July 30, 2003

Basel Committee on Banking Supervision
Bank for International Settlements
CH – 4002, Basel
Switzerland

Dear Sir or Madam:

The Financial Guardian Group (FGG) is pleased to comment on the Committee’s third consultative paper (CP3). The FGG represents the interests of specialized U.S. banks particularly concerned with the proposed new capital charge for operational risk. Thus, the following comments will generally focus on this issue, noting the international financial market implications of this proposal. Concerns with specific U.S. implications will be addressed in our comments to domestic U.S. regulators on the advance notice of proposed rulemaking released July 11.

The FGG strongly supports Basel’s objective of comparable, truly risk-based international capital standards. However, we urge the Committee to advance this goal by deleting from the Accord the proposed capital charge for operational risk. Unless or until the regulatory understanding of operational risk catches up with the knowledge of credit risk reflected in many major improvements proposed in the third consultative paper, a regulatory capital charge will – contrary to the Committee’s best intentions – increase systemic risk, create perverse incentives for risk-taking and result in undue competitive harm. Indeed, the operational risk charge undermines Basel’s initial goal of curtailing regulatory capital arbitrage, without advancing the objective of improved internal risk management. The operational risk-based capital (ORBC) requirement is largely a plug to prevent recognition of regulatory capital savings for assets with low credit risk. It is also a plug – especially in the basic-indicator and standardized approaches – that substitutes for proven forms of effective operational risk mitigation and management.

The FGG has long supported Basel II’s goal of a three-pillar approach to effective bank supervision. However, we believe that including operational risk in Pillar 1 (regulatory capital) rather than Pillar 2 (supervision) undermines balanced supervision. The goals of
improving bank operational risk management and internal capital allocation are best served through a substantial improvement in Pillar 2 with regard to operational risk, supplemented by appropriate Pillar 3 disclosures. A Pillar 1 capital charge for a risk that the BIS’s own Risk Management Group and Committee on the Global Financial System agree cannot be defined or accurately measured has already distracted significant industry and supervisory resources from urgently-needed improvements. An operational risk-based capital charge – even with the proposed improvements in the advanced measurement approach – will deter improvements in qualitative operational risk management. The goal of “comparability” – that is, comparable regulatory standards across institutions and national borders – can best be met through Pillar 2 and 3, not an arbitrary Pillar 1 capital charge with unintended adverse consequences for the competitive viability of specialized institutions that choose to operate as U.S. banks.

The FGG is appreciative of the Basel Committee’s efforts to address acknowledged problems with ORBC with the aforementioned advanced measurement approach (AMA). However, as discussed in more detail below, we believe the fundamental problems defining and measuring operational risk makes Pillar 2 the best approach. Further, the basic-indicator and standardized approaches remain options for large banks around the world, and many may well choose these instead of the more complex and costly AMA, especially given recent findings that AMA capital may well be higher than the more simple approaches for many institutions. The floors limiting benefits from Basel II for banks that use the advanced approaches may also lead banks, where permitted, to select the simpler models unless or until these floors are eliminated. This will result in reliance on a crude capital number for operational risk with potentially serious systemic risk consequences. Pillar 2 under the aegis of the Basel Committee provides an excellent framework for rapid action on meaningful improvements to operational risk backed by effective supervision with real enforcement.

We remain concerned that ORBC – regardless of the approach – has been proposed by the Basel Committee at least in part to “top off” the new capital numbers to ensure that risk-based capital (RBC) does not drop dramatically from current levels. The third quantitative impact survey (QIS3) supports this concern because ORBC is the lynch-pin that keeps total RBC near current levels, especially for large banks in the largest countries. Absent ORBC, capital for these institutions as determined by the QIS3 would drop 13%; with ORBC, it falls only 2% — making all of the investment in the systems necessary to run Basel II’s advanced models far less economically rewarding.

Based on these concerns, the FGG urges the Basel Committee to:

- drop the operational risk charge from Pillar 1 and instead rely on Pillar 2;
- revise Pillar 2 to promote improved supervision related to operational risk and effective enforcement where banks fail to meet these standards; and
- refine Pillar 3 disclosure standards to ensure real market discipline.
I. Pillar 1 Approach is Fundamentally Flawed

Although the FGG is most appreciative of all the hard work devoted last year to constructing the AMA, we believe – after additional refinements – that it is best suited for use in Pillar 2. In Pillar 2, supervisors can refine their AMA expectations to the widely different factors that in fact drive individual bank operational risk (OR). Doing so will in fact advance the Basel goal of improving internal risk management and capital allocation. As currently proposed, many institutions will lack the capital incentives to move beyond the basic-indicator and standardized approaches since, as noted, ORBC may actually be lower for them under these approaches than under AMA. Further, many flaws in the AMA (discussed below) make it appropriate only for implementation under Pillar 2 to ensure no undue benchmarking or standardization that leaves the problems with the other two ORBC methods fundamentally uncorrected.

A. OR Still Not Defined

Serious definitional problems remain as to OR in CP3:

1. Lack of Agreement

Despite the proposed operational risk definition, there is wide disagreement on how in fact it should be determined. Note, for example, the BIS’s own Committee on the Global Financial System conclusion that, “[Operational, legal and liquidity] risks are more difficult to measure than credit and market risk, and it may be difficult to deal with them in quantitative capital rules and disclosure standards. A more qualitative approach, focusing on risk management, may be needed.”

We would also refer the full committee to the results of the Risk Management Group (RMG) 2002 loss data collection (LDC) exercise for operational risk. As with the 2001 exercise, the LDC is intended to substantiate the ORBC charge. While the 2002 report shows considerable improvement in such areas as number of participating banks and bank confidence in the data presented, the results still show variations in operational risk measurement and the way economic capital is assigned. The RMG itself states that these results should be used with “caution” and that data “does not allow identification of the business lines and/or event types that are the largest source of operational risk.” Similarly, the RMG notes that it is, “…not clear the extent to which the sample of banks in the survey was representative of the banking industry as a whole.” The data on OR

---

losses and loss recovery are found also to be of dubious quality due to the range of methodological problems still dogging the LDC.2

Key points from the RMG study include:

- 89 banks in 19 countries reported, with only 63 meeting various sample criteria that permit broad use of their data. This small number in so many countries suggests very wide variations in data applicability to large numbers of banks in individual countries. Data problems are compounded by the fact that, of these 89 banks, only 32 said that the reported data comprise all OR for all business lines. Over half of the reporting banks said data were not comprehensive for any business line.

- There is wide variability in the number of reported OR loss incidents (ranging from one to over 2,000), with doubts about the validity of these data. Of the eight banks reporting 1,000 or more incidents, only two said data were comprehensive; however, of the 35 banks reporting 100 or fewer losses, 17 said data were comprehensive.

- Data are very clustered, making it difficult to infer capital charges either by event type or business line. For example, over 36% of incidents were in one area: external fraud in retail banking. This is perhaps the best understood area of OR and one for which pricing and reserves are in place, although the ORBC charge does not permit offsets for either. Further, this risk remains double-counted due to the credit risk charge related to these losses. Physical and system disruptions were only 2% of the reported incidents, but 20% of the loss (perhaps due to the fact that 9/11 was in this year’s report). Insurance related to these losses is generally not recognized in ORBC.

- Of the 89 banks, 60 provided some data on economic capital for OR, although only approximately 40 provided data either on OR overall and/or on business lines. The average and median amounts of economic capital for OR reported by the 40 banks were 15% and 14% respectively, indicating that a large number of the banks fell within this range. However, the full range of reported economic capital varied from 0.09% to 41%. The average and median amounts of economic capital for asset management were 7% and 5%, respectively – far off the charges in the proposed standardized approach.

- Only one-third of reporting banks estimate expected OR. Data here are most inconsistent due to different definitions of OR and other factors.

We fail to see how a Pillar 1 ORBC charge can be deemed viable at this time when the Basel Committee’s own group assessing it has found such wide variability and incomplete data. Even though some findings cluster around the averages on which the basic-indicator and standardized approaches are based, many institutions assess their

---

appropriate economic OR capital far differently without any indication that these differences are unsafe or unsound. Reliance on the simple averages proposed will create significant opportunities for arbitrage between economic and regulatory ORBC – precisely the activity Basel II hopes to curtail.

2. Treatment of Catastrophic Risk

A statement that AMA capital is not to be based on “catastrophic” risk included in the QIS 3 instructions is deleted in CP3, although the surrounding text (paragraph 627) remains unaltered. From this, we remain concerned that the AMA is intended to include some calculation for catastrophic risk – that is, the risk of nuclear war, devastating terrorist attacks or the like.

One major objection to the AMA – as well as to any regulatory OR capital charge – has been the problem of modeling and quantifying 9/11-type risks. Thus, advocates of the AMA indicated that CP3 (like the 2002 documents from Basel proposing the AMA) would address this concern. With the change, however, AMA capital would again have to include some charge for nuclear war or similar tragedies even though no one knows how to anticipate or model these risks.

Capital is particularly irrelevant in the face of catastrophic risk. These risks are so unexpected and, potentially, so large that banks – like society as a whole – will be forced to rely on the ingenuity and heroism that distinguished the financial system after the collapse of the World Trade Center. Importantly, what limited loss then was not regulatory or even economic OR capital, but contingency planning, disaster preparedness and back-up facilities – none of which is fully recognized in the AMA in part because there remains no accepted method to define or measure OR taking full account of risk mitigation. The proposed limit on recognition of insurance also undermines the incentives for banks to obtain adequate insurance for high-severity, low-frequency events, including catastrophic ones. We would note that the RMG survey found that insurance recoveries average 58%, but that these rise sharply as the size of the loss increases. The insurance recovery amounts in specialized lines of business (agency services, asset management, payment processing) were generally higher than even these high rates for the industry as a whole. Thus, insurance is a reliable OR mitigant, especially against catastrophic loss.

3. Treatment of “Legal Risk”

In paragraph 607, CP3 states that operational risk is defined to include “legal risk.” Annex 7 in CP3 includes an array of regulatory, legal and even social policy risks. As shall be discussed in more detail in our comment to U.S. regulators, the FGG believes that including legal risk in a regulatory capital charge will have unintended and, for U.S.
banks, adverse-competitive consequences. We are particularly struck by the inclusion of legal risk in the face of the explicit exclusion of reputational risk from the definition. This is of special note when reputational risk has in recent years proven itself a serious one even as banks around the world continue to manage their legal risk without any potential threat to safety and soundness.

**B. Perverse Incentives**

1. Quick Fixes to Standardized Approach Point to Overall Problem

The FGG has long argued that reliance on arbitrary regulatory ORBC calculations will divert resources from proven forms of OR mitigation, including those most essential in cases of catastrophic risk as noted above. We recognize that the AMA is intended to address these concerns but, as discussed, we believe the proposal remains flawed and will still result in implicit application of the standardized approach because of the requisite regulatory benchmarking of the AMA.

CP3 does attempt to address the concern about the cost of the standardized ORBC approach to institutions that focus on retail or corporate lending, but the manner in which this is done highlights the potential perverse incentive issue and the reason ORBC must be addressed in Pillar 2. Specifically, footnote 91 would permit an alternative standardized capital charge for these two business lines based on the volume of “drawn commitments,” instead of the simple gross income test on which the standardized test, like the basic indicator, is otherwise premised. However, as drafted, this would mean that a lending organization that moved its commitments off its balance sheet could avoid much of the operational risk charge – even though off-balance sheet assets often bear significant amounts of operational risk. This is precisely the incentive that Basel I sought to address through the imposition of a risk-based capital charge for credit risk. Why Basel II now contemplates reinstating this opportunity for regulatory arbitrage for operational risk is most unclear.

2. AMA Does Not Solve Perverse Incentives Problem

Since Basel’s second consultative paper (CP2), awareness has grown that reliance on gross income – as still proposed in the basic-indicator and standardized approaches – will lead to numerous undesirable consequences because OR is not correlated in a linear fashion with gross income and, in fact, often runs counter to it. CP3 attempts to address this with the AMA, but the fundamental problem remains because:
many of the world’s biggest banks will count ORBC based on the gross-income method, creating potential systemic risk (discussed in more detail below); and

- the AMA does not address the perverse incentive issue because regulators will benchmark it to the standardized approach, insurance is not fully recognized, and many other measurement and definitional problems remain.

C. Specific AMA Concerns

1. AMA Now Little Different Than Standardized Approach

Perhaps our most significant concern with the draft proposal is ongoing uncertainty as to the real difference between the new AMA and the standardized/basic-indicator ORBC approaches. As we understand CP3, banks will need to keep their ORBC books according to the standardized business lines, despite the fact that allocation of activities to these lines is often arbitrary and inconsistent with individual corporate organizations. This will essentially require banks to keep two sets of books on OR, with one tracking the standardized approach and the other the bank’s own business structure and actual OR. Supervisors will clearly review AMA calculations based on the standardized business lines against the standardized charges, and banks may have difficulty explaining lower capital calculations under the AMA. Further, CP3 notes that some national supervisors will specify the internal models that must be used under the AMA, in essence requiring their banks to use a regulatory model, not one appropriate to the bank’s activities or true risk profile.

Thus, the standardized charge is, in effect, the benchmark AMA charge. In turn, this charge does not appear appreciably different from the basic-indicator approach since the average of the capital charges in the draft standardized approach equals the 15% of gross income ORBC requirement under the basic-indicator approach.

2. Timing Issues Could Also Force Use of Standardized/Basic-Indicator Approaches

As noted, the standardized and basic-indicator approaches have serious potential adverse consequences, recognized by regulators in the effort to craft an AMA. However, many banks may be forced to use the standardized or basic-indicator approach as Basel is implemented because of the numerous quantitative and qualitative criteria required to use the AMA. The U.S. may attempt to prevent these problems by implementing only the AMA. But, as noted, large banks elsewhere will be allowed to use these gross-income derived ORBC charges, thus putting many of these problems into effect at institutions where systemic risk is a major concern. The FGG understands why supervisors wish to
validate AMA approaches, but the process will doubtless be complex and some banks that believe the AMA works best for them could find themselves required by regulators to use one of the other approaches for an indefinite period of time. Furthermore, very few banks have five years of quantitative OR data, especially given that most do not capture data along the standardized business lines mandated for the AMA supervisory comparison.

We appreciate the fact that the draft says that only three years of data will be necessary at first, making it thus theoretically possible for banks to be approved for the AMA by 2007. However, this would require banks to begin AMA-style data capture at the start of 2003, even as the Basel rule remains in draft form. Most, if not all, banks will need at least three years after finalization of the Accord to restructure their internal models and data, as well as to document OR practices in accordance with the new standards. Thus, the basic-indicator or standardized models are likely to prevail for at least the first few years of Basel II, with all the perverse incentives and other problems associated with these options creating undue risks for the global financial system.

3. Numerous Additional Uncertainties Cloud AMA

We appreciate that CP3 attempts to address problems with the AMA identified in the earlier CP1 and CP2. For example, banks may now be able to rely upon earnings or reserves to address expected loss. However, how this will be done remains very unclear, and the inference in the draft is that a specific additional capital charge will be required even if earnings and reserves more than offset expected losses under a bank’s internal models. Further, since Pillar 2 generally requires supervisory capital in excess of the Pillar 1 minimum charges, any benefits achieved through this provision could be offset by a supervisory add-on charge. Real supervisory attention to risk without diversion into the details of the AMA model would provide appropriate protection against OR without a potential double charge.

We are also uncertain about what is meant in paragraph 622, where numerous standards for how OR is to be assessed are specified. What, for example, is meant by “scenario analysis?” We do not believe that industry agreement on these terms is in place, although numerous private models attempting to provide these data are coming on the market. Without more clarity as to what is meant by these models – thus allowing banks to rely on their own models – banks may be forced to use one of the few approaches approved by regulators at the outset of the Basel Accord. This will, in turn, force ORBC calculations into a few, as yet unproven models. Should these prove incorrect, systemic OR will actually be increased, in contrast to reliance on more diverse systems which would not create this type of models risk.

Finally, we appreciate the proposed recognition of insurance in the AMA. However, the strict criteria necessary for eligibility may force insurance into a few structures provided
by a limited number of insurers. This could concentrate risk in a few counterparties, resulting in systemic risk if severe OR events occur. We understand the regulators’ desire to permit ORBC reductions only for insurance structures that will quickly and certainly compensate a bank for loss, but specific Pillar 1 standards for insurance eligibility could actually increase, not reduce, OR.

The proposed 20% limit on reductions in the AMA capital calculation for insurance also creates a perverse incentive. Banks may well reduce their purchases of insurance, especially the most costly – and therefore most needed – kinds because of limited regulatory capital recognition of this costly form of OR mitigation. As noted, the FGG believes that insurance – even with acknowledged limitations – is a proven form of risk mitigation. It should thus be fully recognized in the AMA to create a positive incentive for risk mitigation.

**D. Competitive Impact**

1. **Foreign Competitors**

Banks operating in the United States generally face a far broader range of regulation outside the banking area than their foreign competitors. This regulation covers areas as diverse as corporate governance, lending and employment discrimination and workplace safety. In addition, the U.S. legal system poses the highest litigation risk of any G-10 country. As a result, under the Basel proposal, U.S. banks may be required to set aside more capital for operational risk than their foreign competitors. U.S. banks will be forced to do this despite the fact that U.S. securities laws already require reserving for material legal risks and there is no evidence that these types of legal risks have adversely affected the safety and soundness of any U.S. bank.

2. **Non-bank Competitors**

Banks often operate in major lines of business, such as asset management, custody and payments processing services, in which they compete head-to-head with non-bank institutions. In the U.S. and much of the world, only banks will be covered by the Basel Accord and its stringent operational risk-based capital charge. Their non-bank counterparts would be exempt. This could place the banks at a substantial competitive disadvantage relative to their non-bank counterparts. The competitive disadvantage is particularly pronounced for FGG members, which specialize in fee-based asset management, custody and payments processing lines of business. These lines of business are dominated by non-bank institutions and these competitive pressures could force some U.S. banks to move these lines of business out of the bank, or to de-bank completely. Such a development could increase systemic risk.
II. Pillar 2 Most Appropriate for Operational Risk

Based on all the problems noted above, the FGG continues to strongly recommend that the Basel Committee address operational risk in Pillar 2. This will create a strong incentive for improved internal controls and capital allocation, in sharp contrast to the arbitrary Pillar 1 approach that – even with the AMA – will result in undue regulatory arbitrage and risk-taking.

We remain deeply puzzled as to why CP3 proposes to include OR in Pillar 1, but persists in retaining interest-rate risk – on which there is widespread definitional and measurement consensus – in Pillar 2. We do note that Pillar 2 now says (paragraph 720) that national supervisors may on a case-by-case basis begin to move interest-rate risk capital into Pillar 1, and this approach would also be suitable for operational risk – but only after all of the agreements on which national supervisory action is premised occur.

In general, the FGG supports the proposed new supervisory standards, just as we support the Committee’s Sound Practices for the Management and Supervision of Operational Risk (February 2003) (See Attachment A, our September 30, 2002 comment letter). However, we believe strengthening of these standards should occur among all the BIS member nations. Under U.S. law, supervisors visit all insured depositories at least once every eighteen months and larger institutions are examined at least every twelve months. At the same time, all very large U.S. banks have teams of resident examiners who stay at the bank full-time to test and re-test a wide range of risk areas to ensure there is appropriate capital and risk management processes. When banks fail to satisfy their examiners, the supervisors have a very broad array of remedies. These range from the “moral guidance” cited in CP3 to specific sanctions, cease-and-desist orders and, under extreme circumstances, bank closure or forced sale. U.S. regulators have closed insured depositories when they are in nominal compliance with Pillar 1-style regulatory capital standards because of undue risk. These powers were significantly enhanced by the U.S. Congress after the S&L crisis of the 1980s and the banking problems of the early 1990s, in part because several very large banks (e.g., Texas’ First Republic) failed at considerable cost to the U.S. deposit insurance fund even though they had adequate capital under then-applicable rules.

The FGG recognizes that the Basel II Accord attempts to reflect the importance of effective supervision in Pillar 2. However, CP3 remains relatively weak in this area and we do not believe it will encourage supervisors in all participating nations to improve their standards and – where necessary – back them with effective enforcement. We understand that Basel II reflects governing law in all participating countries, many of which do not permit the type of in-place supervision and enforcement mandated in the U.S. However Basel would have done far better to push for this type of supervision and
enforcement – tailored of course to local needs – than to place so much reliance on assigning a capital charge to operational risk in Pillar 1. The consequence has been to force into a capital requirement the kind of risk that is best dealt with through a robust supervisory system. Home-country law is, of course, set with due regard for the recommendations of national supervisors, and an outline from Basel of true best practices in the new Accord is a vital step towards improving standards along the lines outlined above.

In our comments on the December 2001 “Sound Practices,” paper, (See Attachment B our March 29, 2002 comment letter) the FGG detailed a range of specific supervisory standards we think appropriate for operational risk. We incorporate that comment by reference here and express our strong willingness to assist the Basel Committee in crafting any additional supervisory standards for Pillar 2 appropriate for operational risk.

III. Pillar 3 Will Support Effective Supervision and Comparability

As noted, the FGG believes not only that a strong Pillar 2 is necessary, but also that Pillar 3 – additional disclosures to promote market discipline – is vital as well. Indeed, we believe that the Basel Committee’s goal of comparable and appropriate capital for operational risk can be best achieved through a strong Pillar 2 backed up with meaningful Pillar 3 disclosures. While Pillar 1 regulatory capital for OR results in all the problems discussed above – primarily, perverse incentives and systemic risk – Pillar 2 and Pillar 3 will achieve Basel’s goals without any of these harmful consequences.

The FGG would like to take this opportunity to thank the Committee for deleting from CP3 a proposed requirement that the Pillar 3 operational risk disclosures be based on the standardized business lines. As noted in our February 14, 2003 comment to the Committee on the transparency draft, this requirement would have had the effect of mooting the AMA by virtue of public disclosure along business lines different than those actually used by many banks.

Despite our general support for Pillar 3, the FGG has numerous concerns about its specific implementation in the U.S. because of our unique securities laws and the fact that only banks will be subject to these extensive disclosures (resulting in serious competitiveness concerns). In addition, we remain concerned about the possible release of proprietary data mandated in Pillar 3. We do note that a new exemption is provided in paragraph 768 in cases where banks believe a mandatory disclosure would result in proprietary disclosures. Banks making use of the exemption would have to disclose the facts related to the decision not to disclose as well as the reason why, in addition to providing more general disclosures of the required information. Thus, the limited exemption could result in significant questions from regulators and investors, possibly making the exemption irrelevant.
These disclosure problems could have significant implications for the large banks subject to them. As noted, U.S. banks could be exposed to significant increases in securities-related legal risk. As has been made clear recently, these risks can pose substantial costs, as well as creating reputational risks that can have profound impact on market capitalization and, by implication, systemic risk. In the U.S., only large banks may be subject to these disclosure requirements. Any proprietary information released as a result of these disclosures will worsen the competitive difference between banks and non-banks in lines of business like asset management or payments processing, increasing the desirability of adopting a non-bank charter for these activities. This too could increase systemic risk, if banking institutions decide to abandon the bank regulatory framework. In the European Union, the Basel rules can be adopted across the financial services industry, but that is not possible under currently applicable U.S. law.

We would be pleased to provide any additional assistance we can to ensure successful completion of the Basel II Accord.

Sincerely,

Karen Shaw Petrou
Executive Director

Attachments

CC: Mr. Kevin Bailey
Office of the Comptroller of the Currency

Mr. Andrew C. Burkle, Jr.
Federal Reserve Bank of Cleveland

Mr. Roger Cole
Federal Reserve Board

Mr. Edward Ettin
Federal Reserve Board

Mr. Richard Riccobono
Office of Thrift Supervision

Mr. Eric Rosengren
Federal Reserve Bank of Boston
Mr. T. Snow
Office of the Comptroller of the Currency

Mr. Richard Spillenkothen
Federal Reserve Board

Mr. Stefan Walter
Federal Reserve Bank of New York

Mr. Michael Zamorski
Federal Deposit Insurance Corporation
Attachment A


September 30, 2002
Dear Sir or Madam:

The Financial Guardian Group is pleased to comment on the July 2002 draft of the Risk Management Group’s “Sound Practices for the Management and Supervision of Operational Risk” (“Sound Practices”). We again commend the overall efforts of the Basel Committee to set a global standard for effective operational risk management. The Basel Committee’s work in recent years has made a significant contribution to improving the safety and soundness of banking around the world. In keeping with the goal of strengthening the global banking system, we continue to urge the Committee to focus on refining an appropriate supervisory framework for operational risk, and dropping the proposed operational risk-based capital charge (the Pillar 1 approach).

We believe that the Committee’s recognition of the many difficulties with measuring operational risk, and its determination instead to focus on assessment of such risk in the “Sound Practices” paper, validates our concerns with a Pillar 1 approach. Because of recognized serious problems in operational risk measurement, the Committee sensibly adopts a flexible approach, and does not stipulate that the Pillar 2 approach quantify operational risk. The Committee’s appropriate flexibility in defining operational risk in the Sound Practices Paper, however, is inconsistent with its parallel effort to impose a highly quantification-dependent Pillar 1 charge for operational risk. Similarly, the FGG commends the Committee for recognizing in the Pillar 2 approach variations in the definition of operational risk, as long as each institution recognizes all material operational risk to which the bank may be subject. This makes certain all operational risks are accounted for on an institution-by-institution basis. However, the Committee’s recognition of the need for flexibility in defining operational risk under Pillar 2 raises significant additional questions regarding the appropriateness and effectiveness of any Pillar 1 operational risk capital charge. It is difficult to envision how a Pillar 1 charge based on a necessarily variable definition of operational risk can be applied in a consistent and uniform manner.

The Financial Guardian Group (FGG) is a coalition of specialized U.S. banks on which operational risk capital and supervisory issues have a particularly strong anti-competitive impact. In our March 2002 letter, we identified several problems with the “Sound Practices” paper. We are pleased to see that the Committee considered and acted on many of these suggestions in drafting this new version. Most notably, we agree with the Committee’s decision to remove the entire second section of the December 2001 paper that appeared to detail the qualitative and quantitative criteria for use of the Pillar 1 “advanced measurement approach” (AMA). This deletion eliminates one of the major objections to the original paper for us and other industry participants. Thus, the revised “Sound Practices” paper will be a firm basis from which supervisors can build an effective Pillar 2 treatment of operational risk.
Policy Issues

As noted, we believe the RMG has properly modified the definition of operational risk management to include “identification, assessment, monitoring, and control/mitigation” of operational risk. This alteration removes references to “measurement” and allows for the “control/mitigation” rather than “control” of operational risk. These are important and warranted adjustments. We agree with the RMG that arriving at an exact definition of operational risk is difficult and we applaud the discretion granted banks in determining definitions applicable to their internal workings. However, we do not understand why the Basel Committee has so far failed to recognize this major shortcoming when establishing a Pillar 1 charge for operational risk. The FGG is concerned that the Pillar 1 charge will be based on quantifications of risk, which cannot be supported – or even agreed upon - by the industry or the Basel Committee. As a result, we ask the Committee to apply the adjustments made to this paper to its other actions, dropping the proposed Pillar 1 operational risk-based capital charge in favor of a rigorous Pillar 2 based on this “Sound Practices” paper.

The FGG strongly supports the emphasis in the “Sound Practices” paper on effective contingency planning and disaster recovery preparedness, evident both in Principle 7 and throughout the paper. We further commend the efforts individual regulators are making in this area, such as the draft guidance on financial resiliency released on August 30, 2002 by U. S. regulators and the sound-practices draft released in July, 2002 by the U.K. Financial Services Authority. All of these papers correctly emphasize the vital importance of these efforts, which were confirmed during the tragedy of September 11 and in numerous smaller-scale natural disasters over the years. The papers issued by the national supervisors point not only to the vital importance of preparedness for individual organizations, but also for the financial system more generally. These events, showed the importance of developing a flexible approach to operational risk management. Firms are affected in a multitude of ways when disasters occur. A “one-size fits all” approach ignores this reality. To achieve this goal, cross-organization planning and testing is critical, and we suggest that this issue be reflected not only in the “Sound Practices” discussion of bank responsibilities, but also in the goals to be set for supervisors.

The FGG supports the RMG’s plan to have the “Sound Practices” paper apply to all banking organizations regardless of size. However, this still leaves open the question of operational risk on non-banking organizations, and the burden and additional hazards if “sound practices” govern only banks. We continue to urge the Basel Committee to work with the Financial Stability Forum, the International Organization of Securities Commissions, and other relevant agencies to press hard for appropriate operational risk management standards governing non-bank financial services firms. These institutions are major competitors with banks, as well as important players in the global financial system, and at present face few supervisory requirements pertaining to operational risk, let alone a capital charge. We would note that both the U.S. and U.K. standards cited above will apply to all major commercial and investment banks, and we urge Basel to ensure that its “Sound Practices” do the same. The global financial system is increasingly interrelated, crossing over country and charter lines. It is our belief that the resiliency of the overall financial services system would be stronger if all institutions were subject to these rules, because any inadequacy in the controls of non-covered institutions may create additional risks, even for well-managed, Basel-covered institutions.

Additional Points

In particular, we would like to thank the RMG for considering the following concerns raised by the FGG in our March comment letter:
• We generally support the new role mandated for directors and senior management in addressing operational risk. The excessive focus on the role of boards of directors and senior management in the initial proposal regarding control of non-material operational risk was a major concern of the FGG. Directors and senior management of banks are currently subject to extensive duties and recent corporate governance legislation in the United States has added to these already wide-ranging responsibilities. We agree that senior management should be concerned and cognizant of operational risk and that the board of directors should ensure that appropriate incentives are in place and that accountability occurs. We appreciate the balance struck by the RMG in its most recent draft, but we urge the Committee to continue its recognition of the many duties with which Directors are already burdened, and to allocate more responsibilities to senior management. An undue focus on the board in day-to-day risk management will distract from its essential corporate governance responsibilities.

• We are pleased with the RMG’s acknowledgment of the differences between operational risk and credit and market risk. Most notably, the Committee has recognized that operational risk is usually not taken in return for an expected reward, but rather exists as a natural course of corporate activity not exclusive to the banking industry.

• Finally, we appreciate the RMG’s recognition of the role revenues and future earnings can and do play in the management of operational risk. However, recognition of the critical role of revenues should be included not only in Pillar 2, but also in any consideration of allocating capital for operational risk. The Committee should ensure consistent recognition of earnings and reserves as a proven way to mitigate operational risk, not just discuss doing so in regard to revisions in the AMA.

Conclusion

The revised “Sound Practices” paper is a major step forward in the recognition of the intangible nature of operational risk and the challenges facing banks and regulators in meeting the requirements of the Accord. Furthermore, the removal of the December paper’s second section eliminates any confusion as to what constitutes “sound practices” as opposed to “best practices.” While we prefer the overall approach of the document in dealing with Operational Risk, the FGG is still concerned that these standards will not be applied to non-bank financial institutions. We are also troubled that a bank could be determined to have effectively applied all the “sound practices” principles to its business by its regulator and yet still be subject to an arbitrary capital charge. As the RMG further develops its approach to managing this risk, the FGG firmly commits to providing any and all assistance on these, or any other, issues to the Risk Management Group, our domestic regulators, and the Basel Committee.

Sincerely,

Karen Shaw Petrou
Executive Director
Cc:

Mr. Roger Cole  
Senior Associate Director of Policy  
Federal Reserve Board  
Mail Stop 179  
20th and C Streets., N.W.  
Washington, DC 20551

Mr. Kevin Bailey  
Senior Advisor to the Chief National Bank Examiner  
Comptroller of the Currency  
250 E Street, S.W.  
Washington, DC 20219

Ms. Beverly Hirtle  
Vice President  
Federal Reserve Bank of New York  
33 Liberty Street  
Third Floor  
New York, NY 10045

Mr. Kirk Odegard  
Supervisory Financial Analyst  
Federal Reserve Board  
Mail Stop 155  
20th and C Streets., N.W.  
Washington, DC 20551

Ms. Tanya Smith  
National Bank Examiner, International Advisor  
Comptroller of the Currency  
250 E Street, S.W.  
Washington, DC 20219

Mr. Stefan Walter  
Vice President  
Federal Reserve Bank of New York  
33 Liberty Street  
Twenty Fourth Floor  
New York, NY 10045

Mr. Michael Zamorski  
Director of Supervision and Consumer Protection  
Federal Deposit Insurance Corporation  
550 17th Street, N.W.  
Washington, DC 20429
Attachment B


March 29, 2002
March 29, 2002

Secretariat of the Basel Committee on Banking Supervision
Bank for International Settlements
CH-4002 Basel, Switzerland

Dear Sir or Madam:

The Financial Guardian Group is pleased to comment on the Risk Management Group’s paper, “Sound Practices for the Management and Supervision of Operational Risk” (“Sound Practices”). Although we have numerous comments that we believe will contribute to an effective supervisory framework for operational risk, we commend the efforts of the Basel Committee to set a global standard for effective operational risk management. Basel Committee efforts in electronic banking, interest-rate risk management, effective auditing, and many other areas have made an immeasurable contribution to improving the safety and soundness of banking around the world. We strongly urge the Committee to focus on refining an appropriate supervisory framework for operational risk, dropping the proposed operational risk-based capital charge (the Pillar 1 approach) unless or until the many questions regarding quantification, effectiveness, and the competitive impact of the capital charge are resolved.

The Financial Guardian Group (FGG) is a coalition of specialized U.S. banks on which operational risk capital and supervisory issues have a particularly strong impact. However, our views do not represent solely those of such specialized banks. We would refer you not only to the approximately twenty comment letters filed in May, 2001 that opposed the operational risk-based capital (ORBC) charge, but also to more recent letters from these institutions and major trade associations. We understand that the Risk Management Group (RMG) and U.S. regulators may receive letters on the “Sound Practices” paper from both the American Bankers Association and the Financial Services Roundtable (the association for the nation’s largest financial services firms). The FGG strongly endorses these views, and urges the RMG to consider them as evidence that the concerns expressed by the Financial Guardian Group and its members are not isolated problems that can be dismissed as final rules are crafted.

Recent events have made clear the importance of operational risk management — and the value of back-up systems, contingency planning, and other forms of operational risk mitigation. The financial services industry operated with remarkable resilience after September 11 due to these risk mitigants and the emphasis supervisors had placed on them in the years before the terrorist attack. Recent events have also demonstrated that the absence of the most basic internal controls — such as independent review of trading activity — should not be overlooked by both banks and their supervisors. We urge
the RMG to continue to develop effective operational risk management standards to guide the industry and its regulators, terminating the ongoing and increasingly time-consuming effort to craft ORBC rules. These rules create numerous problems in their own right, as we have noted in our comment letters on Pillar 1. Additionally, these rules are a drain on resources that could best be used to finalize, implement, and enforce effective operational risk supervisory standards in the G-10 and around the world.

We urge the RMG to be guided by the following principles as it moves expeditiously to finalize this important “Sound Practices” paper:

- The importance of operational risk argues for rapid action on effective supervisory standards. The Basel Committee should not defer action on these sound practices until such time as the many problems associated with operational risk-based capital are resolved. Further, the operational risk management standards should apply to all banks, not just internationally-active ones, with appropriate adjustments for smaller and/or less sophisticated banks. This has been the practice in most recent Basel Committee sound-practices papers in other emerging risk areas, and we urge its continuation with regard to operational risk. We also urge the Basel Committee to work with the Financial Stability Forum, the International Organization of Securities Commissions and other relevant agencies to press hard for appropriate operational risk management standards governing non-bank financial services firms. These institutions are major competitors with banks, as well as important players in the global financial system.
- An excessive focus on the role of boards of directors and senior management in controlling non-material operational risk will distract these officials from their primary function, thereby increasing — not reducing — potential risk.
- Operational risk management sound practices should not mandate centralized risk management instead of line-of-business structures. Supervisors currently have little reliable loss information with which to assess institution-wide operational risk and its management. They should therefore, in general, defer to institutions with proven histories of controlling operational risk as to the appropriate structure for risk management. This is especially true for conglomerates, where centralized risk management could lead to standardized approaches inappropriate for specific lines of business.
- Operational risk is different from credit and market risk. Therefore, supervisory policies appropriate for credit and market risk should not be applied to operational risk. Supervisory standards for operational risk can and should be made compatible with the incentives driving banking organizations.

As discussed in more detail below, we propose a specific agenda for rapid supervisory work to improve global operational risk standards. We would be pleased to provide whatever technical expertise FGG members can contribute to this effort.

I. Appropriate Supervisory Responsibilities

The FGG strongly concurs with the emphasis in the “Sound Practices” paper on the importance of supervisory scrutiny of operational risk management standards. However, we believe that the
emphasis should not be on compliance with capital standards, but rather on the risk management culture, back-up systems, contingency planning, and risk mitigation that have proved their worth.

Paragraph 40 describes supervisory review of capital assessment as the first supervisory responsibility, subsuming such vital issues as analysis of overall risk management processes, problem resolution competence, and auditing quality. As noted, the FGG strongly opposes a specific regulatory capital charge for operational risk. However, even if one conceded the value of such a charge, capital comes into play only when unexpected losses may create financial stresses beyond reserves, future revenue, insurance, and other risk mitigants. Even advocates of ORBC acknowledge its extreme complexity — especially for users of the advanced measurement approach. Thus, supervisors who make review of capital adequacy their top priority could well become mired in complex technical debates with the banks they supervise, missing the potentially serious operational risks arising out of failures to take prudent risk management steps under the effective supervision of the bank’s board and senior management.

As noted, the FGG strongly supports the RMG’s goal of improving operational risk management practices. As a result, we urge the panel to move forward quickly with a final “Sound Practices” paper that delineates the minimum standards of operational risk management necessary to protect a bank’s safety and soundness and to insulate the financial system from risk. We urge the Committee to separate the Pillar 2 approach from the Pillar 1 ORBC charge, not only because we oppose the capital charge, but also because making safety-and-soundness rules dependent on the capital charge could indefinitely delay important action on supervisory guidance and not achieve the desired protection.

Bank supervisors can play an essential role in improving industry practice by working with the banks they regulate after an instance of operational risk has highlighted potential vulnerabilities. This was not completely done in the wake of the Barings failure, which amply demonstrated the importance of independent control of trading activity. Although press coverage widely highlighted the problems at Barings, the new Allied Irish case and the spotlight it has put on trading-room controls in the industry as a whole make it clear that the Barings lesson was very incompletely learned. Supervisors should not just put out bulletins when a new case points to a particular operational risk. Instead, they should go out and ensure that industry practice rapidly and demonstrably improves, while imposing meaningful sanctions on laggards.

When banks fail to meet supervisory standards for effective operational risk management, the same techniques used to enforce other standards should be employed. In the United States, bank regulators use public cease-and-desist orders to force banks to curb undue interest-rate risk, for example. These orders have a long and salutary history of increasing market discipline over troubled institutions, and they should be adopted by all regulators with regard to operational risk. Banks engaging in certain lines of business without appropriate back-up computing or telecommunications capability should be subject to the same enforcement actions — including civil money penalties — as those taking other undue risk. A widespread understanding that operational risk is subject to this supervisory discipline will have a profound impact on improving operational risk management practices.
II. Specific Comments

A. Role of Directors

The FGG strongly supports the intent of the RMG and the Basel Committee to ensure that boards of directors (or the appropriate equivalent) and senior management take full responsibility for appropriate operational risk management. We strongly recommend that the RMG balance the evident need for board involvement and responsibility with the fact that bank directors have numerous responsibilities, including those increasingly related to ensuring audit quality. The ability of directors to set policy and to ensure that senior management adheres to it is undermined if directors must at each meeting review numerous lengthy and detailed regulator-mandated “policy and procedure” manuals. Buried in detail that is best delegated to senior and line management, boards can become unable to spot key emerging risks and address them quickly and effectively.

The demands on boards of directors to review a range of regulatory documents are already extensive, especially in the United States. Attached to this letter is a list of many of the regulatory mandates now governing boards of U.S. banks and bank holding companies. These 277 requirements and suggestions can dominate board meetings, leaving little time for the focus on business decision-making on which shareholders rely. Adding additional requirements that are not carefully honed to address key strategic concerns will only worsen this already serious problem.

We strongly urge the RMG to confine board obligations with regard to operational risk management to risks and strategies that are material to the institution as a whole. Specifically, we suggest the following sound-practice standards for boards of directors and senior management:

- Senior management must periodically re-evaluate the effectiveness of the organization’s operational risk management policies, guidelines, and procedures to ensure that they remain appropriate, sound, and consistent with the organization’s overall business strategy and risk management policy, as determined by the board of directors. Such reviews should occur at least annually, although any fundamental shift in business strategy or risk should involve a reassessment of existing operational risk management strategies and policies.
- Boards should receive regular reports on material and significant operational risk events and risk management activities. Senior management should be responsible for allocating sufficient resources to identify, measure, and control operational risk. This responsibility includes hiring qualified and experienced risk managers, as well as providing adequate training for staff. Senior management is responsible for ensuring that line units meet operational risk management goals and that compensation policies support board-dictated policies and strategies.
- Funding must be sufficient to provide tools to support risk measurement and monitoring, as well as to provide insurance coverage and other risk mitigation tools.
- Senior management is responsible for evaluating which operational risks warrant notice to shareholders, regulators or other affected parties. Institutions should provide public disclosures in accordance with applicable standards and/or relevant legal requirements.
- Boards of directors should approve corporate-wide operational risk management strategies and policies. Senior management should then be responsible for establishing the institution’s operational risk management guidelines, infrastructure, and processes to
implement board-approved strategies and policies. The board is responsible for ensuring that senior management takes appropriate measures to monitor and control operational risk.

**B. Centralized vs. Line-of-Business Risk Management**

Both the principles espoused in the initial part of the “Sound Practices” paper and the very detailed second session addressing large-bank issues appear premised on an independent operational risk control structure (see, for example, paragraph 50). Given the ongoing development of operational risk expertise at both banks and supervisors, the FGG urges considerable caution in mandating one organizational structure for operational risk management. Many banks have had considerable success with line-of-business operational risk management, especially in diversified financial services providers where lines of business vary considerably and require specialized risk management. Mandating a corporate-wide risk management structure could remove this function so far from actual operations as to increase — not reduce — operational risk. One of the key issues in the Allied Irish case, for example, may be that foreign-exchange trading operational risk management was centralized and housed in Dublin, too far from the actual risk-taking line of business in Maryland to provide adequate internal control.

Centralized operational risk management may also be inappropriate in diversified institutions because of the potentially significant difference between organization-wide risk and that in specific lines of business. Operational risk management based on aggregate data could lead senior management to overlook emerging risks in individual lines of business, and therefore fail to allocate sufficient reserves or to reduce earnings expectations appropriately. Public loss data remains, as the RMG has noted, of very mixed quality and of limited value in assessing line-of-business risk, suggesting strongly that institutions should structure operational risk management as best suits their board-of-directors’ mandated strategy and policy goals.

**III. Additional Concerns**

**A. Operational Risk Differs Markedly from Credit/Market Risk**

On page 3, the paper states that, “…it is clear that operational risk differs from other banking risks in that it is typically not directly taken in return for an expected reward, but exists in the natural course of corporate activity, and that this impacts the risk management process.” We strongly concur, and believe that this view is yet another reason the Basel Committee and the Risk Management Group should eschew a Pillar 1 approach and carefully craft their Pillar 2 approach.

In sharp contrast to credit and market risk, banks do not take on measured or forecast amounts of operational risk to boost profits. Banks — like all other financial services firms — are of course precisely in the business of taking anticipated amounts of credit or market risk to earn their profits. If banks did not take credit risk, they could not make loans; if they did not take market risk, they could not function as traders and underwriters. In short, their business would cease. However, banks could be in the asset management, custody or payments-processing businesses without taking operational risk (assuming reaching this theoretical nirvana were possible). Without operational risk, these businesses would be still more profitable. Thus, operational risk is priced into fee-based and other
services, but not taken in the same way or for the same corporate objectives as many other forms of risk.

If banks were not provided government-granted benefits designed to protect economic stability, then they could take any amount of credit or market risk the markets would bear, with shareholders suffering the result when too much risk is taken or risk is incorrectly priced. Since banks operate with these government supports based on the broad economic impact of their operations, ongoing supervision of credit/market risk, and appropriate capital allocation is essential to ensure that banks not only operate to reward shareholders, but also to protect financial systems more broadly.

In sharp contrast, banks do not take on measured or forecast amounts of operational risk as the premise of their profit equation. Instead, operational risk is the unfortunate — albeit necessary — concomitant of the businesses in which banks operate. Banks that do not appropriately control operational risk adversely affect their profitability, sometimes dramatically, without having first run at the higher returns that characterize banks that knowingly take on higher levels of credit or market risk. Simple translation of the supervisory framework suitable for credit and market risk to operational risk is therefore inappropriate, just as the imposition of regulatory capital for operational risk raises serious problems.

We would be pleased to provide detailed comments on the areas throughout the “Sound Practices” paper where credit-risk concepts appear to be inappropriately applied to operational risk. Examples include the discussion of the role of directors, where (in paragraph 16) directors are charged with explicit approval of “risk tolerances.” This makes sense in credit or market risk, but not in operational risk, where risk is often well outside an institution’s control. It is not possible, for example, for directors to specify what Richter-Scale earthquake they are willing to accept.

Another example of mis-application of credit risk mitigation can be found in paragraph 29, which requires a range of steps to monitor and control risk “exposures” — again a difficult concept for operational risk. The FGG believes the supervisory emphasis must be on risk mitigation — which is within a banking organization’s control.

**B. Market Operational Risk Mitigation Incentives**

As noted, profitability does not increase as banks take on more operational risk. However, banks can boost profits — at least temporarily — by under-investing in operational risk mitigation. Such institutions will have lower operating expenditures and thus may be viewed by some investors as more “efficient,” possibly resulting in improved stock prices. It is far easier for regulators to assess the degree to which some banks under-invest in operational risk management in comparison to their peers than to construct the complex quantifiable models of operational risk currently under development by the RMG. Supervisors can, for example, survey banks to determine the extent and nature of back-up controls, contingency planning, and similar operational risk mitigants at institutions widely known to be “best practices” within the industry, and they can then turn to other banks and make tough inquiries as to why comparable systems are not in place. Institutions that run at lower operating costs than their peers should be questioned by regulators as to whether these differences are in fact the result of improved efficiency or just a failure to make forward-looking investments that will protect the institution and its customers from both expected and unexpected operational losses.
Indeed, the FGG believes that the events of September 11 support making supervisory understanding of contingency planning, disaster recovery, internal operational risk controls and operational risk mitigation a top priority. It is vital that supervisors undertake a disciplined study of effective operational risk mitigation practices and then compare the banks they regulate to these standards. Banks that fall short should quickly be required to improve — a change in supervisory policy that will have a far more immediate and demonstrable impact on reducing systemic operational risk than the proposed capital charge.

IV. Conclusion

The FGG believes that back-up systems, internal controls, and sound management — buttressed by insurance — are key to effective risk management for expected losses, with reserves and future revenue the appropriate way to handle unexpected losses. We therefore urge the Risk Management Group and the Basel Committee to turn their attention to providing guidance on specific ways to reduce operational risk, based on the hard lessons of recent history. The RMG could, for example, publish guidance based on the lessons of September 11, noting the role of contingency planning and the structure of those plans that proved successful in saving lives and restoring operations. It could provide significant guidance to the industry on the role of insurance, suggesting structures that ensure prompt and certain pay-out, thus strengthening the clear and important role of insurance in reducing the cost of operational risk.

Technical guidance would be particularly helpful for smaller institutions and those operating in emerging markets, which model their supervisory policies on Basel standards. Smaller institutions and those in emerging areas may not be ready to adopt the complex quantified models of operational risk now under discussion for many years, even if the RMG resolves the many outstanding questions surrounding them. However, they can come quickly into compliance with effective, non-burdensome operational risk mitigation standards, with benefit to their own institutions and to the financial system as a whole.

The “Sound Practices” paper, like the Pillar 1 capital proposal, significantly over-estimates the current value of quantifiable operational risk models, based in part on the apparent assumption that these will have much in common with quantifiable models of credit and market risk. Forcing reliance on incomplete and untested models and diverting supervisory resources to their ongoing construction diverts essential resources from the many tasks already at hand that would improve operational risk management. The FGG urges the RMG to join with the industry to identify areas of weakness, especially those exposed in the September 11 attacks, and to propose specific steps to control these known operational risks. We firmly commit to providing any and all assistance we can to the Risk Management Group, our domestic regulators, and the Basel Committee in highlighting key operational risks and issuing standards to mitigate them, as we believe that this effort will contribute to the stability of the global financial system on which each FGG member depends.

Sincerely,

Karen Shaw Petrou
Executive Director
CC:
Kevin Bailey
Senior Advisor to the Senior Deputy Comptroller for Bank Supervision Policy
Office of the Comptroller of the Currency

Roger Cole
Senior Associate Director
Policies and Procedures
Federal Reserve System

Edward Ettin
Deputy Director
Division of Research and Statistics
Board of Governors
Federal Reserve System

John Fiechter
Senior Deputy Comptroller
International and Economic Affairs
Office of the Comptroller of the Currency

R. Chris Moore
Senior Vice President
Bank Supervision
Federal Reserve Bank of Cleveland

Eric Rosengren
Senior Vice President
Federal Reserve Bank of Boston

Mark Schmidt
Associate Director
Policy and Program Development
Federal Deposit Insurance Corporation

Richard Spillenkothen
Director
Bank Supervision and Regulation
Board of Governors
Federal Reserve System

Stefan Walter
Vice President
Bank Supervision
Federal Reserve Bank of New York