It is indeed a pleasure to have this opportunity to address such a distinguished group of bankers. In your presence, I feel as though I am among colleagues, a reflection of fond memories of the 22 years I spent as a commercial banker before coming to the Federal Reserve. Now, as a central banker, I frequently call upon my private-sector experience to help me anticipate and understand economic and banking developments unfolding around the world.

Today, I want to address some challenges posed to banks and official banking supervisors by new exigencies that call for changes in the way risk is measured and managed. I can think of no other long-term issue of greater importance to the banking industry. But before I get to that, I would like to reflect broadly on two events of greater immediacy, but no less importance. Those events, the January 1, 1999 introduction of the euro by member countries of the European Union and the century date change as the clock strikes midnight on January 1, 2000, will force every banker in this room to adjust to major one-time shocks to the financial environment. We know these events are coming, and we know exactly when. It is now up to us to prepare our institutions thoroughly and effectively for their eventuation.

There can be no doubt about the magnitude and economic importance of the inauguration of the European Monetary Union next year. The most obvious implication of the start of EMU for the United States--as well as for the world community--is the coming into existence of a new currency, the euro, which is intended to function as a major international currency alongside the U.S. dollar. This is a prospect the U.S. should not contemplate with fear. Over the foreseeable future, the major repercussion of a growing international role for the euro will be with respect to financial rather than trade transactions. To a large extent, these repercussions reflect the very predictable gains that stem from increasing returns in the use of a currency as a store of value. As a market for a currency becomes more liquid, the costs of carrying wealth denominated in that currency fall, raising investors' preferences for denoting their portfolios in that currency. These increased preferences, in turn, lead to a further deepening and broadening of the market for that currency, costs of holdings are reduced further, and the process continues.

Once the euro comes into existence, the conversion of the EMU countries' outstanding securities into euros will contribute to the immediate creation of a major securities market. This development alone will create a critical mass for a market in euro-denominated securities. It will give the market depth and liquidity, and, in so doing, will bring down the costs of conducting transactions, issuing loans, and trading securities below those currently seen for European national currencies--possibly to levels comparable to those for dollars. Development of such a virtuous cycle could feed upon itself and lead to the continuous growth of the market for euros.

If the U.S. experience with a large, unified capital market is of any relevance, then Europe beginning next year can expect decreasing use of bank loans and growing use of securities. Repo markets also likely will grow, potentially along the lines we have seen in the United States. European institutional investors including mutual funds, state and local governments, and insurance companies are likely to increase substantially their provision of capital under repo arrangements and, correspondingly, reduce their holdings of bank deposits. A growing role of repos already is apparent in Europe, and this growth may be expected to accelerate once the European central bank starts to operate in this market, accepting--and fostering--the use of a wide range of government paper as collateral.

It is useful to keep in mind that the move to a highly securitized single-currency European capital market cannot be expected to be completely painless. As the main intermediaries of cross-border transactions, banks will bear the brunt of the costs associated with the changeover to a common currency. Banks, for example, will suffer losses from reduced foreign exchange trading and transfer revenues. They also will have to pay for the retooling of information management and delivery systems and face uncertainties about their core deposits.

At the same time, however, the larger single market will create new opportunities for banks, particularly in the areas of investment banking and the cross-border sale of deposits, mutual funds, and other savings products. On balance, it seems fair to conclude that the commercial position and earnings of some European banks are likely to come under pressure. This pressure may accelerate the ongoing restructuring of Europe's banking industry, spurring a process that, to date, has been confined within each country.

More broadly, there can be no doubt that the benefits of a more efficient and cost-effective market for euro-denominated capital will extend well beyond Europe. The availability of a new, low-cost channel of portfolio investment, for example, could help reverse the traditional reluctance of households and many institutional investors worldwide to invest internationally--a reluctance that has long puzzled academics and policy makers. Moreover, a well-developed market for euro-denominated capital will encourage institutional investors from the United States and elsewhere to acquire diversified European portfolios offered in a single currency. In addition, capital might also flow in the opposite direction, as non-European firms tap the euro-denominated capital market as an efficient source of funds, in the same way as European businesses and governments have chosen to borrow dollars in recent years.

Changes in international investors' perception of the market for euros also will reflect the policies of the incipient European central bank. I would suggest that it will take some time before the objectives and operating procedures of the European central bank become clearly understood by most market participants. Although low inflation will be the ultimate objective of the central bank, markets will have to understand precisely how that objective will be pursued: Which price aggregate will be the focus of monetary policy? How will intermediate instruments, such as monetary aggregates, be used to achieve the ultimate objective? What channels will the central bank choose to signal and implement changes in its policy stance?

As these longer-term questions are addressed, the policy importance of the external value of the euro, particularly the euro/dollar exchange rate, certainly will be watched carefully. Market participants and foreign central banks are likely to focus on the euro exchange rate as a high-frequency and widely available--if somewhat noisy--indicator of the current and likely future stance of European monetary policy. Given its need to instill confidence in the markets and to ensure the stability of the euro exchange rate, the European central bank is likely to want to be perceived as ready and able to operate effectively in the dollar market. To do so, it is likely to continue to hold dollar reserves rather than...
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management and directors those instances when progress may be lagging. Our oversight includes not only U.S. banks, but also the U.S. effectively with Year 2000 problems. Our examiners will focus on how well individual banks are doing and will highlight for their senior Let me assure you that the Federal Reserve Bank of New York will continue to encourage banks to set up and adhere to programs that deal customers who rely on technology on a regular basis.

underwriting standards should consider specially how customers are addressing the issue, and credit officers should monitor the progress of resources at some institutions. Nonetheless, all firms will have to bite the bullet. Failure to test thoroughly can put the operations of a unit or an entire firm at risk, while putting in jeopardy the well-being of the entire financial system.

Involvement by the private sector in coping with Year 2000 issues extends beyond financial services firms. Banks and other financial institutions must rely on vendors, rather than their in-house staffs, to identify and fix problems, especially invisible problems embedded in operating systems. The experience at my Bank suggests that, in recent months, vendors who have previously been reluctant to do so, have begun to disclose a good deal more information about their products. Disclosure of product information helps users to identify how a vendor's hardware or software fit together and interact with those of other vendors. Supervisors can play a constructive role in the disclosure process by encouraging financial services firms to analyze their systems thoroughly, work with vendors on detecting and diagnosing potential problems, and take corrective actions. Ultimately, however, every bank bears responsibility for thoroughly testing the systems upon which it depends.

In studying the Year 2000 problem, one area where contingency alternatives may not be readily apparent is in infrastructure, particularly telecommunications and electric power grids. Although telecom and electric utilities express confidence in their readiness for the century date change, their plans for releasing Year 2000-compliant products have fallen well behind the targets established by official supervisors for banks. Delays in testing can have a ripple effect -- failure to implement Year 2000-compliant telecommunications capabilities may, in some instances, upset the test schedules of banks and other organizations. This is not insignificant. Without certainty that telecommunications and electrical service will be unimpared by the century date change, banks, like many other types of businesses, face the risk that their own operations could be halted.

Contingency planning also must account for the uneven preparedness of foreign as well as domestic firms. With only two years to go, some firms on all continents do not yet appear to realize the importance of detailed plans and testing of all existing applications, as well as the hardware and software on which they depend. Such delays can be expensive, not only for the slow-moving firms that will have to catch up, but for their customers and counterparties as well. There is a limited pool of skilled technical staff to make needed changes, and demands on this pool are growing as the time draws closer. In the short run, the ability to add to this pool significantly through training is limited. Qualified outside consultants already are heavily committed and will become even more scarce over time. Obtaining equipment on which to conduct tests also often requires significant lead time.

All of this suggests that controlling the cost of Year 2000 projects will be a problem for many institutions as resource prices are bid up. Already, we have seen many institutions increase their Year 2000 budgets several times, and by significant amounts, as they develop their detailed plans.

Security also is likely to be of increasing concern as we move forward. As time pressures mount, there is a risk that shortcuts will be taken. The checking of credentials for new staff or outside contractors or consultants may be rushed and less rigorous. Date-dependent security applications may be turned off to facilitate testing. In an industry like ours, with so much interconnectivity, any compromise of security simply cannot be tolerated.

Year 2000 issues stretch well beyond the doors of financial services companies. How well customers and counterparties handle this complex and costly technical challenge could affect their business prospects and even their viability. Consequently, over the next couple of years, underwriting standards should consider specially how customers are addressing the issue, and credit officers should monitor the progress of customers who rely on technology on a regular basis. Let me assure you that the Federal Reserve Bank of New York will continue to encourage banks to set up and adhere to programs that deal effectively with Year 2000 problems. Our examiners will focus on how well individual banks are doing and will highlight for their senior management and directors those instances when progress may be lagging. Our oversight includes not only U.S. banks, but also the U.S. branches and agencies of foreign banks with respect to their U.S. business operations. However, the primary motivation and determination to cope with the Year 2000 problem must come from within banking organizations rather than from supervisory oversight. Getting the Year 2000 issue right is critical for every organization. Failure to get it right could affect the integrity of the payments system and the performance of the U.S. and global economies.

The century date change presents challenges and risks that cannot be eliminated, but can be managed if banks and other firms take early and rigorous actions on a global basis. Global risk management, of course, never has been easy. Nonetheless, unless all financial services firms manage their global risks prudently and deftly, the financial system could be prone to sudden and sharp liquidity crises and losses in the value of investment portfolios. Officers of financial services firms must be alert to these dangers and empowered by their directors to take bold, perhaps even expensive, steps to manage risk exposures. Otherwise, the task of providing liquidity and crisis management will fall to the central bank. As a central banker, I can assure you that those roles I never look forward to playing, even though we are quite sure what we would do.

Instead of reliance on the central bank as a primary line of defense against systemic problems, I have long favored a supervisory approach that emphasizes prevention and fosters cooperation between the public and private sectors. A multi-faceted supervisory approach should rest on sound capital adequacy standards, effective management oversight and market discipline. It should be flexible enough to allow each firm to apply its own risk measurement models, yet enforcement must have enough teeth to discourage any firm from taking imprudent or excessive
risks.

Since the Basle Capital Accord of 1988, and perhaps for many years before that, bankers around the world have recognized the roles that capital and prompt corrective action play as buffers to absorb losses and reduce systemic risk. Maintenance of appropriate capital adequacy standards has made banks more disciplined while also protecting the banking system from hazards resulting from large or numerous credit defaults. However, changes in the way banks manage their risk exposures have forced bank supervisors to begin to rethink their approach to capital adequacy.

The Basle Accord's market risk amendment, which took effect at the start of this year, represents a significant shift toward a more market-based approach to supervision rather than a mandated, rigid regulatory formula or ratio. The amendment bases the market risk capital requirement on each bank's internal methodologies for risk measurement and thus encourages further innovation and improvement in each bank's internal models. Flexibility afforded by the amended approach will help bank managers to better match capital levels to particular market risks. This is a useful step.

Nevertheless, supervisors around the world will need to develop a comprehensive framework for the next generation of capital rules that will encompass market risks as well as risks to operations, liquidity, and legal and information systems. It also must reconcile the sophistication of internal market risk models with the simpler methodology of the original accord, which covered derivatives' credit risk and the amended accord, which captured derivatives' market risk. A comprehensive framework should be consistent with movements by financial institutions toward a more integrated approach to measurement of credit and market risk exposure, while also overcoming the differences in accounting standards that complicate comparisons of earnings, asset valuations, reserves and capital across borders. Finally, a new framework will have to address assessment of the consolidated capital positions of the growing number of internationally-active financial conglomerates which combine banking, securities and insurance activities in a single group.

No matter how strong or comprehensive the supervisory framework may be, the primary responsibility for the safe and sound operation of an institution lies with its board of directors and senior management. All too frequently, significant losses at global financial institutions have been traced to avoidable breakdowns in management controls. To avoid this, directors and managements must be certain to build a culture that reflects sound core values and ensures that written policies and practices are in place at all levels of the organization. A culture conducive to prudent business practices should have the following six attributes:

- strong communication, including incentives for staff to alert management and act promptly to solve problems;
- denial of rewards for officers for business profitability as long as significant control deficiencies remain in place for an extended period of time;
- hiring practices that review candidates' records for integrity and ethical behavior;
- compensation that reflects the relative importance of the various business lines and the audit and control functions;
- a salary structure comparable to the market norm that rewards excellence and discourages imprudent risk-taking; and
- investigation of the source and sustainability of profits that are excessive in relation to the perceived risk.

After effective supervision, market discipline that results from meaningful public disclosure serves as the second line of defense against financial instability and undisciplined markets. Yet disclosure practices have not kept pace with the rapid changes in banks' business activities and both the measurement and management of risk exposures. In times of stress, insufficient information about asset quality can lead to rumors and over-reactions in the marketplace, with the potential for problems to spread to other institutions that may otherwise be in relatively good health.

For large and complex financial services firms, a difficult issue involves the extent to which financial statements can accurately convey the quality of internal controls and global risk management systems. Right now, no commonly-accepted criteria or industry frameworks exist for measuring and disclosing the quality of risk management systems and management controls; this leaves market participants to rely on regulators' and external auditors' findings. Addressing this issue will require collaboration and creativity on the part of the private sector and the supervisory community to find innovative, yet comprehensive, solutions.

Improved disclosure, however, will require more than a comprehensive framework. Accounting standards also need to be upgraded to reflect innovations in financial products and risk management techniques. The process of upgrading accounting standards, in turn, would benefit from greater harmonization of accounting standards across countries. Harmonized accounting standards would facilitate comparison of global financial institutions and result in more uniform capital standards across countries. Thus wherever there exist significant differences in loan valuation and reserving standards there also will exist dramatically different capital calculations for a given loan portfolio.

Development of a contemporary model for overseeing the activities of financial conglomerates will pose a major challenge to supervisors over the years ahead. At a minimum, all global financial conglomerates large enough potentially to threaten the stability of the financial system should be subject to some form of consolidated oversight intended to foster market stability. This supervisory approach would include the following six elements:

- Designation of an umbrella supervisor to coordinate the overall supervisory process and the sharing of information across the conglomerate's various national and functional supervisors. Legal impediments to information flows should be identified and eliminated;
- Strong and positive channels of communication among home and host country supervisors;
- Adequate direct reporting of information to the umbrella supervisor by the conglomerate itself that helps provide a complete, timely and less flawed view of the enterprise;
- A framework for measuring capital adequacy on a consolidated basis with sufficient flexibility to cover exposures related to the banking and securities businesses and to insurance underwriting risks. This framework should draw upon the best practices of all three of these industry sectors and their functional supervisors;
- Qualitative standards for the management of inter-affiliate exposures, perhaps supplemented by quantitative limits;
- Periodic, coordinated reviews of the conglomerate's risk management and internal control systems, including efforts to assure compliance with applicable laws and regulations.
I have no doubt that official supervisors will be able to meet the challenge of developing this broad supervisory agenda. Official supervisors bring an essential perspective to market oversight and discipline. Supervisors obtain and monitor proprietary information not found in public disclosures about an institution's risk exposures, management information systems and internal controls. In addition, supervisors are uniquely positioned to observe trends across groups of financial institutions and, based on these observations, to provide the industry with perspectives on which of those trends constitute "best practice." Official supervision helps to enforce compliance with applicable laws and regulations. This is important because inadequate compliance, beyond simply being wrong, can result in a serious reputational risk to an institution that could threaten its well-being. Finally, supervisors must take prompt corrective actions in response to serious problems at financial institutions, even if the market has no awareness of those problems.

Even with a comprehensive supervisory framework in hand, the public sector will need to work cooperatively with the private sector to minimize instability and manage risks. The rapidity of financial market innovations, and occasional stresses, put a higher premium on the operating standards that guide the activities of banks. As a central banker, I applaud international efforts to strengthen supervision and minimize systemic risks. Last year, for example, the Group of Thirty issued a proposal which, among other things, called for the development of an international framework for the banking industry for comprehensive management controls. This framework would be validated through a group-wide global audit, the result of which would be reported to the public. The G-30 proposal is an important step in the right direction, but it can bear fruit only if the private sector and the supervisory community work together closely.

As a central banker, I also recognize that market discipline and sound risk management complement monetary policy and a reliable and safe payments system. Safety and soundness don't often make headlines the way mishaps and breakdowns typically do. However, they do make for good banking.

For all of us here today, events like the New Year's Day inauguration of the European Monetary Union in 1999 and the century date change in 2000 will pose complex challenges made easier only by the certainty of their timing. There's still time for each of our institutions to analyze and take decisive steps to deal with these challenges effectively, perhaps even profitably, but the clock is running. Let's resolve today to put our institutions in a position to toast each of the next two new years, not in fear, but with confidence. And when we raise our champagne glasses, let's do so knowing that our institutions are prepared, agile and focused.

Thank you very much.