods of time that scenario planning would take place.

Until full implementation, it is too attenuated to anticipate the potential consequences of Basel II implementation, intended or unintended. As stated previously, however, the agencies are committed to ongoing refinement throughout the process, including after implementation, as necessary, and would make changes if such scenario planning demonstrates changes are warranted.

Q.2.d. 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?

A.2.d. OTS has experience in overseeing the use of models and validation processes. In anticipation of the proposed new capital framework, OTS is already developing specialized examination teams with the training necessary to oversee the use of A–IRB. The Basel II Accord is an international agreement with a multilateral commitment that each country will supervise the measurement and management of capital within its own financial institutions. International consultative processes have been ongoing throughout the development of Basel II to aid that goal. Theses will, no doubt, continue.

Q.2.e. Have the banking agencies consulted with institutional investors, rating 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? [If so, what were the views of these market actors as to the adequacy of the contemplated disclosure requirements?]

A.2.e. The Pillar 3 disclosures have been issued for public comment, both formally and informally, on a number of occasions, and will be subject to further public comment following the issuance of the Basel II NPR. In addition, representatives of the Federal banking agencies consulted with market participants in developing the disclosures. In general, market participants, such as debt and equity analysts, have supported enhanced public disclosures of risk

information and capital adequacy by banking organizations. The version of Pillar 3 included in the June 2004 text from the BIS balances the desire for additional disclosures by market participants and the reporting burden associated with such disclosures. This version leverages off of the information institutions will need in order to implement Basel II, and is substantially streamlined from earlier Pillar 3 proposals.

Q.2.f. 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?"

A.2.f. The agencies have studied the other approaches and have determined that the direction we are moving in, and that will be enunciated more fully in the upcoming Basel II NPR and guidance, is the best approach available. However, we also are committed to flexibility and will consider all new ideas, including new approaches and refinements suggested by public commenters on the Basel II NPR. We understand that none of us can predict what may evolve over the next half-decade for incorporation into the Basel II rules in the United States. And we have said consistently, this will be an iterative process, even after we have "finalized" the Basel II rules. We are prepared to introduce, for comment, any changes that serve safety and soundness.

Q.3. Although Basel IA aims to reduce any competitive advantage Basel II may confer on large banks, have you conducted any analysis to determine whether Basel I–A itself creates any competitive issues within the subset of banks that are intended to be covered by it? If not, do you intend to do so?

A.3. When the agencies issued the Basel I–A ANPR, we recognized the competitive issues between large banking organizations, small community institutions, and regional banking organizations. We specifically invited and anticipate comments on competitive issues among and between all kinds of charters and different institutions, by size and specialty. Since the Basel I–A ANPR does not propose specific capital requirements, it is probably premature to do an impact analysis at this time, but we will analyze the capital impact of the approaches in the Basel I–A NPR after these approaches are formulated. OTS senior economists and examiners will also continue their analysis of the models-based approaches in the Basel II NPR, and will analyze the approaches adopted in the Basel II Final Rule, with a careful eye on competitive concerns.

Q.4. What consideration has been given to the fact that there are huge differences between 7,000 or so banks that will participate in the Basel I–A framework?

A.4. OTS recognizes that a broad-based capital rule will not address the idiosyncrasies of all 7,000 community banks and thrifts. However, the Basel I–A rulemaking will likely benefit financial institutions that have sound risk management systems in place, and we expect it will also benefit smaller community institutions that are less sophisticated. One of the primary goals of the Basel I–A rulemaking is to better align capital commensurate with risk. The Basel I–A ANPR suggested changes attempt to meet this goal without undue burden to community banks and thrifts. These improve-

ments would be available to all and are designed to benefit all by better aligning risk with capital. However, in further recognition of the difference among institutions, the Basel I–A ANPR specifically asked for comment on allowing institutions the flexibility to remain under the simpler and well-established Basel I-based rules, which in most instances would result in those institutions holding greater risk-based capital. OTS will carefully evaluate the comments received when we develop the Basel I–A NPR.

Q.5. In Dr. Kaufman's testimony, he stated that there is "substantial empirical evidence of a negative relationship between leverage ratios and bank insolvency," but "no such evidence between risked-based capital ratios and bank insolvency." Do you agree with Dr. Kaufman? If so, does this conclusion undermine the Basel II framework?

A.5. We partially agree with Dr. Kaufman's analysis that the current risk-based capital system is insufficiently risk-sensitive. While eliminating a leverage ratio is not a viable option at this time, this observation supports our efforts in implementing a more risk sensitive regime, rather than undermining it.

Q.6. Have you undertaken any analysis of the initial start-up costs and annual compliance costs that Basel II will impose on banks?

A.6. As part of the regulatory impact study required for the Basel II NPR, OTS continues to analyze such costs. Thus far, only anecdotal information using a variety of metrics is available regarding start-up costs. Compliance costs will be assessed in future estimates.

Q.7. To what degree will the significant costs necessary to comply with Basel II act as a barrier to entry that prevent banks from growing and becoming a bank large enough to qualify to use Basel II? In effect, will Basel II cement the market positions of the largest banks? If not, why?

A.7. OTS does not believe that cost will create a significant barrier to future growth for thrifts. Because the Basel II NPR is designed to reflect sound risk management practices for the largest and most complex financial institutions, these institutions have already incurred costs to develop sophisticated risk management practices and systems. However, we expect significant additional cost at some institutions to modify existing information systems, policies, and procedures to meet the requirements that may be contained in the Basel II final rule, as well as to train or hire staff. As other thrifts grow and engage in more complex activities, OTS expects these institutions to also incur costs to develop more risk sensitive management practices and systems. We expect there would be marginal additional expense associated with compliance with the Basel II final rule beyond what was spent to develop such systems.

From an international perspective, the largest foreign banks already have systems and practices in place, and are competing with U.S. financial institutions, large and small, in every corner of the financial industry, including the wholesale and retail business. OTS believes that our largest thrifts will find it necessary to improve their risk management practices for competitive reasons, regardless of a Basel II final rule.

Q.8. Please explain the type of information that banks will be required to disclose under Pillar 3 with respect to how banks calculate their capital requirements? Will banks be required to disclose proprietary capital requirement models?

A.8. Consistent with Pillar 3 requirements discussed in the Mid-Year Text, the agencies intend to propose to collect, both qualitatively and quantitatively, the following disclosures: Scope of Application; Capital Structure; Capital Adequacy; Credit Risk, Credit Risk Mitigation, Securitization Approaches; Market Risk, Operational Risk, Equities, and Interest Rate Risk. The proposed disclosure requirements would be structured to limit the extent of public disclosure of confidential and proprietary information. In addition, the agencies will request comments from institutions and other interested persons on the appropriateness of the proposed disclosure requirements in connection with the Basel II NPR.

Q.9. If Basel II is implemented, do you favor at any point in the future reducing the leverage ratio for well-capitalized and adequately capitalized banks or reducing the statutory capital thresholds for prompt correction actions?

A.9. At this time, OTS opposes elimination of the leverage ratio, and we urge great caution in any consideration to lower it. We do, however, believe it is imperative that we engage in a dialogue with the financial industry and other stakeholders to rethink what a leverage ratio should be, as we make these major changes in risk-based capital standards. We believe the agencies should, as part of the eventual adoption of changes to risk-based capital in the Basel II and Basel I–A rulemakings, consider how best to synthesize a leverage ratio with these new standards, especially as we become more comfortable with the safety and soundness of the new rules in the years to come. We oppose reducing the statutory capital thresholds for prompt corrective action.

Q.10. In his testimony, Mr. Isaac points out that compared to European banks, "large U.S. banks are much better capitalized and far more profitable in terms of their operating margins." Do you agree or disagree with Mr. Isaac's observation, and what is your rationale for your position?

A.10. OTS agrees with the observation, and further adds that the U.S. markets have experienced favorable credit conditions over the last several years. Many foreign banks have been attracted to the U.S. market for that reason. Only the United Kingdom has neared the United States in terms of economic growth among major competitors. The changes in the current draft of the Basel II NPR would bring oversight and capital measurement between Europe and the United States into better alignment, which may level the playing field for U.S. banking organizations with their foreign competitors here.

Q.11. Do you believe that U.S. banks are operating at a significant competitive disadvantage vis-á-vis foreign banks due to the higher capital requirements imposed on U.S. banks? If you do, please explain in detail and quantify the competitive effects on U.S. banks, including giving your assessment of how low U.S. capital require-

ments would need to go in order to level the playing field with large foreign banks.

A.11. Merely lowering capital is not the key to competitiveness. Competitiveness is enhanced by improvements to management and measurement of risks within a capital system. The system should adequately reflect risks so that capital requirements themselves do not prevent U.S. banking organizations from competing in various markets, here and abroad.

Q.12. If capital standards are reduced for the largest U.S. banks, do you believe that will place U.S. banks that do not implement Basel II at a competitive disadvantage vis-á-vis banks that implement Basel II? If so, how would you suggest that competitive inequity be remedied?

A.12. In an effort to alleviate disadvantages that smaller institutions may experience, the agencies are pursuing rule changes in the Basel I–A rulemaking. Modernizing risk-based capital is necessary, through the Basel I–A and the Basel II rulemakings, for all U.S. banking organizations. Through the notice and comment periods, the banking agencies will address any competitive inequities.

Q.13. Have you considered requiring the largest U.S. banks to implement Basel II-type models as part of their risk management programs without making Basel II a capital-regulation device? If you have considered and rejected such an approach, please explain why you rejected it?

A.13. Although considered, OTS believes that risk management programs and capital requirements are mutually reinforcing concepts. Thus, allowing appropriate adjustments for capital based on these enhanced programs is more likely to provide the needed incentive to cause institutions to move toward more risk sensitive management behaviors. OTS believes we can promote both safe and sound risk management systems and adequate capital levels, which will allow thrifts to successfully compete in the inter-connected global markets.

Q.14. Have you compared the capital requirements for the participating banks that came out of your Quantitative Impact Study with the judgments of your professional bank examination staff on the capital needs of those same banks? How closely correlated were the results?

A.14. OTS examination staff was involved in the planning and implementation of QIS–4, and agreed that, upon review of the results, there was a fair amount of dispersion caused by differences in data and methodologies across participating institutions. OTS expects to engage examination staff in the additional work that will be done during the transition years to address these issues.

QIS–4 was a best efforts exercise. Nevertheless, the results informed us about changes, enhancements, clarifications, and significant adjustments the agencies need to make to the framework to better align capital with risk as we move forward.

QIS–4 focused on the Pillar 1 capital calculation, which consists of capital allocated to credit risk and operational risk. It did not include an assessment of overall capital adequacy under Pillar 2. In order to make a supervisory assessment regarding the adequacy of

capital compared to the comprehensive risk profile of an institution, it would be necessary to include both Pillar 1 and Pillar 2 capital. Thus, it would have been inappropriate to compare QIS–4 results to the total capital that a financial institution is expected to retain. A judgmental assessment of capital requirements calculated under the QIS–4 exercise can only be performed based on a review of credit risk separate from other risks associated with the lending operations. Subject to that premise, we found that, for most portfolios, the calculation for the credit risk component of the lending operation that is in the current draft of the Basel II NPR was consistent with the perceived risk based on supervisor and examination experience.

Q.15. Basel II represents an attempt to apply the same formulas for measuring commercial loan credit, consumer loans, and commercial real estate loan risk to banks in the United States and to banks in other developed countries. What evidence do you have that the formulas will assure that U.S. banks will hold sufficient capital to see them through a variety of economic scenarios, such as those that have occurred in the United States over the last 30 or 50 years? Are the markets and economic environments similar enough that the same formulas can be applied safely to large banks from the United States, Canada, the United Kingdom, France, German, Japan, etc.?

A.15. The agencies expect that banking organizations will manage their regulatory capital positions so that they remain at least adequately capitalized during all phases of the economic cycle, including economic downturns. The current draft of the Basel II NPR would require a banking organization to segment retail portfolios by similar risk characterizations, and group commercial loans by internal ratings categories. The past performance of the retail loan segment or commercial loan-rating category would be determined through review and analysis of internal or external data, and the banking organization would produce an estimate of the economic loss expected if the obligor were to default during economic downturn conditions. The formulas would incorporate economic downturn conditions in terms of the aggregate default rates for the exposure's supervisory asset class in the exposure's supervisory jurisdiction (United States or another developed country). Accordingly, the proposal would require banking organizations to use a loss given default (LGD) estimate that reflects economic downturn conditions for purposes of calculating the risk-based capital requirements.

Q.16. The agencies' current transitional plan for implementing Basel II contemplates allowing capital levels to fall to an 85 percent "floor." How can the agencies know, even before the "parallel run" contemplated for 2008, that a drop of 15 percent in the capital of banks would be consistent with safety and soundness considerations?

A.16. Experience has taught us that existing Basel I risk-based capital rules do not always afford a capital requirement commensurate with the risk of the asset. In addition, by virtue of the 100 percent risk-weight ceiling, Basel I-assigned risk weights are not always sufficient to address the credit risk of higher risk assets. Under the current draft of the Basel II NPR, each core or opt-in

banking organization would have to adequately measure and model risk. An institution that has a low risk portfolio, for example a portfolio of traditional, amortizing home mortgage loans, would appropriately be able to reduce its risk-weighted assets, in some cases down to the floors. Another with a higher risk profile would, in theory, see its risk-weighted assets increase. As part of the implementation process, each core or opt-in institution would have to receive the approval of its regulator before moving forward from the parallel run, and into each of the next three periods of potentially reduced capital requirements. The floors would be assessed on an institution-by-institution basis. The floors are intended to ensure that any reduction in capital (if at all, and then, only as approved by the primary regulator) can be no more than an incremental percentage reduction. The agencies will seek public comment on the proposed floor and floor amounts. All of these provisions would be subject to change based on the analysis of the comments. Moreover, if the regulators do not believe that a banking organization's indicated reduction in capital is warranted, they would not approve the move from one level to the next. Within each level of these steps, the OTS's foremost concern is safety and soundness.

Q.17. Basel II's capital formulas are based on highly complex models that are to be implemented on a bank specific basis. While Basel I has been criticized for its over-simplification, the sheer complexity of Basel II has raised some very serious concerns. In his written testimony, Mr. Isaac states, "Basel II is so complex it cannot be adequately understood by senior bank managements, boards of directors, regulators, or the public." Professor Kaufman states, "Increased complexity is likely, however, to both increase compliance costs and reduce understanding, particularly by the bank CEO, board of directors, and possibly even the CFO and by bank supervisors." Do you share Mr. Isaac and Professor Kaufman's concerns? If you share their concerns, what recommendations do you have for the regulators as to how to fix this problem?

A.17. While the new framework is complex, so is modern enterprise-level risk management at the largest U.S. banking organizations. The current draft of the Basel II NPR is based on a value-at-risk approach to capital. The value-at-risk model, and similar approaches, is already widely used at the more sophisticated institutions. In fact, one of the most important components of the proposal would be the "use" test that requires institutions to build on their own internal risk management models in meeting the proposed requirements.

The current draft of the Basel II NPR reflects the complexity of many large institutions. Thus, it would supply the agencies with a sufficient and sophisticated tool to measure these complex businesses. Under Basel I-based rules, the agencies had concern we were missing an accurate assessment of complex activities. However, the new proposal is not suitable for all institutions. The appropriate question then is whether the senior management at the largest institutions would be able to understand proposed requirements. Although there is a danger that Basel II could reduce understanding if not properly implemented, in general, we do not share Mr. Isaac's and Dr. Kaufman's concern that the proposal is

beyond the comprehension of senior management at such institutions. In addition to supporting guidance that would be issued following the publication of the Basel II NPR, and which should mitigate some of the complexities, OTS will ensure that management and boards are properly addressing these complexities. As regulators, we will enhance our own expertise so we can provide the required oversight.

Q.18. According to FDIC data, the equity to capital ratio of insured U.S. financial institutions reached a low of slightly above 5 percent in the late 1980's, during the S&L crisis, and then rose steadily through the 1990's reaching the level of over 10 percent, at which it stands today. Profits—as measured by return on assets—which had fallen dramatically during the period of low capital, also began a steady rise in the 1990's, rising together, it becomes clear that large profits and strong levels of capital can coexist. Do you agree that strong levels of bank capital can and do coexist with strong bank profitability?

A.18. Strong levels of capital and profits can coexist. The goal of the current draft of the Basel II NPR is not to reduce capital, but to make it more risk-sensitive, so that we do not inadvertently advantage or disadvantage any type of lending by requiring too little or too much capital for the risks involved.

Q.19. Under the Administrative Procedure Act, agencies are required to consider public comment prior to issuing new final regulations. How can the agencies fully comply with this requirement? Doesn't the fact that the agencies reached an international agreement on the new capital framework effectively limit their ability to fully consider public comment and modify proposed regulations in light of that comment?

A.19. OTS will fully comply with the requirements of the Administrative Procedure Act. The timelines for the Basel II NPR and the Basel I–A NPR are being coordinated to permit industry consideration of, and public comment on, the two rulemakings along overlapping timeframes. OTS will consider all comments, and take action to address those comments as appropriate. The international accord does not limit the agencies' ability to make appropriate revisions in response to public comment. The agencies would not be bound to adopt all aspects of the Basel II Accord. Rather, the Basel II Accord provides a range of options for determining the capital requirements for credit and operational risk, allows national supervisors to select approaches that are most appropriate for their financial markets, and specifically recognizes the need for national discretion in the implementation of various matters.

Q.20. The Basel II framework ignores a significant risk: Interest rate risk. Many banking assets, such as mortgage servicing rights, are extremely sensitive to changes in interests rates, and the value of assets such as these may fluctuate dramatically when interest rates change. How do you propose to take interest rate risk into account under the Basel II framework?

A.20. OTS agrees that an interest rate component is critical. In fact, OTS has employed an interest rate risk model since 1992, and has comprehensive policies regarding appropriate interest rate risk

management. Interest-rate risk is addressed under Pillar 2 of the Basel II Accord, and the agencies plan to specifically invite comment on interest rate risk in the Basel II NPR. Moreover, OTS is committed to developing interagency guidance to ensure that interest rate risk is measured and capitalized adequately, and that it is benchmarked for consistent treatment by the supervisors for all banking organizations, especially mortgage lenders. Interest rate risk in the trading book would also be captured as part of the market risk capital requirements of Pillar 1. While OTS does not currently have a market risk rule, OTS intends to propose a market risk rule in 2006.

Q.21. Due to the tremendous devastation caused by Hurricanes Katrina and Wilma this fall, it is estimated that over 100,000 homes have been lost. Would the Basel II framework have provided institutions with enough capital buffer to handle a calamity of this magnitude?

A.21. The well-capitalized position of thrifts was a source of strength for local community thrifts impacted by Katrina or Wilma. Capital, however, cannot protect an institution against every kind of conceivable catastrophic event, and it is not the only tool to ensure an institution can endure such events. Other tools include the ability to mitigate and manage risk by ensuring strong underwriting, and by requiring flood, property, and casualty insurance, as appropriate.

Q.22. Last week, on November 18, 2005, the *Financial Times* published an editorial by Harold Benink and Jon Danielsson titled, "There is a chance to correct the defects of Basel II." Harold Benink is Professor of Finance at RSM Erasmus University in the Netherlands. Jon Danielsson is a Reader in Finance at the London School of Economics. They concluded: "Instead of requiring bank capital to be risk sensitive, banking regulation should simply require the use of high quality risk models in banks without using their output to determine capital. Minimum capital is better calculated as a simple fraction of bank activity in broad categories." What is your response to this suggestion?

A.22. This suggestion ignores a financial institution's ability to manage risks, and places a minimum capital standard on all institutions regardless of their sophistication. It is this type of conservatism in capital standards that could price larger institutions out of global markets and severely limit their ability to compete. The United States has a somewhat unique regulatory environment in that it requires a simple leverage ratio as a backstop. The leverage ratio requirement provides for a simple fraction of financial activity as Messer's Benink and Danielsson advocate.

The simplicity of broad categories, while attractive, can mask significant differences in actual risk. For example, all qualified residential mortgages receive a 50 percent risk weight under the Basel I-based rules. However, actual risk can vary among mortgages in that category. Because of this structure, banking organizations face misaligned incentives.

Q.23. In his testimony, Mr. Isaac states, "I have not found a single professional bank supervisor who is enthusiastic about Basel II."

We have also heard of a similar lack of enthusiasm on the part of the supervisors who will actually be responsible for supervising Basel II. What is your response? Separately, what gives you confidence that regulators will be up to the task of understanding and policing Basel II?

A.23. OTS supports moving forward cautiously with the Basel II NPR. We also recognize that anything new and complicated often receives a mixed response from those familiar with systems that are more routine and simple. However, as supervisors we must adapt to change to keep our supervision relevant, sophisticated, and effective. In order to succeed in an increasingly complex financial world, banking organizations are developing sophisticated internal models and financial risk management approaches to manage their businesses. They participate as intermediaries in transactions that would not have been contemplated a decade ago. As supervisors of those organizations, we must also remain dynamic and enhance our knowledge of capital measurement and management in a faster, more complex, financial world. If we fail to do so and remain in a 1980's risk-based capital system, we will miss those risks, and safety and soundness will suffer.

The current draft of the Basel II NPR promises complex and new approaches to capital measurement and management at our thrifts. As stated in response to earlier questions, we are hiring and training staff in order to "retrofit" capital supervision, risk analysis, and risk assessment to the challenges posed to our institutions, and hence to us. In conjunction with the careful and deliberative implementation plan outlined by the agencies, OTS is confident it can meet these challenges.