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Lessons of the Financial Crisis for Banking Supervision

Remarks by

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After more than a year and a half of financial crisis, both bankers and policymakers must contend with two questions: What have we learned from this extraordinary episode? And how can we apply those lessons to strengthen our banking system and to avoid or mitigate future crises? Getting the answers to these questions right is critical for our future financial and economic health.¹

The Federal Reserve has been intensively evaluating the lessons of the crisis, both with respect to the companies we supervise and to our own policies and procedures, and we are actively incorporating what we have learned into daily supervisory practice. Increasing the effectiveness of supervision must be a top priority for our institution. In my remarks today I will outline some steps that the Federal Reserve has already taken in the wake of the crisis to strengthen capital, liquidity, and risk management in the banking sector, as well as to improve the supervisory process itself. I will also touch on what we have learned about the importance of effective consolidated supervision and the potential benefits of a more macroprudential orientation to financial oversight.

The Federal Reserve's Role in Banking Supervision

It may be useful first to briefly review the Federal Reserve's bank supervisory responsibilities and how they interact with the other parts of our mission. The Fed has supervisory and regulatory authority over bank holding companies (including financial holding companies), state-chartered banks that choose to join the Federal Reserve System (state member banks), the U.S. operations of foreign banking organizations,

¹ I introduced these questions and offered preliminary answers in speeches I gave last year. See Ben S. Bernanke (2008), "Risk Management in Financial Institutions," speech delivered at the Federal Reserve Bank of Chicago's Annual Conference on Bank Structure and Competition, Chicago, May 15, www.federalreserve.gov/newsevents/speech/bernanke20080515a.htm; and Ben S. Bernanke (2008), "Addressing Weaknesses in the Global Financial Markets: The Report of the President's Working Group on Financial Markets," speech delivered at the World Affairs Council of Greater Richmond's Virginia Global Ambassador Award Luncheon, Richmond, Va., April 10, www.federalreserve.gov/newsevents/speech/bernanke20080410a.htm.

and certain types of U.S. entities that engage in international banking.² In fulfilling these responsibilities, we work with other federal and state supervisory authorities to promote the safety and soundness of the banking industry, foster the stability of the broader financial system, and help ensure fair and equitable treatment of consumers in their financial transactions. The Federal Reserve Banks manage the process of onsite bank examinations, while providing a strong regional presence that allows us greater insight into local economic conditions.

Besides working with other U.S. agencies responsible for the oversight of banking and other areas of the financial system, we also coordinate closely with foreign supervisors. These relationships are fostered through regular interactions within bodies such as the Basel Committee on Banking Supervision and the Financial Stability Board. Through these organizations we contribute to the development of international banking standards. For example, we helped lead the Basel Committee's development of the revised *Principles of Liquidity Risk Management*, which was issued last year and is currently being incorporated into supervisory guidance in the United States.³ Our close relationships with key foreign supervisors, central banks, and other authorities have proved very helpful as we have dealt with the challenges of the crisis.

The Federal Reserve's role in banking supervision complements its other responsibilities, especially its role in managing financial crises--a point I have made on

² Edge Act and Agreement corporations are typically bank subsidiaries that conduct activities outside the United States that are permissible to foreign banks abroad but may not be otherwise permissible for U.S. banks.

³ Basel Committee on Banking Supervision (2008), *Principles for Sound Liquidity Risk Management and Supervision* (Basel, Switzerland: Bank for International Settlements, September), www.bis.org/publ/bcbs144.htm.

other occasions.⁴ The complementary nature of its functions was evident, for example, after the September 11 terrorist attacks, when the Federal Reserve's supervisory staff provided critical assistance to policymakers in evaluating conditions in the financial sector in a quickly evolving, chaotic situation. During the current crisis, supervisory expertise and information have repeatedly proved invaluable in helping us to address potential systemic risks involving specific financial institutions and markets and to effectively fulfill our role as lender of last resort. Our supervisors' knowledge of interbank lending markets and other sources of bank funding also contributed to the development of new tools to address financial stress, such as our Term Auction Facility. The Fed's prudential supervision benefits, in turn, from the expertise we develop in carrying out other parts of our mission--for example, the knowledge of financial and economic conditions we gather in the formulation of monetary policy and the insight into retail financial markets that flows from our consumer protection responsibilities.

Lessons from the Financial Crisis

Since the onset of the crisis, the Federal Reserve and other U.S. supervisors--in many cases along with supervisors from other countries--have been working to identify both its causes and its lessons. Our contributions have been reflected in reports issued by, among others, the Financial Stability Board, the President's Working Group on Financial Markets, and the Senior Supervisors Group, which includes representatives of seven industrial countries.⁵ Ongoing international collaboration, which began before the

⁴ For example, see Ben S. Bernanke (2007), "Central Banking and Bank Supervision in the United States," speech delivered at the Allied Social Science Association Annual Meeting, Chicago, Ill., January 5, www.federalreserve.gov/newsevents/speech/bernanke20070105a.htm.

⁵ Senior Supervisors Group (2008), *Observations on Risk Management Practices during the Recent Market Turbulence* (Basel, Switzerland: Bank for International Settlements, March 6), www.newyorkfed.org/newsevents/news/banking/2008/SSG_Risk_Mgt_doc_final.pdf; President's Working Group on Financial Markets (2008), "Policy Statement on Financial Market Developments," policy

crisis, has enabled U.S. supervisors to learn from the international experience and allowed us to compare the performances of individual U.S. institutions with those of a broad cross section of global financial firms.

The Federal Reserve is also in the midst of its own comprehensive review of all aspects of its supervisory practices. Since last year, Vice Chairman Kohn has led an effort, with participation from Board members, Reserve Bank presidents, and staff from around the System, to develop recommendations for improvements in our conduct of both prudential supervision and consumer protection. We are including feedback from the Government Accountability Office, the Congress, the Treasury, and others as we look to improve our own supervisory practices. Among other things, our analysis reaffirms that capital adequacy, effective liquidity planning, and strong risk management are essential for safe and sound banking; the crisis revealed serious deficiencies on the part of some financial institutions in one or more of the areas. The crisis has likewise underscored the need for heightened vigilance and forcefulness on the part of supervisors to make sure that standards are met.

Strengthening Capital, Liquidity, and Risk Management

Because capital serves as such an important bulwark against potential unexpected loss, U.S. supervisors have been giving it very close attention since the beginning of the crisis. We have been closely monitoring firms' capital levels relative to their risk exposures and discussing our evaluations with senior management. We have also been revisiting our policies regarding capital; for example, earlier this year we issued

statement (Washington: U.S. Department of the Treasury, March 13), www.treas.gov/press/releases/reports/pwgpolicystatemktturmoil_03122008.pdf; Financial Stability Forum (2008), *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience*, (Basel, Switzerland: FSF, April 7), www.fsforum.org/publications/r_0804.pdf?noframes=1.

supervisory guidance for bank holding companies on dividends, capital repurchases, and capital redemptions, reemphasizing in the process that holding companies must serve as a source of strength for their subsidiary banks.

As you may know, the Federal Reserve is leading the interagency Supervisory Capital Assessment Program, which is aimed at ensuring that the largest and most systemically important U.S. banking organizations have a capital buffer sufficient to remain well-capitalized and actively lending, even should macroeconomic conditions prove worse than currently anticipated. More than 150 examiners, supervisors, and economists from the Federal Reserve, Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation cooperated in a simultaneous review and evaluation of the prospective losses and earnings of 19 major institutions, which collectively hold about two-thirds of the assets of the U.S. banking system. The exercise has been comprehensive, rigorous, forward-looking, and highly collaborative among the supervisory agencies. Undoubtedly, we can use many aspects of the exercise to improve our supervisory processes in the future.

Although capital remains a critical bulwark of a strong banking system, the crisis has also demonstrated the importance of effective liquidity management. Along with our colleagues at the other U.S. banking agencies, we are monitoring the major firms' liquidity positions on a daily basis and are discussing liquidity strategies, key market developments, and liquidity risks with the firms' senior managements. As we have learned over the past year and a half, adequate liquidity management entails more than holding assets that are liquid in normal times; firms must take into account how their

liquidity positions might fare under stressed market conditions. We are also requiring firms to consider risks arising from the need to fund off-balance-sheet positions.

The third key element of safe and sound banking, after capital and liquidity, is effective risk management. The crisis exposed the inadequacy of the risk-management systems of many financial institutions. We have stepped up our efforts to work with banks to improve their risk-identification practices. For instance, we have emphasized to banks the importance of stress testing to help detect risks not identified by more-typical statistical models, such as abnormally large market moves, evaporation of liquidity, prolonged periods of market distress, or structural changes in markets.

As I noted in a speech last month, financial innovation can benefit consumers, the financial system, and the broader economy, but it also has risks that must be properly understood.⁶ Indeed, as you know, financial innovations in areas such as structured credit products and mortgage lending in some degree helped precipitate the current crisis. Accordingly, we are requiring banks to evaluate more comprehensively the possible unintended consequences of proposed new financial instruments as well as how those instruments are likely to perform under stressed market conditions.

Counterparty credit risk is another area in which the Federal Reserve has been working for some time, and, as the crisis has unfolded, we have intensified our monitoring of how firms manage this type of risk. Institutions are being pushed to further improve their understanding of key linkages and exposures across the financial system. They are also being asked to analyze how their own defensive actions during periods of

⁶ Ben S. Bernanke (2009), "Financial Innovation and Consumer Protection," speech delivered at the Federal Reserve System's Sixth Biennial Community Affairs Research Conference, Washington, April 17, www.federalreserve.gov/newsevents/speech/bernanke20090417a.htm .

stress might put pressure on key counterparties, especially when other market participants are likely to be taking similar measures.

A critical component of risk management is understanding the links between incentives and risk-taking, such as in the design and implementation of compensation practices. Bonuses and other compensation should provide incentives for employees at all levels to behave in ways that promote the long-run health of the institution. The Federal Reserve has been working in international forums on compensation and incentives issues; one product of those efforts was the publication last month by the Financial Stability Board of new principles for sound compensation practices.⁷ Certainly, an important lesson of the crisis is that the structure of compensation and its effect on incentives for risk-taking is a safety-and-soundness issue.

In this and other areas, one of the key lessons for bankers has been the need for timely and effective internal communication about risks. We are putting a high priority on ensuring that management and board of directors are well informed about the various risks that confront the organization and that they are actively engaged in the management of those risks.

As we have worked with financial institutions to strengthen their governance and risk management, we are also mindful that the crisis has revealed the need for improvement in our own supervisory procedures and internal communication. We have updated and strengthened our processes for disseminating supervisory information within the Federal Reserve System, for establishing supervisory priorities, for tracking emerging issues, and for issuing timely supervisory guidance. In the area of consumer protection,

⁷ Financial Stability Forum (2009), *FSF Principles for Sound Compensation Practices* (Basel, Switzerland: FSF, April 2), www.fsforum.org/publications/r_0904b.pdf?noframes=1.

the Fed has recently revised its compliance examination program to ensure that it stays current with market developments and practices. We have introduced the concept of continuous supervision to consumer compliance to ensure ongoing and comprehensive monitoring of our largest state member banks.

Drawing on a particularly important lesson of the crisis, our supervisors are emphasizing to institutions that maintaining strong risk-management practices is at least as important in good times as in bad. It is precisely during those good times, when risks appear low and the financial horizon seems clear, that financial market participants can become overly optimistic and make costly mistakes. Part of the job of supervisors is to counter such trends. In such cases, we must ensure that our supervisory communications are forceful, clear, and directed at senior management and boards of directors, so that emerging issues are given proper attention and satisfactorily resolved.

Consolidated Supervision

As we review the lessons of the crisis, another issue deserving attention is the role of consolidated supervision. The crisis has demonstrated that effective and timely risk management that is truly firmwide is vitally important for large financial institutions. To make sure that that happens, all systemically important financial firms--and not just those affiliated with a bank--should be subject to a robust framework for consolidated supervision.

Although the Federal Reserve is not the primary supervisor of the majority of U.S. commercial bank assets, under the Gramm-Leach-Bliley Act of 1999 it serves as consolidated supervisor of all bank holding companies, including financial holding companies. We take this role very seriously. Before the onset of the crisis, we had

already begun enhancing our consolidated supervision of bank holding companies, working within the framework established by the act. Those efforts resulted in comprehensive supervisory guidance on consolidated supervision last year. The guidance directs our examination staff to focus on key areas as it supervises large, complex firms with multiple legal entities. For instance, it directs the staff to pay special attention to activities--such as clearing and settlement in critical financial markets--that have the potential to affect not only the institution, but the financial system more broadly.

The Fed's guidance on consolidated supervision also provides more-explicit directions for supervisory staff for evaluating the capacity of a banking organization to measure and manage risks across the entire firm. For example, our process for assessing firmwide credit risk management begins with a review of the overarching design of this function at the consolidated level; we then drill down to individual business lines, such as retail credit or mortgage lending, to ensure that they are being managed in ways consistent with the company's overall framework. The guidance also reaffirms that examiners must assess the financial condition and risk profile of a holding company's nonbank subsidiaries to understand their potential for adversely affecting the affiliated banks or the organization as a whole.

Consolidated supervision also improves our evaluation of firms' ability to comply with applicable laws, rules, and regulations. The Federal Reserve last year issued supervisory guidance on compliance risk, which stresses the need for both supervisors and bankers to understand those risks both within and across business lines, legal entities, and jurisdictions. Compliance with consumer protection regulations receives close scrutiny, and consumer compliance specialists participate in the evaluation of the risk

assessments, supervisory plans, and annual letters that our supervisors prepare for large, complex banking organizations. Last year, Federal Reserve staff also led an interagency pilot program to examine the practices of subprime mortgage lenders, including two nonbank subsidiaries of bank holding companies. The pilot provided important insight into lenders' practices, particularly their oversight of broker relationships.

Provisions of the Gramm-Leach-Bliley Act limit the ability of the Federal Reserve, as consolidated supervisor, to examine, obtain reports from, or take actions with respect to subsidiaries that are supervised by other agencies. Consistent with these provisions, we have worked with other regulators and, wherever possible, sought to make good use of the information and analysis they provide. In the process, we have built good cooperative relationships with other regulators--relationships that we expect to continue and strengthen further. Moreover, our consolidated supervision guidance has helped to clarify the protocols for relying on other supervisors, as well as to identify cases in which we need to take a more active role as the consolidated supervisor.

However, the restrictions in current law still can present challenges to timely and effective consolidated supervision in light of, among other things, differences in supervisory models--for example, between those favored by bank supervisors and those used by regulators of insurance and securities subsidiaries--and differences in supervisory timetables, resources, and priorities. In its review of the U.S. financial architecture, we hope that the Congress will consider revising the provisions of Gramm-Leach-Bliley to help ensure that consolidated supervisors have the necessary tools and authorities to monitor and address safety and soundness concerns in all parts of an organization.

Financial Stability

I have been discussing supervisory policy aimed at ensuring the stability of individual financial institutions. However, the Federal Reserve also has the broader objective of enhancing the stability of the financial system as a whole. Supervision of individual institutions and fostering broader stability are, once again, complementary activities, with information and expertise gained in one arena often proving highly useful in the other. Drawing on the lessons of the crisis, we have gone beyond efforts to improve our supervision of individual institutions to try to bolster the capacity of the financial system overall to withstand shocks.

Our efforts to strengthen the financial infrastructure are a good illustration of these initiatives. We have been working since before the crisis with the institutions that support trading, payments, clearing, and settlement systems. For instance, the Federal Reserve Bank of New York, in cooperation with other supervisors and market participants, has helped improve arrangements for clearing and settling credit default swaps and other over-the-counter derivatives. As a result, the accuracy and timeliness of trade information has improved significantly. But the infrastructure for managing these derivatives is still not as efficient or transparent as the infrastructure for more-mature instruments. So, along with others, we are creating increasingly stringent targets and performance standards for market participants.

Protecting consumers also contributes to financial stability. The increased complexity of many consumer products, as well as their sale by a range of financial institutions to a larger segment of the public, is arguably one of the causes of the current crisis. In the past year or so, the Board has developed extensive new disclosures for a

variety of financial products, most notably credit cards, and we are currently in the midst of a major overhaul of mortgage disclosures. Because even the best disclosures are not always adequate, we also comprehensively overhauled our mortgage and credit card regulations to prohibit certain practices.

Our ability to foster financial stability depends on having a staff with a diverse range of knowledge, expertise, and skills. The Fed is accustomed to using interdisciplinary approaches to solving problems, and that perspective often gives us a more accurate picture of financial activities and the potential risks they produce. During the current crisis, we have seen very close collaboration among our supervisors, economists, accountants, attorneys, and consumer affairs experts. We must ensure that we continue to increase our expertise so it is properly matched with the problems and challenges we will face in both our bank supervisory role and in meeting our traditional financial stability mandate.

Looking forward, I believe a more macroprudential approach to supervision--one that supplements the supervision of individual institutions to address risks to the financial system as a whole--could help to enhance overall financial stability. Our regulatory system must include the capacity to monitor, assess, and, if necessary, address potential systemic risks within the financial system. Elements of a macroprudential agenda include

- monitoring large or rapidly increasing exposures--such as to subprime mortgages--across firms and markets, rather than only at the level of individual firms or sectors;

- assessing the potential systemic risks implied by evolving risk-management practices, broad-based increases in financial leverage, or changes in financial markets or products;
- analyzing possible spillovers between financial firms or between firms and markets, such as the mutual exposures of highly interconnected firms;
- ensuring that each systemically important firm receives oversight commensurate with the risks that its failure would pose to the financial system;
- providing a resolution mechanism to safely wind down failing, systemically important institutions;
- ensuring that the critical financial infrastructure, including the institutions that support trading, payments, clearing, and settlement, is robust;
- working to mitigate procyclical features of capital regulation and other rules and standards; and
- identifying possible regulatory gaps, including gaps in the protection of consumers and investors, that pose risks for the system as a whole.

Precisely how best to implement a macroprudential agenda remains open to debate. Some of these critical functions could be incorporated into the practices of existing regulators, or a subset of them might be assigned to a macroprudential supervisory authority. However we proceed, a principal lesson of the crisis is that an approach to supervision that focuses narrowly on individual institutions can miss broader problems that are building up in the system.

Conclusion

The events of the past two years have revealed weaknesses in both private-sector risk management and in the public sector's oversight of the financial system. It is imperative that we apply the lessons of this experience to strengthen our regulatory system, both at the level of its overall architecture and in its daily execution. Indeed, although reform of the current system is necessary, much can be done within the current framework. The Federal Reserve has engaged in extensive introspection and review of the lessons of the crisis and is working diligently to implement what has been learned. As the past two years have brought home to everyone, the development of a more stable and sound financial system should be of the highest priority.