**Mr McDonough focuses on the importance of risk management techniques and the enhancement of market discipline**

Remarks by the President of the Federal Reserve Bank of New York, Mr William J McDonough, before the Bond Market Association in New York on 21/1/99.

---

Good morning. It is a pleasure to be here today and I thank the Bond Market Association for giving me this opportunity to share some of my thoughts about supporting the resiliency and liquidity of our capital markets.

As you recall, last August the Russian government announced an effective devaluation of the ruble and declared a debt moratorium, shocking investor confidence all over the world. Against the backdrop of weakened economies and financial markets in many developing countries, global equity and debt markets became increasingly volatile. In the U.S., a number of market observers had anticipated a correction in stock prices. However, the simultaneous and abrupt widening of credit spreads went far beyond the expectations of investors and financial intermediaries.

We are all familiar with the immediate consequences of these dramatic events. What is most important, it seems to me, is to try to understand what public and private entities can potentially do to prevent, mitigate, and manage financial uncertainty in the future.

In the face of the recent events in Brazil, the launch of the euro, the countdown to Y2K, and the extraordinary market volatility of the last 18 months, all of us are obliged to think carefully about our responsibility to support the functioning of liquid and efficient financial markets. One conclusion seems clear: prudent risk management by a critical mass of firms will not only help to ensure a safe and sound financial system, but also will reward individual institutions with long-term profitability.

In my view, market discipline, enhanced by appropriate regulation and supervision, offers the only realistic path for us to achieve our goals of a strong and stable marketplace. Today, I would like to focus my comments on the importance of risk management techniques and how market discipline can be enhanced to the benefit of public and private sector participants alike.

A series of market events over the past year and a half, beginning with the devaluation of the Thai baht in July 1997, had a major impact on many lenders and investors, revealing in the process several shortcomings in risk management techniques. One lesson financial institutions learned from these events was the need to continuously reassess both counterparty credit risk management techniques and assumptions about market liquidity. Broadly, financial institutions learned that reliable estimates of the size and portfolio composition of major counterparties were lacking and that improved credit risk management techniques were needed in two key areas: credit and market exposure measurement, and counterparty due diligence.

Let me be a bit more specific about some of the weaknesses found in credit risk management techniques. For example, some institutions routinely performed credit assessments using sparse, often unaudited financial information from valued customers, some of which had recorded substantial profits in previous years. Moreover, institutions that received intermittent financial statements and had infrequent contacts with these counterparties were left to make periodic credit assessments using stale information in a rapidly changing market. This insufficient information impeded the setting of prudent credit limits and terms, including collateral requirements and contract covenants.

Many risk managers also failed to account fully for the risks involved in new financial products. Non-traditional products, such as equity repos and credit derivatives, challenged existing credit

analysis systems and methodologies. In addition, relatively few financial institutions attempted to stress test credit exposures and even fewer anticipated a market environment as adverse as what we experienced in the third quarter.

For these and most other institutions, the rush to mitigate and reduce their exposures, particularly to highly leveraged institutions such as hedge funds, quickly resulted in the widespread withdrawal of all lending activity to some troubled sectors, regardless of an individual counterparty's financial condition. While these decisions undoubtedly were intended to reduce risk and avert losses, they also served to exacerbate already extraordinary financial market fragility.

Given that the task of assessing and managing risk is not going to get any easier as we move into the 21st century, let me now turn to some of the issues that I believe will challenge financial institution managers in the coming year and beyond. One issue is the increasing integration of banking, securities and insurance services; a second is the increasing pace at which capital moves across international borders; a third, the Year 2000 problem; and a fourth, the challenge of bringing improved risk management techniques to business operations as a whole, including the trading rooms. This is particularly important for participants in the rapidly changing fixed-income markets.

First, the integration of previously separate financial services means that institutions must be prepared to manage risks across a far wider range of products, business units, and counterparties than they have been accustomed to doing. In the securities lending markets, for example, an increasing number of firms are accepting equities as collateral for financing arrangements, or structuring securities lending transactions off-balance-sheet through total return swaps and other derivative structures. Thus, corporate treasurers must develop greater expertise in equity and derivatives markets.

More broadly, the potential economies of scale and scope, as well as the potential benefits of reducing risk through sectoral and geographic diversification, have fueled the trend towards consolidation in varied financial industry sectors. As this trend continues, we must meet the challenge of merging the risk management practices of previously separate financial firms. These readjustments are likely to be far more complex for firms consolidating across the spectrum of financial service providers.

A second issue that has an important bearing on risk management techniques is the increasing pace at which capital moves across international borders. The proliferation of electronic trading and banking may not only improve the efficiency with which transactions are executed, but also may accelerate the rate at which capital flows through global financial markets. The rewards of increasingly open financial markets may be great, but the punishment for poor investment decisions and lapses in public policies may be comparably severe. Thus, global financial markets are likely to place a greater premium on robust risk management practices.

The Year 2000 computer problem is a third issue that needs to be a top priority for risk managers. One need only look at the price action in interest-rate futures markets to note the high degree of uncertainty surrounding this issue. While an organization may have prepared its internal systems, it still may be exposed to credit risk from less-prepared counterparties in both the public and private sector. Thus, I fully support the contingency plans a number of institutions are putting in place.

I think it is important to make clear that it is the boards of directors and senior management of financial institutions – not the regulators – who must be responsible for ensuring that their

companies provide seamless and high-quality service through the year end. The Federal Reserve System has completed the internal testing of almost all of its applications. In addition, the governments of various industrialized nations stepped up their internal Y2K remediation efforts last summer. At the official level, international cooperation is intensifying through groups such as the Joint Year 2000 Council, chaired by my Federal Reserve colleague, Governor Ferguson. However, it is plausible that time will simply run out for some countries and some institutions. While I certainly don't expect a financial system breakdown, the potential for some disruption to international trade and capital flows exists and that puts a premium on maximizing our efforts now.

Finally, the practice of risk management must permeate all levels of your institutions, from the executive offices to the trading rooms. The senior management of most large financial institutions now have a variety of sophisticated measures and reports on their firms' exposures, making it possible for them to track credit and market risks on a daily basis. But if the insights gleaned from these risk management tools are not incorporated into the operations of the front line, where both trading and credit decisions are made, they will be of little help when they are needed most.

This is especially true for this audience because of the constant and rapid evolution of the fixed-income markets. Against the backdrop of the budget surplus in the United States, there are expectations for a continued reduction in the supply of U.S. Treasury securities. Borrowers in a variety of markets – including corporate, agency, and, to a lesser extent, emerging market and mortgage-backed securities – have taken this opportunity to meet investor demand with a greater volume of new issues and larger offering sizes.

In addition, expectations for increased investor demand for euro-denominated investments, together with the possibility of reduced participation by speculative and arbitrage trading accounts, are likely to have an effect on spreads of fixed-income securities to Treasuries. Traders in various fixed-income markets already have begun to note increased levels of spread volatility and expectations for higher absolute spreads relative to historical levels in response to these market dynamics.

In this environment, managing market risk will become more difficult as the nature of fixed-income spread products changes. As we recently have learned, spread relationships that had endured for many years can break down suddenly, thereby increasing the already complex task of hedging positions. The increase in the liquidity premium for on-the-run Treasury securities last fall resulted in increased hedge-related activity in both the interest-rate swap and Treasury futures markets. Traders have continued to explore the usefulness of non-Treasury fixed-income securities as hedging vehicles. Risk managers must, therefore, be especially rigorous in analyzing their firms' positions and hedging strategies, particularly when historical experience may not be as predictive a guide as it once seemed to be.

I am encouraged by some recent market efforts to improve risk management practices. In lending, the risk-return discipline has been greatly enhanced at some international banks. These institutions have introduced measures to compare credit spreads with historical loss rates on well defined categories of credit. They also have enhanced the methods they use to assign internal risk ratings to individual credit exposures. The development of credit models by a number of banks has led to a deeper understanding and analysis of the relationship between risk and return in credit activities at the portfolio level. In addition, some banks are exploring the possibility of validating their internal ratings using information from the equities markets.

With respect to securities financing, several institutions have discussed and, in certain cases, already have implemented instrument specific collateral haircuts. Many institutions also have acted to ensure the adequacy of their current collateral holdings and developed procedures for accessing additional collateral when necessary. Finally, I applaud recent efforts by the securities lending community in the U.S. to begin publishing aggregated cash-collateral reinvestment data that reflect reinvestment return, interest-rate sensitivity, and liquidity and credit tiering. These are all positive developments.

However, along with many of my colleagues in the private sector, I believe there still is a need for the market to develop and implement additional risk management techniques. Let me give you some examples of what I am thinking about.

First, financial institutions must have the discipline to consistently apply robust risk management techniques through all phases of the business cycle. A concern for supervisors is the tendency of credit markets to steadily bid down spreads in the optimistic phase of the cycle, often to the point where returns no longer seem commensurate with risk. Then, as problems emerge, lenders in the credit markets pull back, causing spreads to reverse sharply.

In addition to the most recent cycle, examples of such behavior include high-yield bond and leveraged buyout lending in the 1980s, and Latin American investment and lending in the mid-1980s. Too often, management edicts to reduce risk occur during the latter phase of the credit cycle, after substantial losses have already occurred.

Second, I would argue that targeting returns commensurate with risk over an appropriately long time horizon probably is the single most important defense against violent swings in the credit cycle. Individual banks can protect themselves if they recognize when margins become too thin to cover risk by restraining their credit activities at those rates. They can benefit by expanding their credit activities when returns have risen enough to cover risk once again. To limit credit cycle volatility, appropriate risk and return analysis must be practiced widely and consistently throughout the financial system.

Third, more attention must be directed at stress testing, the leading technique in assessing the direct and indirect effects of unusual market and economic events. Stress testing is a fundamentally qualitative and judgmental process, typically used in conjunction with more formal, statistical approaches to risk measurement, such as risk modeling. The primary goal of stress testing is to identify scenarios, usually low probability, high-stress events, that could jeopardize the health of a financial institution.

Stress testing of market risk exposures is not a recent development. However, the analysis of distinct classes of fixed-income securities all too often occurs in isolation. What we learned from the crisis last fall is that markets that previously did not move together can suddenly do so, reversing trends that had been under way for several years. Moreover, we became aware that liquidity in even the most widely traded securities can be interrupted, primarily when many traders attempt to enter or exit positions at the same time. Thus, simultaneous stress testing across diverse fixed-income portfolios may help to identify high-risk market scenarios.

Finally, I am convinced that there is a need for improved disclosure. In my view, the transparency derived from more open disclosure of risk management practices, risk profiles, and risk management performance cannot help but facilitate market discipline. Timely disclosure of such information would enable market participants to better assess how much risk market participants are taking, how well they manage it, and how much capital and liquidity they may need to survive adverse markets.

The desirability of improved disclosure is made clear in a report issued by the Basle Committee on Banking Supervision in September on enhancing bank transparency. This report set out a framework for the disclosure of key risks and performance measures for banks. In my view, the availability of more detailed data on international exposures would enhance the ability of both supervisors and counterparties to assess the vulnerability of domestic banks and banking systems to financial shocks from abroad. Better information about the credit risk profiles of the largest, internationally active banks, including the composition of their portfolio by internal ratings, would also be useful.

A commitment to the use of advanced analytical tools, stress testing, and improved disclosure comes under the widely discussed rubric of seeking out and adopting industry-wide best practices. It is, perhaps, most important to note that the development of best practices is a dynamic, not a static, process that can only be enhanced by consistent risk management efforts over a long time horizon.

In sum, I am led to conclude that diligent market discipline using techniques such as those I suggest here is in the long run the essential element needed to achieve both public and private goals. All market participants bear the difficult responsibility of determining and exacting adequate compensation for risk. While the public sector has a responsibility to increase the effectiveness of its overall regulatory and supervisory framework, it is the private sector's continuous reassessment of risk and advancement of risk management techniques that ultimately will serve to preserve a safe and sound financial system while simultaneously rewarding individual institutions with long-term profitability.

In the public sector, we can help markets work more effectively by ensuring that regulated financial institutions support the trading process by making sound credit decisions. We can also work to improve bank supervision by our ongoing examinations of bank risk measurement and management processes, a major focus of the examination process.

On the international level, we are working hard at rethinking the Basle Capital Accord, an international agreement on minimum capital standards, developed by the Basle Committee on Banking Supervision, first put in place in 1988. The Committee, which I have chaired since June 1998, is attempting to make certain that banks hold an optimal level of capital based on their risk appetite and their demonstrated ability to manage risk. Also, with the help of many of you in this room, central bankers and security regulators from around the world are working together through the International Organization of Securities Commissions and the G-10 central bank Committee on Payment and Settlement Systems to develop a clearer understanding of global securities lending markets.

At the end of the day, however, it is market discipline that will make the crucial difference. In my view, market discipline involves three key elements, each of which is equally important: the continuous questioning of market assumptions regarding adequate compensation for risk, the relentless pursuit of more advanced risk management techniques, and the conviction to assess business decisions over an appropriately long time horizon. My experience with financial markets and institutions has convinced me that diligent market discipline – rather than increased regulation – is the essential variable in ensuring the future health and efficiency of the global capital markets. I believe that it is in the mutual interest of private and public sector participants alike to support this effort.

* * *