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Remarks by

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Board of Governors of the Federal Reserve System

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to

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It is a pleasure to once again join the members of the American Bankers Association at your annual meeting. This morning I would like to explore the apparent incongruity between the recent substantial losses on corporate credits and the continued strength of the U.S. banking system.

Over the past two or three years, the U.S. financial system has suffered a sharp run-up in corporate bond defaults, business failures, and investor losses. At commercial banks, troubled loans--including charge-offs, classified loans, and delinquent credits--have also climbed to quite high levels. At the same time, banks in this country remain quite healthy--with strong profits and rates of return and with capital and reserves not much below recent historical highs. Our banks have been able to retain their strength in this business cycle, in contrast to the early 1990s when so many either failed or had near-death experiences. Why is this? The answer may tell us much about the changes in our financial and economic system over the intervening dozen years or so.

Part of the answer, of course, is that the real economy was different during these two intervals. The most recent recession was less severe and centered mainly in the business sector. After years of rapid growth, capital spending plunged as firms realized that investments in capital goods, especially in the telecommunication and other high-tech sectors, were excessive. The financing of this high level of spending with debt, which was seen as prudent when equity valuations were high, led to a rise in defaults when firms were no longer able to repay bank loans and other debt through equity issuance in a depressed stock market.

In contrast, despite the substantial destruction of wealth reflected in the decline in equity prices, households, encouraged by ongoing increases in income and housing wealth, have maintained their expenditures. Low mortgage rates encouraged households to purchase both

new and existing homes, the latter enabling sellers to extract large amounts of home equity, previously enhanced by capital gains. Low rates also encouraged refinanced mortgage cash outs and rapid expansion of home equity loans. Consumer and mortgage loans have not suffered the sharp run-up in delinquencies that loans in the business sector have, and they have contributed significantly to the earnings of the banking system, providing it with the ability to absorb losses elsewhere, to maintain loss reserves, and still to show significant profits.

Those banks with relatively large exposures to the business sector and insufficient offsets from other earning flows were able to avoid stresses because they entered the period with both substantial capital and reserves. These positions reflected not just diligent supervision and the Basel I capital reforms but also a marketplace that increasingly demands strength in financial institutions that serve as counterparties in frontier financial risk-management transactions. And bank managers who lived through the late 1980s and early 1990s found capital buffers comforting as well as useful.

That banks had impressive earnings and balance sheets going into the current period of stress is of key significance. The strong balance sheets lowered funding costs and provided needed buffers. Some banks also benefited from the increased diversification and scale of their operations that had resulted from previous consolidations. The larger banks were better able not only to spread their portfolio risks across a wider range of customers but also to broaden their funding sources.

An analysis of the resiliency of the U.S. banking system would be far from complete without a recognition of the new techniques in risk management that have been applied in banking during the past few years. To be sure, at most banks the application of these practices has just begun, and even the most advanced banks still have significant strides to make.

Nonetheless, the efforts to quantify risk have provided management with a far more disciplined and structured process for evaluating credits, pricing risk, and deciding which credits to retain. In the process, banks are becoming much less dependent on the analysis and subjective judgments of lending officers. Although such judgments in the end are indispensable to the lending process, a methodical, systematic, and quantitative review of facts--including the effects of material new exposures on the lender's consolidated risk--provides a greater depth to risk management than we have had in decades past.

Improved risk management and technology have also facilitated, of course, the growth of markets for securitized assets and the emergence of entirely new financial instruments--such as credit default swaps and consolidated debt obligations. These instruments have been used to disperse risk to those willing, and presumably able, to bear it. Indeed, credit decisions as a result are often made contingent on the ability to lay off significant parts of the risk. Such dispersal of risk has contributed greatly to the ability of banks--indeed of the financial system--to weather recent stresses. More generally, the development of these instruments and techniques have led to greater credit availability, to a more efficient allocation of risk and resources, and to stronger financial markets.

The flexibility and size of the secondary mortgage market has been especially important in the United States. Since early 2000, this market has facilitated the large debt-financed extraction of home equity I just noted. That, in turn, has been critical in supporting consumer outlays in this country through the recession. This market's flexibility has been particularly enhanced by extensive use of interest rate swaps and options to hedge maturity mismatches and prepayment risk.

Financial derivatives, more generally, have grown at a phenomenal pace over the past fifteen years. Conceptual advances in pricing options and other complex financial products, along with improvements in computer and telecommunications technologies, have significantly lowered the costs of, and expanded the opportunities for, hedging risks that were not readily deflected in earlier decades. Moreover, the counterparty credit risk associated with the use of derivative instruments has been mitigated by legally enforceable netting and through the growing use of collateral agreements. These increasingly complex financial instruments have been especial contributors, particularly over the past couple of stressful years, to the development of a far more flexible, efficient, and resilient financial system than existed just a quarter-century ago.

Banks appear to have effectively used such instruments to shift a significant part of the risk from their corporate loan portfolios to insurance firms here and abroad, to foreign banks, to pension funds, to hedge and vulture funds, and to other organizations with diffuse long-term liabilities or no liabilities at all. Most of these transfers were made early in the credit-granting process, and significant exposures to telecommunication firms were laid off through credit default swaps, collateralized debt obligations, and other financial instruments. Other risk transfers reflected later sales at discount prices as credits became riskier and banks rebalanced their portfolios. Some of these sales were at substantial concessions to entice buyers to accept substantial risk. Whether done as part of the original credit decision or in response to changing conditions, these transactions represent a new paradigm of active credit management and are a major part of the explanation of the banking system's strength during a period of stress.

Of course, sound risk-management techniques require more than adequate tools and diverse markets. Managers must also pay attention to changing risks and respond effectively to them. In this respect, developments in 1998 were key in alerting U.S. banks to mounting risk.

After three or four years of economic expansion, loan growth, and rising profits, the Asian crisis and the Russian default sent a strong and timely message to U.S. banks to raise their credit standards and more actively manage their existing portfolios to limit risk exposures. I am aware of no other time when banks began so much before the cyclical peak to be highly sensitive to potential risks in either new or existing credits. That experience is indicative, I believe, of how better risk-management techniques can infuse the decisionmaking process with increased discipline and can focus attention on the need to balance risk and reward. We can have little doubt that we have seen a new response mechanism that has contributed to the health of the banking system, one that I trust will be more than transitory.

To be sure, there were, and still are, substantial problems. Large losses have been taken, and more are yet to be recognized. No risk-management system will ever be flawless, and I emphasize that banks have just begun the process of applying the new quantification techniques. Indeed, quantification techniques require quantities--numbers --to work. The most recent credit cycle has created an abundant supply of exactly the kind of critical information that banks will need to improve their risk-management: information about default rates and the associated losses by borrower and loan type.

Now is the time to collect and maintain these default and loss data in a disciplined and uniform fashion. Most banks missed that opportunity in the early 1990s, and some are going back at great cost to mine these data today. A decade ago, one might have been excused from undertaking such data collection efforts because of the technology then existing and the cost of data storage. These reasons are no longer justified. Further, the collection of data on defaulting credits, both from past cycles and on a continuing basis, is required to link internal default and

loss estimates with the minimum regulatory requirements under the new Basel Capital Accord now being developed for the large internationally active banks.

Banks of all sizes are familiar with the importance of data in the quantification of risk-management tools. The simplest of these techniques, credit-scoring models, have been in wide use over the past ten to fifteen years by lenders, insurers of loans, and participants in secondary markets. The technologies have been integrated into routine business operations. They all incorporate past data about borrowers to predict and rank potential borrowers by the risk of default. These technologies have sharply reduced the cost of credit evaluation and improved the consistency, speed, and accuracy of credit decisions.

Credit-scoring technologies have served as the foundation for the development of our national markets for consumer and mortgage credit, allowing lenders to build highly diversified loan portfolios that substantially mitigate credit risk. Their use also has expanded well beyond their original purpose of assessing credit risk. Today they are used for assessing the risk-adjusted profitability of account relationships, for establishing the initial and ongoing credit limits available to borrowers, and for assisting in a range of activities in loan servicing, including fraud detection, delinquency intervention, and loss mitigation. These diverse applications have played a major role in promoting the efficiency and expanding the scope of our credit-delivery systems and allowing lenders to broaden the populations they are willing and able to serve profitably.

The use of credit-scoring models, whether turnkey models purchased from providers or proprietary models developed in house, has taught bankers--sometimes through costly experience--the value of continually updating the database on which the model operates. Indeed, one can speculate that some of the problems this year in subprime credit card losses may well

represent an insufficiently long data series to score successfully such credits during a recession. The experience with credit-scoring models underlines the necessity of basing more-sophisticated quantitative approaches, approaches that seem to have served the banking system so well when applied initially, on a longer and larger database of loss experience.

Let me conclude by noting an often overlooked fact. The use of the more- sophisticated techniques I spoke of earlier, especially the various forms of derivatives, are, by construction, highly leveraged. They are thus prone to induce speculative excesses, not only in the U.S. financial system, but also through out the rest of the world. The greater potential for systemic risk can be contained by improvements in effective risk management in the private sector, including market discipline based on better public disclosure, and by improvements in bank supervision and regulation in the public sector. To be sure, as I have noted elsewhere, there is some level of risk that must be absorbed, as a last resort, by central banks if an economy is to obtain the full resource allocation benefits of financial intermediation.

The supervisors of the industrial world have been working together for two decades, through the Basel Committee on Banking Supervision, to improve bank supervision and regulation. The revised Capital Accord, now almost fully developed, places much greater emphasis, implicitly and explicitly, on improved risk-management systems. All of this has the potential for placing even more responsibility on commercial banks for reducing both their own and systemic risk. Most financial institutions will neither need nor be expected to achieve the complex risk-management practices required by the new Basel Accord for large, complex banking organizations, but their operations will not be unaffected. Success, indeed survival, requires that we all adapt. The recent experience of the U.S. banking system suggests that it has begun to prepare itself for the task.