STATEMENT OF

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on

THE DEVELOPMENT OF THE NEW BASEL CAPITAL ACCORDS

before the

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

9:30 A.M.
November 10, 2005
Room 538, Dirksen Senate Office Building

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
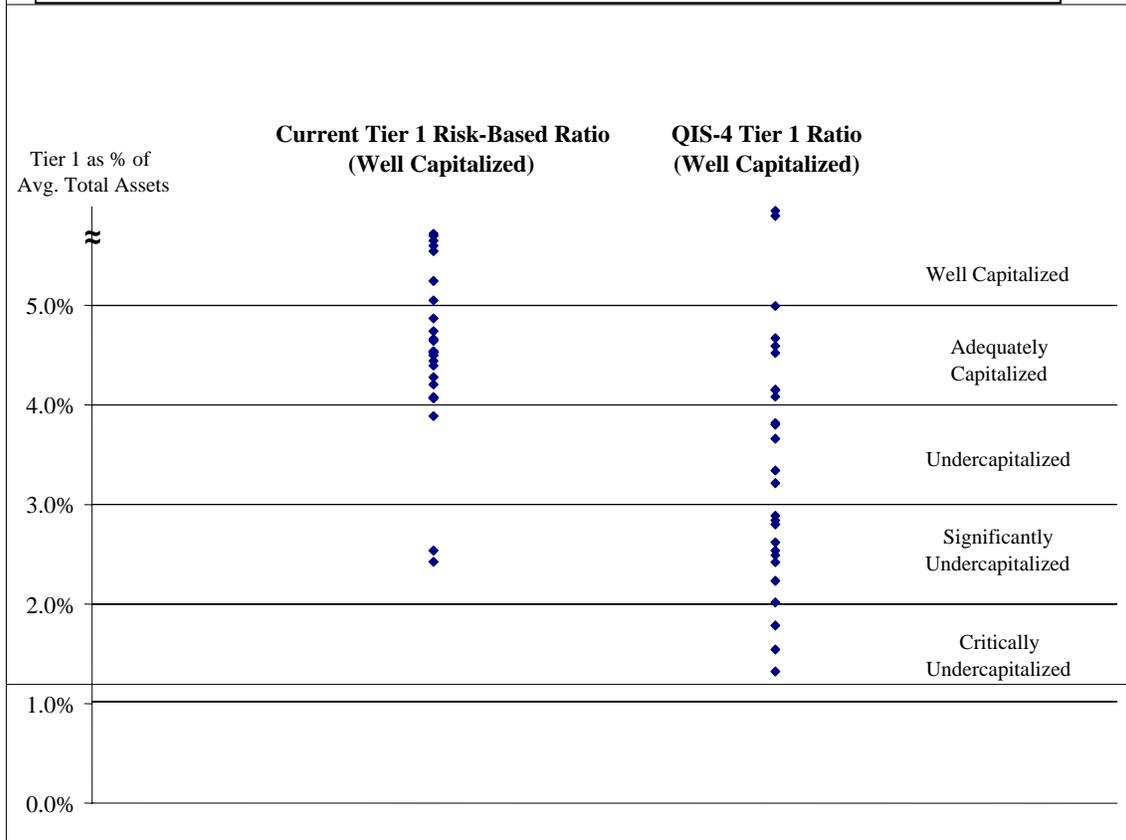
The results in Chart A show that, under current Basel I rules, 7 of the 26 organizations at the QIS-4 report date would have tier 1 minimum risk-based requirement more than 5 percent of assets, indicating that for them the risk based capital requirement was more binding than the leverage ratio. For the 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.[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

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[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.