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Enhancing the Effectiveness of Supervision

Introduction

The crisis that gripped the U.S. and global financial systems starting in the summer of 2007 has abated in recent months, but many of its effects--ranging from high unemployment to tighter credit for households and businesses--will linger for some time to come. These economic strains have driven home the critical link between the health of the broader economy and the stability of the financial system; it is imperative that governments and financial regulators worldwide carefully evaluate the causes of this crisis and make the changes necessary to mitigate the risk of such episodes in the future. Our systems of regulation and oversight must be strengthened, and the forces that led to the nearly complete breakdown in market discipline that was exposed by the crisis must be addressed.

The Federal Reserve strongly supports the ongoing efforts of the Congress and the administration to achieve comprehensive financial regulatory reform. For its part, the Federal Reserve has been conducting a comprehensive evaluation of how it carries out its regulatory and supervisory responsibilities and has been actively implementing improvements. The Federal Reserve supervises approximately 5,000 bank holding companies--a number of which are large, complex and globally active; approximately 850 banking organizations that are state-chartered and members of the Federal Reserve System (state member banks); and foreign banking organizations operating in the United States. Many other financial institutions--including nationally-chartered banks, state non-member banks, thrift institutions, investment banks, insurance companies, and independent mortgage companies, are overseen by other regulatory agencies.

While the crisis was still ongoing, the Federal Reserve established an internal working group comprised of senior officials from the Board of Governors and the Reserve Banks to identify key aspects of its supervisory process that needed improvement. This paper presents the working group's findings and describes improvements initiated to date. The focus of this paper is safety and soundness supervision, primarily of the large banking organizations which were at the center of the crisis. Importantly, though different supervisory issues generally arose for regional and community banks than for large institutions, some of the same challenges were present. Informed by efforts to overhaul the supervision of large institutions, the Federal Reserve is also strengthening supervision of regional and community banks.

This paper explores the changes the Federal Reserve is implementing for its oversight of large, complex banking organizations, including:

- Adoption of a macroprudential perspective to complement the traditional focus on individual firm safety and soundness, including an evaluation of the linkages across firms and markets and other mechanisms that have the potential to amplify both booms and busts.
- Formalization of a multidisciplinary approach to supervision that more fully exploits the Federal Reserve's considerable analytical expertise in macroeconomics and finance and the operation of money and capital markets, as well as in banking supervision and regulation.
- Enhancing overall surveillance and analysis of large, complex banking organizations, including the incorporation of information from a more model-driven "quantitative surveillance" program to complement the work of examiners in the field.
- More centralized management of supervision by senior Board and Reserve Bank officials to better support the timely identification, analysis and mitigation of systemic and firm-specific risks at large, complex banks and to ensure individual firms address risks more swiftly and consistently.

The Federal Reserve's internal efforts to enhance supervision have informed, and been informed by, the efforts of domestic and international groups in which the Federal Reserve is a leading participant. These groups include the Basel Committee on Bank Supervision, the President's Working Group on Financial Markets, the Financial Stability Board, and the Senior Supervisors Group.[i] The Federal Reserve is working with these groups and with other regulatory and supervisory agencies to strengthen capital and liquidity standards for all financial institutions, but most notably for the largest and most complex. The Federal Reserve has also played a leading role in implementing standards to ensure compensation practices focus on firms' long-term financial condition and do not encourage undue risk-taking.

The Federal Reserve will continue to work internally and with other agencies domestically and around the world to ensure rapid progress in improving supervision. But it is important to understand that enhancing supervision, while necessary, is not sufficient to address all the issues that were exposed by the recent crisis. Among these issues were:

- The internal risk-management practices and the corporate governance and oversight by both management and boards in many countries, including the United States, were weak or ineffective in a number of key financial institutions;
- Market discipline did little to constrain excessive risk taking at financial institutions or to incent borrowers and lenders to price risk accurately and make careful and informed decisions

Additionally, gaps in the overall regulatory framework left the financial system susceptible to instability and contagion, with some nonbank financial institutions receiving no effective consolidated oversight, and with risks increasing largely unchecked in the so-called "shadow banking system," which operated without regulatory oversight. In its role as the consolidated supervisor of bank holding companies, the Federal Reserve was, by statute, narrowly focused on the risks posed by the companies' non-bank subsidiaries to the safety and soundness of their bank subsidiaries. And, also by statute, the Federal Reserve was heavily reliant on functional supervisors of the bank and regulated nonbank subsidiaries. Those functional supervisors, in turn, were statutorily focused only on the safety and soundness or other defined aspects of the narrow entities they regulated. The net effect was no federal regulator had sufficient authority to effectively supervise all aspects of a holding company's activities, or to identify and mitigate the risks these organizations might pose to the financial system.

All of the underlying factors that contributed to this crisis must be meaningfully addressed before Americans can be confident that our nation's system of financial oversight effectively protects them from the economic hardships created by financial instability. Enhancing the Federal Reserve's supervision is one critical step in that process. The rest of the paper will focus on efforts underway to complete that step.

Enhancements to Federal Reserve Supervision

The working group evaluated Federal Reserve supervision through the prism of risk-focused supervision, an approach developed by all of the federal bank supervisory agencies in the 1990s to strengthen the oversight of large financial institutions. The risk-focused supervision framework consists of three critical steps: 1) identification of key risks and vulnerabilities; 2) design and execution of appropriate supervisory responses; and 3) effective communication to banks' executive managers and boards of directors about the risks and vulnerabilities facing the firms, as well as specific practices that do not meet minimum supervisory expectations, followed by a requirement for swift remedial action.

The working group identified areas for improvement in each of these three steps. These areas for improvement, along with a consideration of the adequacy of resources devoted to the supervisory process, are discussed in Section I. The actions being taken to implement necessary improvements are discussed in Section II.

I. Areas for Improvement

Identification of risks and vulnerabilities

Supervision clearly did not adequately identify all of the material risks and vulnerabilities facing individual banking organizations or the financial industry as a whole. In particular, supervision did not provide a comprehensive picture of large firms' vulnerability to the interaction between some of their most complex activities and changes in financial market and economic conditions. Examples of those vulnerabilities included the widespread distribution of relatively opaque structured credit products, many of which imbedded poorly underwritten mortgage securities, and the funding of these long-term structured products through short-term money market vehicles.

Supervisors generally understood many of the challenges associated with the valuation of these complex structured products. But they did not adequately understand the risks stemming from the growing use of off-balance sheet entities, particularly the increased use of bank-sponsored or supported short-term money market vehicles to fund senior tranches of asset securitizations and re-securitizations. In particular, risk exposures that were thought to have been widely dispersed across the financial system through the distribution of credit assets in fact were concentrated in the banking system, largely as a result of banks' direct, indirect, or implicit support for the underlying securities and funding vehicles. The end result was that financial institutions of all types were more vulnerable to a rapid erosion in market liquidity than was recognized. Once housing and mortgage markets began to deteriorate in earnest, counterparty exposures and risks escalated across large financial institutions and liquidity pressures quickly spread throughout the financial system.

Understanding the impact of financial market and economic developments on the health and soundness of a banking organization has always been an element of the supervisory process. It has been reflected, for example, in the issuance of supervisory guidance for classes of lending or practices that suggested the potential for widespread mispricing of risks and vulnerabilities across institutions. However, the development of supervisory strategy, and more specifically the supervisory plans that guide supervision activities, were geared mostly toward addressing firm-specific risks and did not sufficiently incorporate a broader analysis of potential systemic issues and risks.

While supervisors were aware that underwriting standards for residential mortgages were progressively weakening, for example, they did not adequately appreciate the potential systemic impact of changes in the structure and marketing of residential mortgages, such as no- and low-documentation loans, high loan-to-value mortgages, adjustable-rate mortgages with low teaser rates, and mortgages underwritten without regard for the borrower's ability to repay. These practices contributed to an unsustainable run up in house prices and to the intensification of the subsequent correction in house prices and its attendant effects on the health of the financial system.

In addition, the growth in the size and complexity of the largest financial institutions, and the increased use of complex financial products that generate risks across different legal entities and that may not be supervised using the same set of prudential standards, has heightened the need for cooperation among supervisors, and for greater clarity about the roles and authorities of the various supervisory agencies involved.

Design and execution of supervisory actions

In a number of areas, supervision processes quite effectively provided advance indications of weaknesses in banks' risk-management practices that contributed to substantial funding and liquidity problems and unexpectedly large losses. For example, before the downturn, supervisors raised concerns about progressively weakening underwriting standards and the growth of non-traditional residential mortgages and commercial real estate exposures. In addition, supervisors were aware of a variety of other challenges confronting large complex firms, including:

- Weaknesses in management information systems that hindered effective measurement, aggregation, and management of risk exposures, on both a business-line and firm-wide basis;
- Firms' increasing vulnerability to a decline in asset market liquidity and potential weaknesses in their contingency funding plans;
- The rapid expansion of new and complex business activities without robust risk-management and control processes; and,
- The potential for growing concentrations of exposures in certain risky positions (such as structured credit products and counterparty credit) that were being masked by the use of historical volatility- and sensitivity-based risk measures during an extended benign operating environment characterized by historically low market volatility and risk premiums.

However, while a number of potential concerns were identified, for a variety of reasons supervisors did not always adequately address them through in-depth examinations or other initiatives. Reasons for this include:

- Uncertainty about whether the concerns represented a significant potential for generating severe problems, particularly given the extended period of strong bank profits, and little to no evidence of material losses leading up to the crisis. For example, concerns about developments in mortgage markets notwithstanding, many observers saw the odds of a rapid and severe deterioration in the U.S. housing and mortgage markets as quite low.
- Too little attention by supervisors, managers, and boards of directors to some fundamental risk-management practices, especially in emerging complex business activities. In an apparently benign environment, they did not fully appreciate the growing vulnerabilities created by the increasing speed at which shocks could be transmitted across the financial system. And neither supervisors nor bank managers gave sufficient priority to the identification of low probability events with potentially highly adverse outcomes or to mitigating actions that could be taken before such events occurred.
- Uncertainty over legal authority to conduct examination activities in holding company subsidiaries, such as consumer compliance examinations in non-bank mortgage subsidiaries.

Engagement with firms on identified risks and vulnerabilities

Even when potentially significant concerns were identified and generally agreed-upon, supervisors did not always forcefully communicate their concerns to senior managers and boards of directors at supervised institutions. Moreover, supervisors did not always demand swift corrective action or hold managers at financial institutions accountable when deficiencies were identified and communicated to firms.

Confidence that market discipline was helping to constrain excessive risk taking contributed to delays in correcting fundamental risk-management weaknesses in some cases. In addition, a desire to limit regulatory burden on supervised firms raised the bar for determining whether issues were important enough to require prompt remediation. When supervisors raised concerns, they often met strong resistance from an industry that was earning record profits and was seen as expanding household and business access to credit. For example, the industry and its supporters strongly criticized supervisors when they preemptively developed guidance on commercial real estate and non-traditional mortgages, and the resulting guidance to the industry that was issued articulated less rigorous standards than were initially contemplated.

Leading up to the crisis, changes in supervisory ratings for individual firms often lagged observable changes in firms' risk profiles and financial condition. This was an important lapse. Ratings are used for a variety of important purposes, including determining the amount of scrutiny a banking organization might receive and the nature of the access a bank has to the Federal Reserve's discount window. Supervisors also use ratings to communicate their views and concerns about a firm's operations, financial condition, and risk management to boards of directors and management. A desire to improve their firm's ratings can strongly incent a bank's managers to address identified weaknesses.

Sufficiency of supervision resources

The Federal Reserve did not have enough supervisors with expertise in the full range of risks facing the industry, especially given the rapid changes in banks' business activities and in financial markets. Cost concerns and compensation limits often constrained efforts to recruit and retain expert staff, especially in key technical areas. Subject-matter experts often received considerably higher compensation in the private sector.

II. Actions Being Taken to Enhance Supervision

The Federal Reserve is taking a number of concrete actions to enhance its supervision practices. They have been designed to address the following key objectives:

- Enhancing forward-looking risk identification processes by developing a more comprehensive understanding of supervised firms' key business activities and risks.
- Improving the identification of interconnections across firms and taking those into account in the supervision of individual organizations.
- Assessing risk exposures and associated risk-management practices across the entire organization to better understand the potential impact of correlated risk exposures that may reside in distinct business lines as well as different legal entities and regulatory jurisdictions.
- Putting more emphasis on understanding both firm-specific and broader financial sector consequences of particularly adverse events by more systematically using stress testing and scenario analyses, as well as cross-firm horizontal reviews.
- Communicating more clearly and forcefully with supervised firms.
- Ensuring more timely and consistent application of supervisory ratings and more active use of formal and informal enforcement actions.
- Increasing supervision staff and enhancing its expertise.

The Federal Reserve is making changes in the supervision of large financial institutions designed to more consistently and fully draw from its broad range of expertise. Oversight and control of Federal Reserve supervision will be more centralized and multidisciplinary. A newly-formed group of senior officials from the Board and the Reserve Banks--representing supervision, research, markets, payments and settlement, and consumer compliance--will define supervisory priorities and coordinate plans for large financial firms. This group will oversee risk-identification processes and will be responsible for ensuring that strengthened surveillance and analysis of individual firms, financial markets and the broader economy will result in Federal Reserve supervision that appropriately addresses areas of potential concern.

In conjunction with these organizational changes, the Federal Reserve is taking a number of other concrete actions to enhance the effectiveness of its supervisory process. These actions are outlined below.

Strengthening surveillance and analysis

To better address macroprudential issues and to enhance the understanding of important developments at the largest firms and the markets in which they operate, surveillance of large complex firms is being strengthened through a new program tailored specifically for them. Formalized surveillance procedures will encompass analysis of the operating performance, financial condition and vulnerabilities of large banks, taking into account the greater complexity of these firms and their critical roles in the economy and financial markets. This work will explicitly incorporate forward-looking analyses of economic conditions and developments in financial markets and will address the implications for the firms' business activities and emerging risks.

The surveillance and analysis of large financial institutions will be multidisciplinary, taking full advantage of the Federal Reserve staff's expertise in economics, financial markets, and payments systems, as well as supervision. This broader perspective will help better identify key areas of focus, will inform the planning and execution of supervisory responsibilities, and will complement the expertise of supervisory risk specialists and on-site supervisory teams.

Conducting periodic stress testing and scenario analyses across large firms

The Supervisory Capital Assessment Program (SCAP) in 2009 demonstrated the benefits of a simultaneous cross-portfolio horizontal review of a number of major firms--with a critical mass of banking system assets and positions--to develop a more complete view of the vulnerabilities at individual firms and in the financial system more broadly.

Building off of this effort, the Federal Reserve will conduct periodic horizontal reviews and stress tests and scenario analyses across the largest firms to identify the potential impact of possible adverse changes in the economy and financial markets. As with the SCAP, these efforts will be coordinated with and include participation of other federal banking regulatory agencies, where applicable. These exercises will serve a number of purposes, including:

- Identifying firm-specific and financial system vulnerabilities;
- Developing horizontal perspectives on key risk exposures, risk-management challenges, and best practices across the industry that can be used to inform requirements for corrective actions where weaknesses exist;

- Providing independent estimates of firms' potential losses and earnings that supervisors can use to evaluate both the adequacy of firms' capital and the firms' own processes for assessing capital adequacy; and
- Informing the more timely development and communication of supervisory standards and expectations to address identified areas of concern for which standards may be outdated or otherwise insufficient.

Increasing supervisory emphasis on firms' internal capital assessment practices

The SCAP re-emphasized the importance of rigorous supervisory assessments of capital adequacy and highlighted the need for firms to improve their internal capital assessment, management and planning so as to maintain a prudent level and composition of capital, even in adverse environments. Supervisors are focusing substantial attention on bank holding companies' internal capital assessment and planning and have already built further work in this area into supervision plans for the largest firms.

- Sound internal capital assessment relies on accurate measurement and management of risk, including of risks under potential stressed operating environments. Accordingly, supervisors are working with large banks to ensure that they:
  - have comprehensive management information systems in place;
  - enhance firm-wide risk-measurement and -management practices, where needed;
  - make the information derived from these practices an integral part of their internal capital assessment and planning, and
  - have in place appropriate controls and corporate governance over these processes.
- More broadly, supervisors will be looking at large firms' ability to respond to financial distress as reflected in their internal recovery and resolution plans.

Requiring more comprehensive and timely reporting of risk positions and operating performance

The Federal Reserve is working to enhance its access to more timely and consistent information on the risk exposures and operating performance of large firms in order to effectively identify potential vulnerabilities at individual institutions and in the banking sector more broadly. This will include requiring the largest firms to report more systematic, timely and consistent information on material firm-wide risk positions and exposures, funding and liquidity profiles, as well as on earnings and revenues and other measures.

More timely and detailed data reporting requirements will help improve risk-identification practices; provide earlier insights into drivers of revenues and costs, which are often the most valuable early indicators of emerging risks; and help to better target areas warranting explicit focus in the supervisory planning process. Enhanced supervisory reporting requirements will also promote better internal risk assessment at firms.

Clarifying the objectives of consolidated supervision

The Federal Reserve has issued enhanced guidance reaffirming the importance of consolidated supervision of all bank holding companies, particularly of large complex firms. It emphasized that consolidated supervision should be conducted from a macroprudential perspective as well as firm-specific safety-and-soundness perspective. The guidance clarified expectations of Federal Reserve staff in identifying and addressing firm-specific and system risk in the normal course of supervision. Specifically, this guidance, among other things, directs Federal Reserve examiners to pay special attention to activities that have the potential to affect not only the institution, but the financial system more broadly. These include business lines with a significant presence in key financial markets, large-value payment operations, and clearing and settlement functions involving critical financial markets. The guidance also provides more explicit directions to supervisors for evaluating the capacity of a banking organization to measure and manage risks across the entire firm; reaffirms the importance of understanding and assessing the financial condition and risk profile of a holding company's nonbank subsidiaries; and clarifies the protocols for relying on, and communicating with, the primary supervisor of a bank or functionally regulated subsidiary.

Communicating more clearly and forcefully with supervised firms

To ensure banking managers and boards of directors respond appropriately to supervisory concerns, senior Federal Reserve officials will more regularly and consistently deliver messages at a higher level, with more frequent participation of senior managers and boards of directors at supervised firms. During the SCAP, this approach proved to be especially effective in securing prompt increases in capital levels.

- In addition, the Federal Reserve is enhancing the governance of its supervision to ensure that supervisory ratings for institutions are updated promptly as appropriate and are applied consistently across firms.
- Requirements for timely remediation of identified weaknesses will also be enhanced through more proactive use of formal and informal enforcement actions, where necessary.

Promoting enhanced corporate governance

The Federal Reserve expects greater and more active participation of firms' boards of directors on major issues. For example, recent guidance on employee compensation and communications with firms about internal capital assessment practices have both emphasized that the board of directors should be involved in key aspects of oversight and decision making. In addition, the Federal Reserve has encouraged firms to strengthen the composition of their boards of directors, where needed, to increase the banking expertise on the board, and enhance the independence of their board audit committees.

Improvements to the supervision of regional and community banks

Fewer problems arose in supervisory processes for regional and community banks than for large institutions, but some of the same issues were present. The Federal Reserve is also strengthening supervision of regional and community banks. Importantly, these firms will continue to be subject to regular full-scope examinations. Greater emphasis will be placed on sound risk management of lending and funding concentrations, as well as on the collection of information on risk exposures in a format that permits testing for potential systemic risks across groups of institutions. For these organizations as well, timely and forceful communication of supervisory concerns to the most senior managers and the board of directors will be essential.

Enhancing supervision resources

Initiatives are under way to support the hiring, training, and retention of sufficient levels of staff with expertise suitable to support both on-site examinations and off-site analysis of complex financial institutions and financial markets.

- The Federal Reserve budget provides a significant increase of staff for 2010 relative to 2008, concentrated in the supervision of the largest banking organizations.
- Enhanced training is in place to expand staff knowledge of emerging areas of supervisory focus. Other steps are being taken to broaden and deepen staff expertise, including more rotations across supervisory functions.
- Even with these steps, challenges will remain in attracting and retaining enough staff with the skills necessary to understand the increasingly complex activities of the largest firms. As the financial sector recovers and job availability and compensation improve in the private sector, the Federal Reserve will need to budget enough resources to maintain an expert staff.

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[i] President's Working Group on Financial Markets (2008), "Policy Statement on Financial Market Developments" policy statement (Washington: U.S. Department of the Treasury, March 13); Financial Stability Forum (2008), Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, (Basel, Switzerland: FSF, April 7); Senior Supervisors Group (2008), Observations on Risk Management Practices during the Recent Market Turbulence (Basel, Switzerland: Bank for International Settlements, March 6).