I am very pleased to participate in the Finance Forum 2002. As a former banker and current bank supervisor, I would like to focus my remarks on the process of building a strong system of financial supervision and regulation. Generally speaking, I believe a sound supervisory framework must be dynamic and must closely mirror the realities of the financial sector for which it is created. As such, though best practices in industrial countries are an important starting point for thinking about enhancing supervisory frameworks, one also should bear in mind that a single framework very rarely fits all types of banking organizations or banking systems.

My comments today will include an overview of the evolution of banking supervision in the United States, a discussion of the fundamental elements of our system, and a review of aspects of the U.S. experience that may provide lessons for supervisory development in emerging markets. I would like to conclude my remarks with a discussion of a basic supervisory issue related to foreign banking organizations that continues to challenge supervisory agencies around the world.

Evolution of the U.S. Supervisory System

In the not-too-distant past, the Federal Reserve and other supervisory agencies in the United States relied considerably on validating financial accounts and records during on-site examinations to assess the safety and soundness of banking organizations. Examiners also spent significant time valuing account balances by performing detailed reviews of individual loans and other risk assets. Labor-intensive efforts went into verifying compliance with banking laws, regulations, and reporting requirements, and testing the adequacy of internal controls. These procedures enabled examiners to obtain a detailed assessment of a banking organization’s financial condition at the time of the examination. Since examinations were conducted annually and the banking business changed slowly during most of the post World War II war period, this framework provided supervisors with a reasonable assessment of the safety and soundness of the banking industry.

However, as you are aware, by the 1990s the pace of consolidation, expansion, and innovation in the U.S. banking industry had begun to accelerate, particularly among the largest institutions. The emergence of large, complex banking organizations and their use of new financial instruments, particularly derivatives, enabled these organizations to change their risk profiles rapidly. As a result, the point-in-time evaluations derived from transaction validation and valuation-oriented banking supervision became insufficient to ensure that banking organizations, particularly large complex banking organizations, were operating in a safe and sound manner. Moreover, the increased complexity and volume of financial transactions across the largest institutions began to significantly strain examiner resources.

Along with financial innovation, the risk management systems of banking organizations also began to evolve around this time because of advances in information technology, which significantly reduced the cost of obtaining and analyzing data and increased the sophistication of risk management models. More sophisticated risk management systems gave banking institutions a more accurate view of their risk-adjusted returns on capital. Value-at-risk models were adopted to measure expected losses at given levels of probability, and financial products such as swaps and other derivatives were used to manage interest-rate risk more effectively. On the credit side, where banks already had access to considerable information about their borrowers, more sophisticated risk-modeling techniques complimented management’s views on credit risk. These models include credit scoring for consumer lending and KMV models for corporate financing, which estimate option-based pricing models and information contained in stock prices with the probability of default.

As a result, the evolution of the industry in the 1990s rendered our traditional point-in-time, transaction validation, and valuation-based supervisory system inadequate. At the same time, the advancements in risk measurement in the industry allowed supervisors, when evaluating bank soundness, to rely more directly on information from banks’ own internal risk management systems. Doing so, however,
necessitates testing these systems, and thus our current model of risk-focused supervision was
developed.

At its core, risk-focused supervision is a relatively simple concept: Supervisors are expected to
concentrate their efforts on ensuring that financial institutions use the processes necessary to identify,
measure, monitor, and control risk exposures. Given the risk profile of U.S. banking organizations,
risks are divided into six categories: credit, market, liquidity, operational, legal, and reputational. More
time has been allocated to the examination planning process, in which supervisory teams assess the
most important risks facing the organization and structure their examination activities around
assessing and testing the adequacy of it’s management of those important risks. Thus, in the
application of risk-focused supervision in the United States, our examiners verify the adequacy of the
banking organization’s risk management systems, including whether they have an appropriate degree
of transaction testing.

One aspect of sound risk management that did not change during the 1990s is the importance
of sound corporate governance. In particular, bank directors and senior managers are responsible for
seeing that their banks have effective internal controls, including an internal audit function. Effective
internal controls ensure the implementation of bank policies and procedures designed to limit and
manage risks and otherwise promote sound business practices. For example, internal control
procedures that give front- and back-office responsibilities to independent units within the corporation
reduce the ability of individuals to hide losses from bank management and thereby reduce operating
risk. An internal audit function, in turn, verifies that a bank’s internal control procedures function as
intended. Therefore, another critical aspect of our system of risk-focused supervision is the bank
examiners’ assessment and evaluation of a bank’s internal controls and internal audit function.

The application of risk-focused supervision in the United States is supported by a strong culture of
market discipline. The extent and the content of financial disclosure in the United States have
developed markedly over the past few decades through the collective efforts of the corporate sector
and government authorities. Although recent events have illuminated weaknesses in the accounting
and auditing professions in the United States, most knowledgeable observers believe that the quality
of information released by most firms in this country continues to be sound. Further, the long-standing
independence of the regulatory community in the United States has fostered an environment in which
banks are expected to correct in a timely fashion and have in most cases corrected deficiencies
uncovered during the supervisory process.

Our supervisory system has successfully changed to the new risk-focused approach, but the transition
was difficult in the early stages, particularly for supervisory staff who had long careers in the field.
Examiners at times struggled with the shift to evaluating risks and risk management systems from
making independent valuations of a very large portion of an institution’s risk assets. Also, some
examiners misperceived that risk-focused supervision meant eliminating even a cursory review of less-
important business lines and transaction testing from the examination process. In fact, we continue to
struggle with these issues under our current approach, particularly since the system has not been
thoroughly tested under adverse conditions in the banking sector.

It is crucial that the new system remain both flexible in view of the rapid evolution of the banking
industry and grounded in core supervisory concepts, such as maintaining an adequate control
environment--an issue to which I will return at the end of my remarks.

Applicability of this System to Developing Countries

I believe that the basic principles of risk-focused supervision are relevant to most supervisory systems
in industrial and developing countries. However, I would caution those attempting to introduce the U.S.
 supervisory model as it exists in this country to other countries, particularly where the characteristics
of the banking sector differ markedly from those of the United States. Even in the United States, we have
very different approaches to supervising large, complex banking organizations and smaller community
banks.

First of all, the U. S. financial system is based on several fundamental factors. The first is a well-
developed rule of law that enables regulators to administer their responsibilities effectively. This legal
framework also ensures the enforceability of contracts, removing problems when borrowers are
unwilling rather than unable to repay loans. For example, the ability to seize collateral of borrowers in
default is essential if banks are to mitigate risks. As you know, difficulties in this regard have
contributed to bank losses in many countries around the globe.
The second fundamental element of our system is the availability of a large volume of high-quality financial information. For both banks and corporations, a sound system of accounting and disclosure that provides accurate, timely, and complete information is needed for banks to properly assess and manage risks and for supervisors to ensure that the institutions are operating in a safe and sound manner. The third element is that the U.S. supervisory agencies are both operationally independent and sufficiently funded to carry out their duties. In addition, supervisory staff must have a basic understanding of credit analysis and risk management in banking organizations.

We also know from experience that connected lending can weaken banking systems by distorting the incentives of bank owners and managers to manage risk properly. Thus, a fourth critical element that underlies our system is restrictions on and disclosure of lending to bank affiliates, shareholders, and managers. A similar concern underlies our separation of banking and commerce, something with which I had personal experience when I worked at the Federal Reserve Bank of St. Louis more than thirty years ago. My responsibilities included implementation of the new regulations for one-bank holding companies. For the first time one-bank holding companies no longer could have both a bank and nonfinancial subsidiary. This separation eliminates any temptation banks might have to evaluate a commercial affiliate’s loan application less objectively than that of an unaffiliated firm. In countries that are still developing their system of banking supervision, such a separation can reduce the need for bank supervisors to ensure arm’s-length transactions between banks and their commercial affiliates, thus freeing up scarce supervisory resources.

Finally, our system was established to supervise the activities of for-profit, private-sector, commercial banks, and it is wholly incompatible with a banking system that contains widespread government-directed lending. Once the responsibility for taking risk has been removed from bank managers, their incentive for monitoring and managing risk is greatly diminished. Moreover, the incentive of the supervisory authorities, which are part of the government structure, to criticize lending that was granted at the behest of the government is limited. As a result, one of the first steps toward implementing a rigorous supervisory framework must be the elimination of such practices in the banking sector.

In the absence of these fundamental elements, the application of the U.S. supervisory system and many similar systems is likely to be unsuccessful. I encourage you and your colleagues, who provide such valuable skills and resources to developing countries, to continue focusing the bulk of your attention on introducing or improving these critical elements of infrastructure for effective supervision in countries that are lacking these attributes.

In addition, as I have mentioned, one of the key aspects of our supervisory approach in the United States is our increasing reliance on the evaluation and testing of banks’ own risk management systems. This aspect of our supervisory approach probably has the least relevance for developing countries that lack the fundamental factors I have just outlined. The growing sophistication of some global banking organizations’ internal risk-rating systems has led the Basel committee to propose incorporating these models in the calculation of capital requirements under the Basel II Capital Accord. However, the use of such models in calculating capital requirements is likely to be restricted to a limited subset of internationally active banking organizations, given the model’s reliance on accurate data and the expense involved in developing these techniques. As you are undoubtedly aware, banks in countries with poor data and resource constraints are unlikely to employ high-quality risk management systems. Relying on the systems used by those banks to measure the safety and soundness of institutions may give supervisors little useful information about the condition of their banking sector.

Instead, supervisory policies and procedures created in developing countries should focus on the risk environment in that market. For example, if the information supplied by banking organizations is poor and the auditing profession is underdeveloped, examiners should focus on validating accounts and records, valuing risk assets, and verifying the accuracy of financial statements. United States supervisors played this role earlier in the evolution of our banking system. If the banking sector engages primarily in straightforward credit-extending and deposit-taking activities, a system geared toward intensive credit review and transaction testing may be more appropriate. Certainly the years of regulatory report verification and large scale transaction testing allowed our supervisory system to develop skills in assessing borrowers’ ability to repay, verifying the adequacy of internal controls, and recognizing signals that reported information may not reflect the true condition of the financial institution. It is difficult to gauge whether, without this experience, we could have shifted effectively to our current risk management intensive system of supervision.
Another issue that receives a great deal of debate in this country and in supervisory systems around the world is whether a single regulatory body is most efficient for supervising financial institutions. As you are aware, the U.S. banking supervisory system is composed of a large number of regulatory agencies. The Federal Reserve has argued against the creation of a single regulatory body outside the central bank, given the valuable information that the supervisory process provides to us in maintaining financial-market stability. However, compelling arguments have been made regarding efficiencies created by housing the entire financial supervisory apparatus under one roof. In the case of developing countries, a central consideration is the structure and character of the government itself. In countries with strong traditions of bureaucratic control over economic decisionmaking, consolidating the regulatory function may prove counterproductive because that agency would have tremendous power and few checks and balances. Further, such consolidation is likely to be a larger problem if the supervisory agency is not independent of other government functions.

**Current Issues Facing Global Supervisors**

Finally, I would like to discuss a key issue related to the supervision of foreign banking organizations that arises in a dramatic fashion every few years. This issue is the importance of ensuring that banking organizations maintain controls for their foreign affiliates that are sound and independent local management’s influence. History has shown that foreign affiliates are particularly vulnerable to internal control problems. The failure of Barings Bank and the losses incurred by institutions such as Daiwa Bank and, most recently, Allied Irish Bank were directly related to a failure in proper control of foreign affiliates. In most cases these losses could have been avoided by ensuring that the bank’s control procedures—for example, segregation of duties and the conduct of thorough and independent internal audits—were functioning properly. Even under a risk-focused approach, supervisors must ensure that bank management is providing adequate controls for all aspects of the business, even those that appear relatively minor in scope.

A number of banking organizations from developing countries have also had difficulties related to inadequate controls in recent years, particularly banks from countries with weak supervisory oversight. The difficulties have created significant losses for these banking organizations. The lessons from these cases for developing country supervision are that basic control functions are critical to all organizations, no matter what the size, and that banks operating overseas must be monitored carefully and continuously.

Related to these cases is the broader issue of implementing a rigorous supervisory structure for foreign banking organizations. We have seen in our markets that the increased competition produced by opening the banking sector to foreign institutions can enhance efficiency. For developing countries, the introduction of foreign competition is likely also to introduce a transfer of skills to the local banking community. Staff trained by foreign bankers often move to local institutions, and foreign bankers themselves have been involved in training local banking staff. For example, in the People’s Republic of China, a prominent U.S. banking organization has been providing training for staff and executives of state-owned, local banks—training the organization believes will benefit its business in the longer run by increasing the sophistication of the market as a whole.

Yet from the perspective of the home country supervisor, introducing an appropriate supervisory apparatus is important to monitor the activities of these banks and to enhance the host supervisor’s understanding of the global institution and supervisory framework in the home country market. The development of a clear supervisory framework for foreign banking organizations will improve the safety and soundness of the banking sector as a whole. And in addition, the supervision of foreign banking organizations may provide a training opportunity to host supervisors in developing countries, given the quality of information and risk management practices in many foreign banking organizations operating in their market.

**Conclusion**

The increasingly integrated nature of financial sectors around the world has increased the importance of sound banking supervision in all financial markets. The U.S. experience provides valuable lessons for the development of effective supervision in developing countries, but those lessons must be viewed within the institutional context of each market. The earlier stages of development in our system may hold the most important practices for developing countries. I wish you all the best in your very important work in this field and have greatly enjoyed the opportunity to speak with you today.