The theme of the Federal Reserve Bank of Boston’s Economic Conference this year – reevaluating regulatory, supervisory, and central banking policies in the wake of the crisis – is certainly timely. Not much more than a year ago, we and our international counterparts faced the most severe financial crisis since the Great Depression. Fortunately, forceful and coordinated policy actions averted a global financial collapse, and since then, aided by a range of government programs, financial conditions have improved considerably. However, even though we avoided the worst financial and economic outcomes, the fallout from the crisis has nonetheless been very severe, as reflected in the depth of the global recession and the deep declines in employment both here and abroad. With the financial turmoil abating, now is the time for policymakers to take action to reduce the probability and severity of any future crises.

Although the crisis was an extraordinarily complex event with multiple causes, weaknesses in the risk-management practices of many financial firms, together with insufficient buffers of capital and liquidity, were clearly an important factor. Unfortunately, regulators and supervisors did not identify and remedy many of those weaknesses in a timely way. Accordingly, all financial regulators, including of course the Federal Reserve, must take a hard look at the experience of the past two years, correct identified shortcomings, and improve future performance.

Supervisors in the United States and abroad are now actively reviewing prudential standards and supervisory approaches to incorporate the lessons of the crisis. For our part, the Federal Reserve is participating in a range of joint efforts to ensure that large, systemically critical financial institutions hold more and higher-quality capital, improve their risk-management practices, have more robust liquidity management, employ compensation structures that provide appropriate performance and risk-taking incentives, and deal fairly with consumers. On the supervisory front, we are taking steps to strengthen oversight and enforcement, particularly at the firmwide level, and we are augmenting our traditional microprudential, or firm-specific, methods of oversight with a more macroprudential, or systemwide, approach that should help us better anticipate and mitigate broader threats to financial stability.

Although regulators can do a great deal on their own to improve financial regulation and oversight, the Congress also must act. We have seen numerous instances when

weaknesses and gaps in the regulatory structure itself contributed to the crisis, many of which can only be addressed by statutory change. Notably, to promote financial stability and to address the extremely serious problem posed by firms perceived as "too big to fail," legislative action is needed to create new mechanisms for oversight of the financial system as a whole; to ensure that all systemically important financial firms are subject to effective consolidated supervision; and to establish procedures for winding down a failing, systemically critical institution without seriously damaging the financial system and the economy. In the rest of my remarks, I will elaborate on each of these areas.

Strengthening regulations and guidance

First, I would like to report on changes already under way to strengthen the regulatory standards that limit the risks taken by financial firms and establish the capital and liquidity buffers that they must hold. Through the course of the crisis, it became increasingly clear that many firms lacked adequate capital and liquidity to protect themselves as well as the financial system as a whole. These problems became apparent not just in the United States but around the world, necessitating an internationally coordinated response. The Federal Reserve has played a key part in the international effort, working through organizations such as the Basel Committee on Bank Supervision and the Financial Stability Board. For example, we were extensively involved in the Basel Committee's recent decisions to strengthen capital requirements for trading activities and securitizations, and we continue to work with domestic and foreign supervisors to raise capital requirements for other types of on- and off-balance-sheet exposures.  

By conducting the Supervisory Capital Assessment Program, popularly known as the stress test, U.S. supervisors took a significant step toward ensuring that our banks hold adequate levels of high-quality capital.  

Internationally, the Financial Stability Board has called for significantly stronger capital standards, and the Group of Twenty has committed to develop rules to improve both the quantity and quality of bank capital. The Federal Reserve supports these initiatives. The structure of capital requirements should also be reviewed. For example, to reduce the

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4 The average Tier 1 Common ratio as of June 30, 2009, has been adjusted to reflect the completion of Citigroup's exchange offer in September 2009.

tendency of current capital requirements to promote credit growth in booms and to restrict credit during downturns, the Federal Reserve has supported international efforts to develop capital standards that would be countercyclical. Countercyclical standards would require firms to build larger capital buffers in good times and allow them to be drawn down – but not below prudent levels – during more-stressed periods. We also are working with our domestic and international counterparts to develop capital and prudential requirements that take account of the systemic importance of large, complex firms whose failure would pose a significant threat to overall financial stability. Options under consideration include assessing a capital surcharge on these institutions or requiring that a greater share of their capital be in the form of common equity. For additional protection, systemically important institutions could be required to issue contingent capital, such as debt-like securities that convert to common equity in times of macroeconomic stress or when losses erode the institution’s capital base.

The crisis also highlighted weaknesses in liquidity management by major firms. Short-term secured funding of long-term, potentially illiquid assets – through repurchase agreements and asset-backed commercial paper conduits, for example – became unavailable or prohibitively costly during the worst phases of the crisis, both here and abroad. In response, the Federal Reserve helped lead the Basel Committee’s development of revised principles for sound liquidity risk management, which in the United States are being incorporated into new interagency guidance that reemphasizes the importance of rigorous stress testing to determine adequate liquidity buffers. Together with our domestic and international counterparts, we are also considering quantitative standards for liquidity exposures similar to those for capital adequacy, with the goal of ensuring that internationally active firms can fund themselves even during periods of severe market instability. With supervisory encouragement, large banking organizations have, for the most part, already significantly increased their liquidity buffers and are strengthening their management of liquidity risk.

In addition to insufficient capital and inadequate liquidity risk management, flawed compensation practices at financial institutions also contributed to the crisis. Compensation, not only at the top but throughout a banking organization, should appropriately link pay to performance and provide sound incentives. In particular, compensation plans that encourage, even inadvertently, excessive risk-taking can pose a threat to safety and soundness. The Federal Reserve has just issued proposed guidance that would require banking organizations to review their compensation practices to ensure they do not encourage excessive risk-taking, are subject to effective controls and risk management, and are supported by strong corporate governance including board-level oversight.

A fundamental element of effective financial regulation is protecting consumers from unfair and deceptive practices. The recent crisis clearly illustrated the links between consumer protection and the safety and soundness of financial institutions. We have seen that flawed financial instruments can both harm families and impair financial stability. Strong consumer protection helps to preserve household savings and to provide families access to credit on terms that are fair and well matched with their financial needs and resources. At the same time, effective consumer protection promotes healthy competition in the financial marketplace, supports sound lending practices, and increases confidence in the financial system as a whole.

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The Federal Reserve has taken several important steps to strengthen the protections provided consumers and ensure that these protections effectively respond to market changes and emerging risks. As well-informed consumers are better able to make decisions in their own best interest, effective disclosures are the first line of defense against improper lending. The Federal Reserve has pioneered the use of extensive consumer testing to improve the clarity of disclosures, notably for mortgages and credit cards. However, we have learned that even the best disclosures may not always sufficiently protect consumers from unfair practices. Accordingly, we have written rules providing strong substantive protections for mortgage borrowers and credit card users. For example, last year the Board adopted new regulations under the Home Ownership and Equity Protection Act to better protect consumers with higher-priced mortgages. These rules strengthen underwriting, restrict prepayment penalties, and require escrow accounts for property taxes and insurance. The rules also address deceptive mortgage advertisements and unfair practices related to real estate appraisals and mortgage servicing. More recently, the Board adopted new credit card rules to increase transparency and protect consumers from a variety of unfair and deceptive acts and practices, rules that were largely incorporated into subsequent legislation. We are currently working on rulemakings in the areas of overdraft protection, reverse mortgages, and gift cards.

Making supervision more effective

Let me turn from regulation (the development of rules and standards that govern banks’ practices) to supervision (ongoing oversight and enforcement to ensure that the rules are being followed). As I noted earlier, the events of the past two years revealed serious failures in risk management at regulated financial firms that, in turn, underscored the need for supervisors to identify weaknesses in a more timely way and to more effectively ensure financial institutions remedy the problems. The nature and causes of these failures have been outlined in reports issued by a variety of domestic and international groups in which we participate. As a complement to those efforts, we at the Federal Reserve set up a number of working groups, drawing on expertise from throughout the Federal Reserve System, to evaluate all aspects of our oversight of banking organizations and to develop strategies to improve the quality of our supervision.

Two important themes have emerged from these efforts. First, they have reaffirmed the importance of effective consolidated supervision, particularly at large, complex organizations, so that supervisors can properly understand risks and exposures that cross legal entities and business lines. Second, we must combine a systemwide, or macroprudential, perspective with firm-specific risk analysis to better anticipate problems that may arise from the interactions of firms and markets. To support these approaches, we are strengthening our supervisory processes to include analyses that draw on multiple disciplines, updated surveillance tools, and more timely information so that supervisors can identify emerging risks sooner and respond more effectively. I will address each of these themes in turn.

First, recent experience confirms the value of supervision of financial holding companies – especially the largest, most complex, and systemically critical institutions – on a consolidated basis, supplementing the supervision that takes place at the level of the holding company’s subsidiaries. Large financial institutions manage their businesses in an integrated manner with little regard for the corporate or national boundaries that define the jurisdictions of

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functional supervisors in the United States and abroad. For example, a nonbank subsidiary of a financial holding company may originate a mortgage loan, sell it to an investment banking affiliate to be packaged and distributed as a security, which in turn may be purchased by an investment vehicle supported by a liquidity facility from a bank affiliate. Because financial, operational, and reputational linkages span large and complex financial firms, the risks borne by such firms cannot be adequately evaluated through supervision focused on individual subsidiaries alone. Instead, effective supervision must involve greater coordination among consolidated and functional supervisors and an integrated assessment of risks across the holding company and its subsidiaries.

In recognition of these points, the Federal Reserve Board issued guidance a year ago that updated our approach to consolidated supervision, tying it more explicitly to the systemic significance of individual holding companies and their business lines, such as core clearing and settlement activities and activities in critical financial markets.\(^9\) Strengthened consolidated supervision also supports improved oversight of institutions' compliance with consumer protections. Indeed, building on a pilot project we launched in 2007, we recently announced a consumer compliance examination program for nonbank subsidiaries of bank holding companies, as well as of foreign banking organizations.\(^10\)

Second, our supervisory approach should better reflect our mission, as a central bank, to promote financial stability. The extraordinary pressure on financial firms last fall underscored how profoundly interconnected firms and markets are in our complex, global financial system. Thus, any effort to address systemic risks will require a more systemwide, or macroprudential, approach to the supervision of systemically critical firms. More generally, supervisors must go beyond their traditional focus on individual firms and markets to try to identify possible channels of financial contagion and other risks to the system as a whole.

To improve consolidated supervision and increase the macroprudential focus of our oversight, we are improving existing supervisory tools and developing new ones. For example, drawing on our experience with the recent capital assessment program, we have increased our emphasis on horizontal reviews, which focus on particular risks or activities across a group of banking organizations. Although we have conducted horizontal reviews before, the Supervisory Capital Assessment Program of the past spring was both broader in scope and conducted differently than many previous horizontal reviews. It involved a broad simultaneous review of several types of risk exposures at the included banking organizations, covering a majority of the assets of the U.S. banking system. Examiners applied the same stress parameters to each firm, highlighting the relative strengths and weaknesses among them. Because we simultaneously evaluated potential credit exposures across all the firms, we were also better able to consider the systemic implications of financial stress under adverse economic scenarios. Building on the success of this initiative, we will conduct more frequent, broader, and more comprehensive horizontal examinations, evaluating both the overall risk profiles of institutions as well as specific risks and risk-management issues.

The increased complexity of the firms we supervise and the need to consider the systemic implications of problems at individual firms underscore the importance of increased collaboration within the Federal Reserve System itself among examiners and other specialists. The Federal Reserve’s ability to draw on expertise from a range of disciplines


was essential to the success of the Supervisory Capital Assessment Program, and it will be a central feature of our supervision in the future. For example, we are using a multidisciplinary approach to develop an enhanced quantitative surveillance program for systemically critical institutions. This program will incorporate supervisory information, firm-specific data analysis, and market-based indicators to identify developing strains and imbalances that may affect multiple institutions, as well as specific firms. Our economic and market researchers will work in concert with examiners, market operations specialists, and other experts within the Federal Reserve System. Their efforts will incorporate periodic scenario analysis so we can better understand the consequences of economic shocks for both individual firms and the financial system. Off-site quantitative analysis will complement our traditional on-site supervision, but will be independently conducted to provide an alternative perspective to traditional examination findings.

To support and complement these initiatives, we are working with the other federal banking agencies to develop more-comprehensive information-reporting requirements for the largest firms. Traditional bank regulatory reports have not been sufficiently complete or timely to support continuous monitoring and analysis of the dynamic and diverse business activities of the largest, most complex organizations. These firms should report systematic, frequent, and consistent information on material firm-wide exposures, funding and liquidity profiles, and operating performance. Enhanced reporting requirements should not only help supervisors identify potential vulnerabilities at individual institutions and in the banking sector more broadly, but should also prompt institutions to better track their own risks.

When risk-management shortcomings are identified, even if losses have not yet materialized, supervisors must hold management accountable and make sure that weaknesses receive proper attention at senior levels and are resolved promptly. We will ensure that important supervisory concerns are communicated promptly and at a high level, with more frequent involvement of senior bank management and boards of directors and senior Federal Reserve officials. This approach proved especially effective during the recent Supervisory Capital Assessment Program and in other circumstances where clear expectations for prompt remediation were forcefully communicated to large banking organizations. Of course, we will use the full range of enforcement tools at our disposal as necessary to achieve important supervisory objectives.

**Need for legislative action**

Though the Federal Reserve and other supervisors in the United States and abroad are strengthening the existing regulatory and supervisory framework, it remains critical for the Congress to close regulatory gaps and provide supervisors with additional tools for anticipating and managing systemic risks. The recent financial crisis clearly demonstrated that risks to the financial system can arise not only from banks, but also from other financial firms – such as investment banks or insurance companies – that traditionally have not been subject to the type of regulation and consolidated supervision applied to bank holding companies. To close this gap, the Congress should ensure that all systemically important financial institutions are subject to a robust regime for consolidated prudential supervision. Large, complex financial firms that do not own a bank, but that nonetheless pose risks to the overall financial system, must not be permitted to avoid comprehensive and effective supervisory oversight. Consolidated supervision of systemically important institutions, together with tougher capital, liquidity, and risk-management requirements for those firms, is needed not only to protect the firms’ stability and the stability of the financial system as a whole, but also to reduce firms’ incentive to grow very large in order to be perceived as too big to fail.

To further ameliorate the too-big-to-fail problem, the Congress should create a new set of authorities to facilitate the orderly resolution of failing, systemically important financial firms. In most cases, federal bankruptcy laws work appropriately for the resolution of nonbank
financial institutions. However, the bankruptcy code does not always protect the public's strong interest in avoiding the disorderly collapse of a nonbank financial firm that could destabilize the financial system and damage the economy. In light of the experience of the past year, it is clear that we need an option other than bankruptcy or bailout for such firms.

A new resolution regime for nonbanks, analogous to the regime currently used by the Federal Deposit Insurance Corporation for banks, would permit the government to wind down a failing systemically important firm in a way that reduces the risks to financial stability and the economy. Importantly, to restore a meaningful degree of market discipline and to address the too-big-to-fail problem, it is essential that there be a credible process for imposing losses on the shareholders and creditors of the firm. Any resolution costs incurred by the government should be paid through an assessment on the financial industry and not borne by the taxpayers.

Beyond strengthening and extending consolidated supervision and making provisions for the safe unwinding of failing, systemically important firms, there remains the broader objective of monitoring and addressing emerging systemic risks. Because of the size, diversity, and complexity of our financial system, that task may exceed the capacity of any individual supervisor. The Federal Reserve supports the creation of a systemic oversight council, made up of the principal financial regulators. By combining the expertise and information of all the relevant agencies and departments, the council would be in the best position to identify developments that threaten the stability of the system as a whole. The council could be charged, among other things, with monitoring risk exposures that cut across firms and markets; analyzing potential spillovers among financial firms or between firms and markets that could lead to financial contagion; identifying regulatory gaps; coordinating the responses of its member agencies to emerging systemic risks; identifying systemically important firms; and periodically reporting to the Congress and the public about emerging systemic risks and recommended approaches for dealing with those risks. In addition, to further encourage a more comprehensive and holistic approach to financial oversight, all federal financial supervisors and regulators – not just the Federal Reserve – should be directed and empowered to take account of risks to the broader financial system as part of their normal oversight responsibilities.

**Conclusion**

As we work together to build on the progress already made toward securing a sustained economic recovery, we cannot lose sight of the need to reorient our supervisory approach and to strengthen our regulatory and legal framework to help prevent a recurrence of the events of the past two years. As I have described today, the Federal Reserve has been actively engaged in this process. We are working with our domestic and international counterparts to strengthen the standards governing bank capital, liquidity, risk management, incentive compensation, and consumer protection, among other areas. We are also improving supervision, and giving it a greater macroprudential focus, through enhanced consolidated supervision and through the development of new supervisory tools – including comprehensive horizontal reviews, off-site quantitative evaluations, and more extensive information gathering. We are moving quickly to bring unresolved issues to the attention of senior management and requiring prompt responses.

Regulators and supervisors can do a great deal, but comprehensive financial reform requires action by the Congress. Strengthening consolidated supervision, setting up a mechanism (such as a systemic oversight council) to identify and monitor risks to financial stability, and creating a framework that allows for the safe unwinding of failing, systemically critical firms are among the essential ingredients of a new system that will reduce the probability of future crises and greatly mitigate the severity of any that occur. We at the Federal Reserve look forward to working closely with the Congress as the legislative process evolves.