

**Donald E. Powell Chairman Federal Deposit Insurance Corporation on the  
Development of the New Basel Capital Accords Before the Committee on  
Banking, Housing, and Urban Affairs.  
November 10, 2005 -- 9:30 AM  
538 Dirksen Senate Office Building**

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 remember 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 six weeks ago, the U.S. agencies announced a plan for moving forward with the implementation of Basel II in the U.S. 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 U.S. 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 sought to 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. 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 (e.g., 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 190 percent greater than the benchmark bank's calculation. For representative mortgage products, banking organizations reported 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 three 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 (i.e., 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 system-wide 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 U.S. 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 U.S., 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 IA 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 IA 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 capital 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 towards 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 IA 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 IA 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 IA 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 IA 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 IA 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 re-assess 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

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Appendix B

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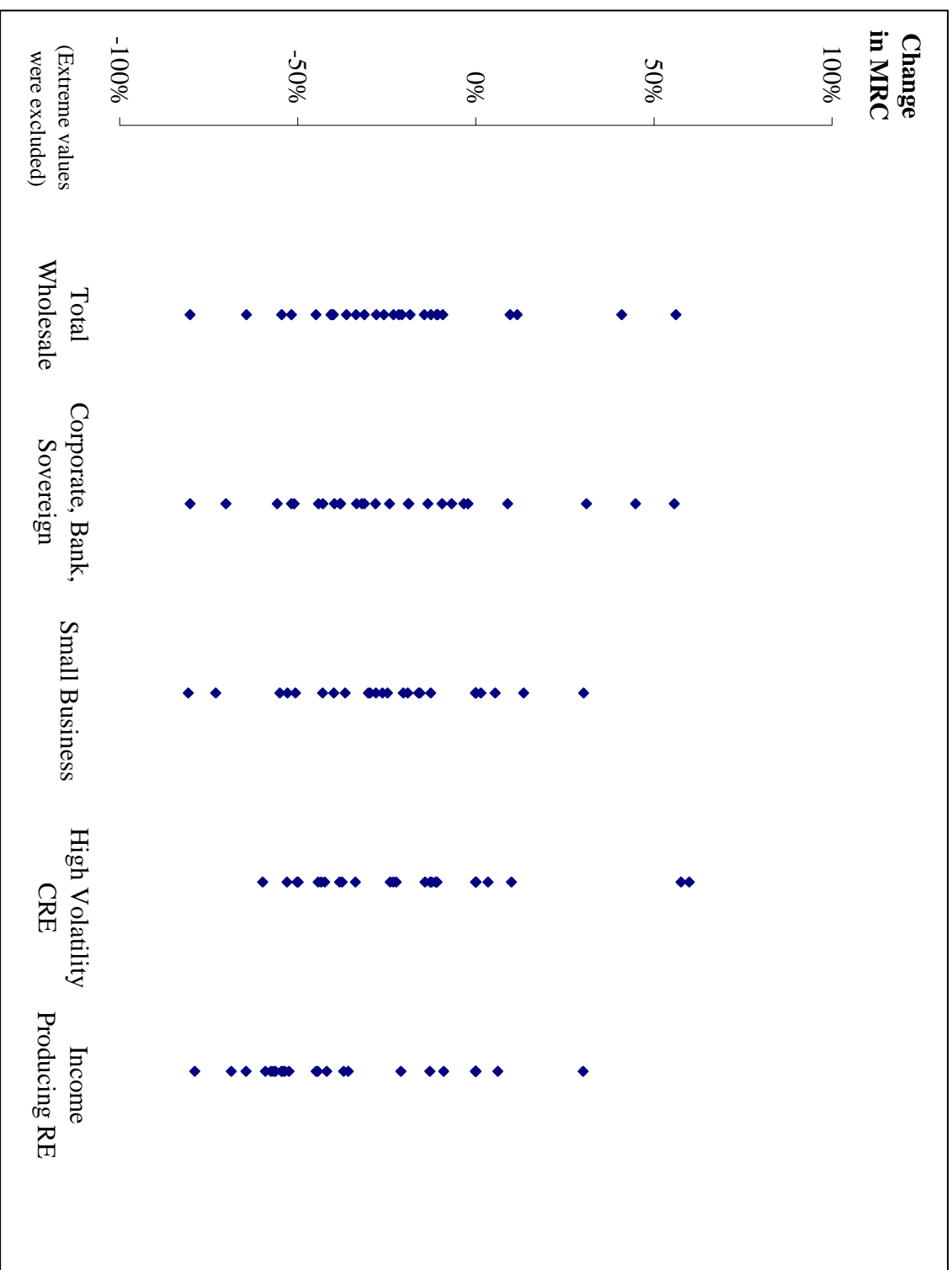
Last Updated 11/10/2005

# **APPENDIX A**

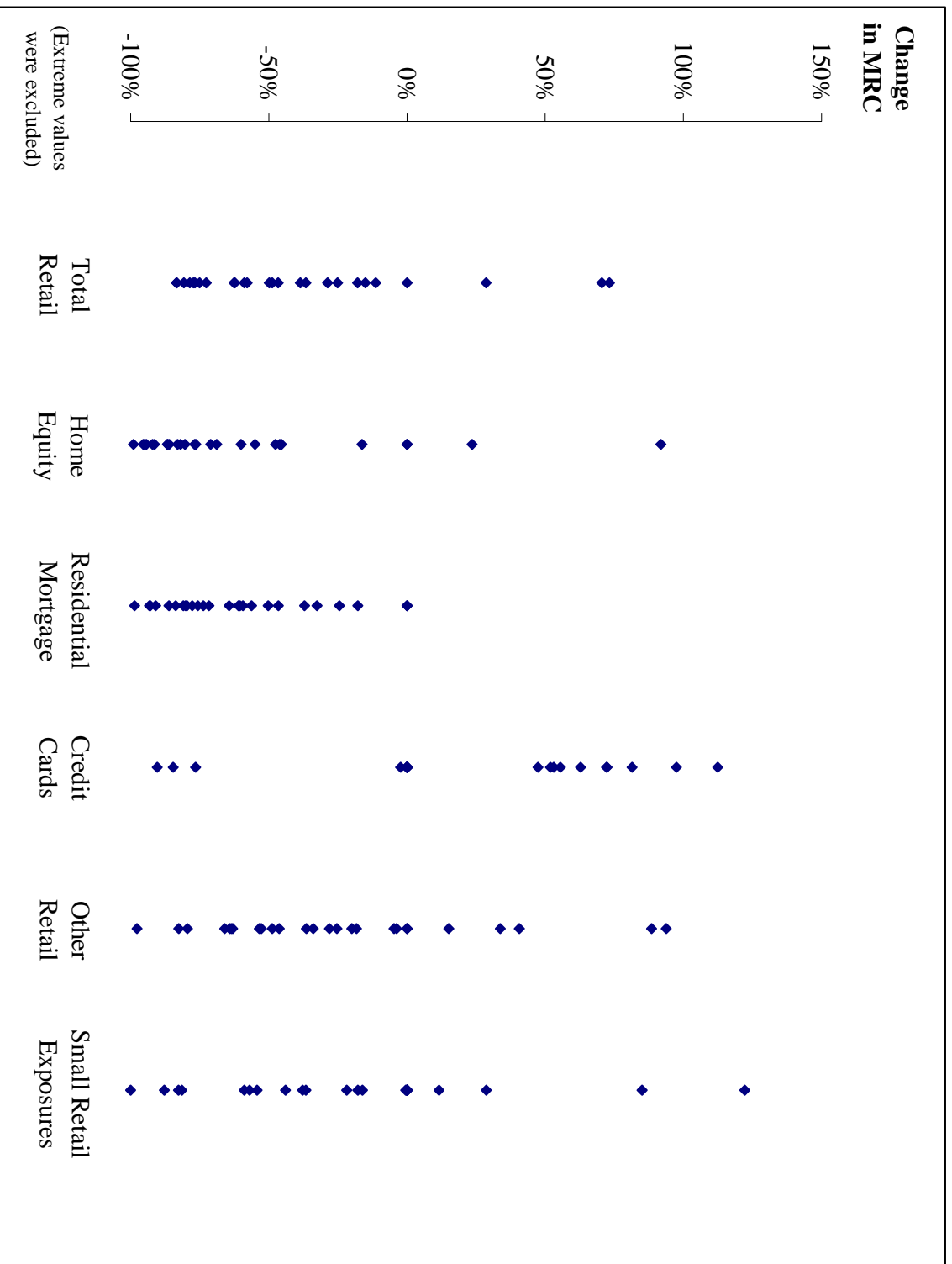
**Ranges of Minimum Required Capital (MRC) Changes for Various  
Credit Portfolios As Indicated by QIS-4 Results**

<b>Portfolio</b>	<b>Average % Change in MRC</b>	<b>Largest % Decline in MRC</b>	<b>Largest % Increase in MRC</b>
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**

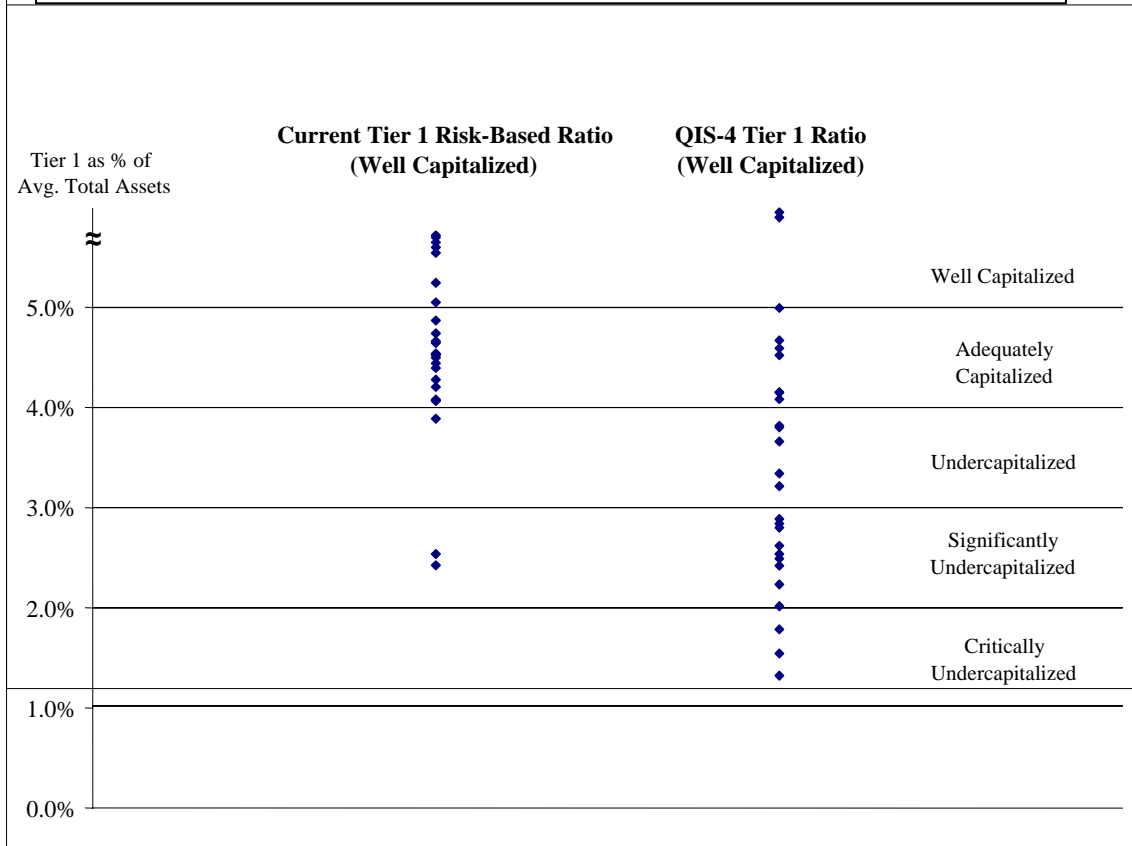
Basel II sets regulatory minimum risk-based capital requirements, but under the U.S. Prompt Corrective Action (PCA) rules, banks are required to substantially exceed their regulatory minimums in order to be deemed well capitalized (“substantially exceed” in effect means to exceed by 25 percent). This 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.

**Chart A**  
**Basel II Sharply Lowers Insured Bank Capital Requirements**  
**Conflicts with Prompt Corrective Action Standards**



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.<sup>2</sup> 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

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<sup>2</sup> 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*

<b>Estimate</b>	<b>Actual</b>		
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.