BASEL II CAPITAL STANDARDS: APPROPRIATE FOR THE UNITED STATES?

Statement by

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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 U.S. and has the potential for weakening the more comprehensive structure that is currently in place in the U.S.

The Basel proposals will apply to banks (depository institutions) in both the U.S. and many other countries in order to achieve greater harmonization in capital standards among

countries. If adopted in the U.S., 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 U.S., 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 U.S. in FDICIA in 1991 in response to its banking crisis of the 1980s. Unfortunately, much of the discussion of Basel II in the U.S. 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 U.S., 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 1970s 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 1980s 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 U.S. 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 1980s, 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%, 4%, and 8% 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:

1. Enhance the accuracy of risk-based capital (Pillar I), and
2. 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 U.S., 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 PhD 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 U.S. 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 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 U.S. 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% 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

[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).

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

according to the 4% 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. policy-makers 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%, say to 3½% 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% 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% 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

[3] This occurs because 4% 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%.

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 1980s. Recently, U.S., U.K., 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 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

Zone	Mandatory Provisions	Discretionary Provisions	Capital Ratios (percent)		
			Risk Based		Leverage
			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.