

SUPERVISORY LESSONS LEARNED FROM RECENT MARKET EVENTS

Recent market events have exposed risk management deficiencies at a number of banking organizations and many firms have suffered significant losses as a result. While it is unclear the extent to which actions taken ex ante by supervisors could have prevented or mitigated the recent turmoil in the banking system and financial markets and/or these losses at supervised institutions, recent events have highlighted a number of issues that supervisors need to consider in order to strengthen current supervisory processes. Doing so should, in turn, encourage improvements in risk management practices at banking institutions. This note outlines a number of the key lessons for supervisors that have been highlighted and points to some of the areas on which supervisors need to focus going forward. It also includes a discussion of specific actions being taken that are directed at improving Federal Reserve supervision of financial institutions.

This document is not meant to provide an exhaustive accounting of all lessons learned and supervisory actions being contemplated, which are to be the objective of further and more detailed analyses. Rather, it is an outline of BS&R staff views aimed at initiating and focusing further discussion, analyses, and potential enhancements to our supervisory program.

- Other initiatives in this regard will include an effort led by senior System officials identifying lessons learned and actions needed to enhance banking supervision and regulation, and an assessment of System supervisory practices relative to the Basel Core Principles for Effective Supervision, which is being undertaken in advance of the upcoming FSAP.

The key lessons learned fall into five broad categories:

- 1) Issues related to the identification of material risk issues in an increasingly complex financial system and the functioning of supervisory processes designed to address these issues -- e.g. risk-focused supervision of large financial institutions -- including:
 - The identification of risk issues and/or potential areas of regulatory/supervisory concern;
 - The setting of supervisory priorities across the System and for individual firms; and
 - The design and execution of supervisory plans, programs and initiatives (e.g., exams).
- 2) Interactions with supervised institutions and the delivery of supervisory messages;
- 3) Issues related to the timely development and articulation of regulatory and supervisory policies and guidance;
- 4) Challenges stemming from the structure and/or functioning of Federal Reserve bank supervision and current Federal Reserve supervisory programs; and
- 5) Challenges resulting from the US regulatory/supervisory structure and regime, including the Federal Reserve's role as an umbrella supervisor and its interaction with foreign supervisors.

EXECUTIVE SUMMARY

Broad Supervisory Lessons Learned

Issues related to the identification of material risk issues

Supervisors did not identify the full spectrum (or the scale) of the risks inherent in increasingly complex banking activities, including those stemming from increased use of securitization and other risk transfer mechanisms, as well as the use of off-balance sheet funding vehicles. In particular, the inter-relationships between credit, market and funding/liquidity risks were not well understood, and the potential consequences of their convergence were not fully appreciated.

- Supervisors need to enhance forward-looking risk identification processes, including developing a more comprehensive understanding of key, and emerging, business lines at firms and the full range of risks they generate at banking and financial holding companies.
- Greater focus should be directed at 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.
- In particular, more emphasis should be placed on understanding both the firm-wide and market consequences of particularly adverse events and market/economic conditions.

Interactions with supervised institutions and the delivery of supervisory messages

When issues were identified, supervisors often did not deliver strong messages to senior management and/or the boards of directors at supervised institutions about potentially significant weaknesses in risk management policies and practices. In addition, supervisors did not always hold management at financial institutions accountable when identified risk management deficiencies remained unresolved.

- An extended period of benign economic and market conditions, as well as unprecedented strong profits at banking organizations, made it more difficult for skeptical voices in the supervisory community (and elsewhere) to have their concerns taken seriously. This was exacerbated by a political environment that often favored scaling back regulatory powers.
- Supervisors must be more willing -- and have the capacity and support -- to effectively challenge management at banking organizations about specific business line and risk management practices that raise concerns before weaknesses turn into full-blown problems.
- Supervisory focus on assessments and testing of fundamental risk management processes, and taking action when weaknesses are identified, remains a critical element of banking supervision, and this needs to be reinforced and strengthened.

Development and articulation of regulatory and supervisory policies and guidance

Supervisory policies, procedures and expectations ('guidance') have not always kept pace with changes in banking practices and in financial markets. In addition, in an attempt to increase flexibility and promote adaptability to a variety of circumstances, and in attempting to facilitate interagency agreement, guidance can end up being delayed, vague and/or not well tailored to specific activities at firms of different sizes and levels of complexity.

- Consequently, guidance for supervisors and supervised institutions may not reflect and/or be fully applicable to existing circumstances/activities and examiners as well as supervised firms may be uncertain as to the specific requirements of minimum supervisory expectations.
- While guidance is typically issued with a caveat that it should be tailored to firms based on their size, risk, and complexity, in practice this may lead to ambiguity in terms of how to apply guidance in specific cases.
- Notably, areas in which identified risks have been translated into clearly articulated examination procedures are less susceptible to inconsistent treatment by examiners.

Given the increasingly complex inter-relationships across risk exposures at large banking organizations that were highlighted by recent events -- in particular those inherent in some securitization transactions and the use of off-balance sheet funding and risk-transfer vehicles -- enhancements are needed in regulatory and supervisory policies and procedures. This should include both examiner guidance and articulation of supervisory expectations to firms, as well as the regulatory capital treatment applied across a variety of products/activities.

Structure and/or Functioning of Federal Reserve Supervision

Responsibilities for the activities/process discussed throughout this note are blurred by the myriad groups/participants involved. It is often not clear and/or agreed upon who has the effective authority to make final decisions, who is responsible for ensuring an issue is followed up on and who is accountable (internally) for the outcomes stemming from those decisions.

While the ultimate authority for oversight of supervision resides with the Board, the supervision itself has been delegated through the Director of BS&R to Reserve Banks and the scope of the Board mandate with respect to this oversight role is frequently challenged by Reserve Banks.

- The responsibilities, roles and authorities of Board BS&R staff vis-à-vis Reserve Banks need to be explicitly agreed upon, clarified and/or more clearly articulated across the System.
- Importantly, if BS&R staff is expected to play a more meaningful oversight role with respect to the design, implementation and execution of supervisory strategy across the System, it will take stronger support from Board management and a general enhancement of resources.

U.S. Regulatory/Supervisory Structure and Regime

A complex supervisory structure involving multiple agencies contributed to challenges in assessing risk profiles of large, complex financial institutions, particularly given the growth in the use of complex financial products that can generate risks across various legal entities and/or jurisdictions that may not be supervised using the same set of prudential standards.

- Lack of clarity about roles, responsibilities and authorities of umbrella, bank and functional regulators has contributed to challenges associated with supervising large complex firms.

DISCUSSION OF SUPERVISORY LESSONS LEARNED

Supervisory Processes and Execution

Supervisors have long recognized that rapid changes in banks' business activities, combined with tremendous growth in the size of the largest financial institutions, were creating challenges for the effectiveness of supervision at these firms. The implementation of risk-focused supervision was intended to address these developments and increase the emphasis placed on the most material risks. The discussion below highlights some of the lessons learned with respect to the need to understand and address increasing complexity in banks activities.

The processes involved in risk-focused supervision include those for identifying key risk issues and areas of potential concern, setting supervisory priorities and executing agreed-upon supervisory plans. Identification of key risk issues is an essential first step towards developing the appropriate response to potential or identified weaknesses, but is only the first step. Processes for translating identified risk issues and concerns into supervisory priorities must be effective, and solid execution of appropriate actions to confirm and address concerns is critical.

Identification of Material Risk Issues and the Functioning of Supervisory Processes

Identification of Risk Issues

The identification of key risks relies on information gathered directly through ongoing supervisory work and a range of other sources. This information is reviewed and analyzed with the goal of distilling the key risk issues that warrant supervisory attention. This necessarily involves some subjective judgments as to the likely range and severity of possible adverse events, the reliability and relative value of available information, and potentially significant information gaps. In the ideal situation, the information gathered by supervisors is clear and complete, allowing for key risk issues to be quickly identified and appropriate supervisory actions to be taken during early stages of a potential problem before major damage is sustained.

Within the Federal Reserve, identifying key risk issues and setting the priorities for supervisory actions involve a number of processes, from developing institutional profiles that provide detailed information on major business activities at supervised firms, to assessing the risks inherent in firms' activities, and identifying potentially material risks and significant risk management challenges arising from these activities. Inputs into the process come from a variety of sources, including the onsite supervision teams at specific firms, risk specialists, various System affinity and management groups (e.g., LFIC, LCBOMG, etc), and offsite monitoring areas at the Board and in-house departments at individual Reserve Banks. (See below for a discussion of Federal Reserve corporate governance challenges.)

In a number of areas, the processes for the identification of risk issues functioned quite effectively and provided reasonably early indications of many of the weaknesses in banks' fundamental risk management practices that have contributed to the current environment (and unexpectedly large losses at some firms). Potential risk issues identified ex ante included:

- The progressive loosening of underwriting standards for corporate and consumer credit;

- A rapid expansion of complex business activities prior to the implementation of robust and effective risk measurement and management processes;
- Weaknesses in management information systems that hindered effective measurement, aggregation, and reporting of risk exposures, on both a business line and firm-wide basis;
- Firms' increasing vulnerability to a decline in asset market liquidity and/or investor demand for certain risky assets and potential weaknesses in contingency funding plans;
- Concerns that those responsible within the banks for setting risk tolerance levels were not being well informed of firm-wide exposures by internal MIS and risk reporting;
- Growing concentrations in certain asset categories (e.g., commercial real estate); and,
- Concerns related to increased leverage at some firms and in the financial system as a whole.

Where the risk identification processes did not work well, it was largely the result of supervisors not fully appreciating the increase in complexity of firms' activities, the interplay between market developments and banks' dynamic risk profiles, and in particular the potential firm-wide consequences of a severe market disruption. While many potential concerns were identified (as noted above), taken individually they may not have appeared to represent significant problems, and supervisors did not fully understand how they might all come together in a period of stress.

Importantly, supervisory reviews are often targeted at specific business activities and/or risks, and if findings from these reviews are not brought together effectively, it can obscure the potential for firm-wide concentrations (resulting from increasingly inter-related and/or correlated credit, market and funding/liquidity risks) to lead to potentially very large losses.

- A key challenge for supervisors is identifying changing ways in which risks may manifest themselves given banks' evolving business practices and innovations in financial markets/products, while maintaining an appropriate level of emphasis on the supervision of more traditional business activities and associated risk management and control processes.
 - For example, it was well known that there had been significant weakening of underwriting standards for consumer and corporate credits, but as these assets were largely being originated and/or purchased from third parties with the express intent to package and sell them into the markets, this raised less of a concern among many supervisors about the potential impact to the banks involved.
 - Had supervisors done more, and acted more rapidly, in response to the well-known slippage in credit underwriting standards, it is plausible to assume that the ultimate disruption caused by rapidly deteriorating credit assets may have been smaller.

A key lesson learned through recent events (by supervisors and others) has been that the process of 'disintermediation' in the banking system, as well as the functioning of the capital markets, is largely dependent upon the continued support of the largest banks, and that there are multiple channels through which those banks can be negatively impacted during a market disruption.

- Transferring risks and assets into the capital markets often requires explicit support of banks as well as the financing of investor positions by banks. Even where support is not contractually binding, many firms have felt they could not afford to let the markets (and their

clients) absorb all the losses, either for reputational reasons, or because the associated market impact of widespread asset sales puts substantial pressure on the value of their own assets.

- Given the greater importance of market distribution of credit assets and risks, and the often opaque ways in which accessing market funding and/or ‘risk transfer’ of these assets was carried out, it has become increasingly difficult to identify the full range of risks at complex financial institutions, for firm management, supervisors, and other market participants.
- Moreover, it is particularly difficult for a risk silo-based approach to supervision of large financial institutions to effectively address the relationships between and across various risks. Recent events have shown that there is a need for greater emphasis on the management of firm-wide risk exposures as a variety of legal entities may all be involved in activities that are closely related and/or that may experience correlated losses driven by the same set of events.
- Supervisory reviews of complex activities would benefit from more active participation of specialists in market, credit, liquidity, and operational risk management issues in order to better identify the linkages between risks stemming from certain activities.
 - For example, when Federal Reserve supervisors reviewed valuation practices for some structured credit products, the lack of a more comprehensive approach aimed at addressing the full scope of credit structuring businesses left supervisors without a complete understanding of the impact of deterioration in underlying credit assets.

Supervisors have tended to focus on assessing the adequacy of risk control processes that firms have in place, and have not focused enough attention on identifying how changes in firms’ activities and in financial markets may have altered firms’ overall risk profiles in such a way as to create a need for changes/enhancements to key risk measures and controls.

- Like for many banks, supervisory focus on the use of traditional risk measurement tools (including those used for the calculation of regulatory capital requirements, such as VaR) for structured credit products distracted from a more important consideration, which was that those tools were largely inadequate to measure risks in these transactions, and by design do not measure the risk of very severe adverse events across any exposure type.
 - While supervisors have promoted the use of stress testing for many years, inadequate attention has been paid to addressing potential weaknesses in stress testing processes, including assessing whether or not key exposures were adequately incorporated into these processes and if the scenarios/stresses being applied were severe enough.
 - Management at some firms argued that stress testing and scenario analyses were not of enough value to management to justify the costs. In many cases supervisors agreed.
 - Supervisors should ensure that risk measures other than VaR, particularly those that highlight various risk concentrations, should always complement any VaR measure.
- In addition, supervisors often failed to validate the rigor and appropriateness of key risk measures being used by banks, including VaR, to determine if inputs were comprehensive enough to ensure concentrated risks were reasonably reflected.
 - The appropriateness of firm VaR models and underlying modeling choices requires greater understanding and scrutiny by supervisors than has existed in the past.

In addition to greater use of complex transactions, the tremendous increase in size and scope of many large financial institutions has raised a number of notable challenges for firms that also impact supervisors' ability to obtain information necessary to effectively assess firms, including:

- The ability to identify/measure credit, market and funding/liquidity risks across multiple portfolios, legal entities (including off-balance-sheet funding vehicles) and locations. This is exacerbated where firms have grown through mergers and acquisitions, which can make aggregation of information across entities and risk reports from legacy MIS problematic.
- Disclosures in both public and regulatory reporting do not provide enough and/or the necessary information to aid a meaningful assessment of complex firms' risk profiles.
- Where supervisors utilize internal risk reports provided by supervised institutions, the knowledge obtained for those reports suffers from firms' own inability to capture and aggregate firm-wide risk exposures in a meaningful way for some products/positions/business activities.

Priority Setting and Execution of Supervisory Activities

While risk identification processes were often reasonably effective -- with the qualifications noted above -- the process for translating identified risk issues and/or concerns about potential risk issues into examinations and other supervisory activities through which the implications of these issues/concerns could have been confirmed did not always function well.

- Federal Reserve supervisors were at times not able to agree on which issues warranted attention and mechanisms for resolving disagreements were unclear.
 - A key issue in this regard is related to the roles, responsibilities, and authorities of various participants in the process of determining supervisory priorities. (See below on Federal Reserve corporate governance)

It is important to note that there were a number of horizontal reviews across large banking organizations over the past several years that were focused on areas where recent events have highlighted specific weaknesses in banks' practices, including reviews of: firm-wide integrated stress testing; valuation of complex illiquid products (which focused primarily on mortgage-related products); and collateral management practices.

- In hindsight, these were generally the right reviews to be undertaken and increased Federal Reserve supervisors' understanding of some aspects of these topics. However, for a variety of reasons (that are different for each of them) these reviews did not always identify what turned out to be the key weaknesses in firms' risk management practices and/or important considerations that, had they been followed up on, could have left supervisors better informed about potential weaknesses and better able to encourage firms to address them.

Interactions with Supervised Institutions and Delivery of Supervisory Messages

During the years leading up to recent market events supervisors could have done a better job of delivering strong messages to bankers and their boards of directors about identified weaknesses in key risk management and control processes. While it was particularly difficult to get management at supervised firms to consider the need for risk measures that contemplated a severe and abrupt reversal of then-extant benign financial market and economic environments, supervisors should have pushed harder for risk management enhancements in this regard.

While it could be argued that supervisors should have stepped in sooner to curb certain activities, particularly where weaknesses were evident such as the deterioration of credit underwriting standards, in practice this likely would have been viewed by the industry, legislators, and others (including Federal Reserve management) as overly intrusive and criticized for potentially leading to the stifling of innovation and reducing access to credit.

It is particularly difficult for supervisors to attempt to prevent problems *ex ante* without being subject to these types of criticisms, and many are overly sensitive to this vulnerability. Supervisory management and staff need to have appropriate incentives in place that encourage questioning and dissent against perceived wisdom.

- For example, many large financial institutions were experiencing an extended period of consistently strong and growing profits, a substantial share of which were directly associated with consumer mortgage-related lending and the packaging and sale of these assets.
 - This was widely considered to be a relatively low-risk business given both the history of low loss rates on consumer mortgages, skepticism about the extent to which housing prices could depreciate, and faith in the effectiveness of risk transfer mechanisms.
- In addition, the rapid growth in access to credit that was facilitated by an increasing use of financial markets to fund credit assets coincided with policies that sought to increase home ownership across the population. Balancing macroeconomic policy making and effective prudential supervision is a key challenge when supervision is housed within a Central Bank.

It was relatively clear that it would take a near-complete reversal of the then-current market and economic performance/environments – and perhaps an unprecedented level of housing price depreciation -- to generate substantial losses and many supervisors (and bankers) were unprepared and/or unwilling to acknowledge the possibility of such a severe and abrupt reversal.

- After many years since the last major crisis across the U.S. banking system (circa late 1980s-early 1990s), some supervisors (and bankers) were complacent, feeling that if banks could withstand the events of 1998, as well as those related to the bursting of the equity market bubble, corporate fraud such as Enron/Worldcom, etc., they could certainly manage through deterioration in housing and mortgage markets without too many significant problems.

Management emphasis on reducing the regulatory burden on financial institutions created uncertainty among line supervisors about whether or not they would be supported if they strongly questioned the business practices and risk management processes of supervised firms.

- For example, attempts to address *ex ante* potential problems stemming from household and CRE markets, including the issuance of guidance on CRE and non-traditional consumer

mortgages, were not timely or well-supported by the industry and, indeed, in the case of CRE guidance was actively criticized and not widely followed.

Direct ongoing communication with supervised institutions is generally the responsibility of dedicated onsite supervision teams (and to a lesser extent risk specialists). However, for a variety of reasons, these resources may not be in the best position to determine the appropriate messages to be sent on complex risk issues, or to deliver strongly critical supervisory messages.

- Lack of expertise and/or seniority of dedicated onsite examiners can make it hard for them to make difficult decisions, particularly if they run counter to the views of staff and management at supervised firms -- or other banking and/or functional regulators -- and if they do not feel they have the clear and strong support of their own management.
- Risk specialists, who are not assigned to the dedicated onsite teams, may not have the authority to ensure an appropriate message is delivered.
- Onsite teams often lack sufficient expertise to supervise the largest, most complex firms.

Notably, the Federal Reserve supervisory process for LFIIs has placed increasingly greater emphasis on ‘continuous monitoring’ of activities as opposed to more hands-on analyses and assessments. The continuous monitoring process seeks to keep staff and management informed of key developments and risks at supervised firms, without having to carry out in-depth reviews of major business activities or to test control processes at every large firm, which resource constraints make difficult and which may place a heavy burden on supervised institutions.

- While continuous monitoring should enhance supervisors’ understanding of key issues, it does not necessarily help examiners to understand how effectively the risks stemming from various activities are being managed. Without the necessary details that might have been provided by more in-depth, focused examinations and analyses, supervisors often did not feel they had the knowledge and support to send appropriately strong messages to the firms and/or hold bank management accountable for ensuring that concerns were addressed.
- In addition, it is not always clear that the monitoring process is enhancing the understanding of firms as it often includes too little rigorous analysis and is instead more focused on gathering, rather than evaluating and understanding, information from firms’ internal reports.
- Resource issues are also an important element; staff may not be sufficient in number and/or effectively trained to carry out analysis of large complex firms and the business activities in which they are engaged.

Role of Supervision in Federal Reserve Financial Stability Efforts

From a supervisory perspective, increased emphasis on the Federal Reserve mandate with respect to financial stability has contributed to enhancing the risk identification process and increased discussion and analysis of key issues. At the same time, however, it has created some confusion on the part of staff and management about the roles and responsibilities of supervisors. While it is clear that supervisors have significant roles to play in promoting financial stability, a clear articulation of what those roles entail has not been effectively communicated.

The explicit direction given to some examination staff that their primary role is to support the Federal Reserve financial stability mandate, and that this is somehow different and/or more important than effectively carrying out more traditional responsibilities of bank supervisors, such as onsite examinations, has created incentives that can distract from the importance of carrying out these core supervisory activities, including onsite examinations, which can be vital to the adequate assessment of key business activities and associated risk management functions.

- The Federal Reserve would benefit from agreement and understanding among management of the various roles supervisors play with respect to the financial stability mandate.
- Given that systemic risk issues can stem from the financial weakness of core banking organizations, the focus on supervision of safety and soundness is itself a key stability effort.
- Better communication to examiners that their role *as examiners* makes them a valuable and essential element of fulfilling the financial stability mandate would improve incentives.
- Indeed, it should be made clear to examiners that it is often the knowledge and perspective gained through a granular review and testing of banks' activities and risk management processes that can lead to the identification of 'systemically' important issues.

Timely Development and Articulation of Regulatory and Supervisory Policies and Guidance

Supervisory policies, procedures and expectations ('guidance') have not always kept pace with changes in banking practices and in financial markets. In addition, in an attempt to increase flexibility and promote adaptability to a variety of circumstances, and to facilitate interagency agreement, guidance can end up being delayed, vague and/or not well tailored to specific activities at firms of different sizes and levels of complexity.

- Consequently, guidance for supervisors and supervised institutions may not reflect and/or be fully applicable to existing circumstances/activities and examiners as well as supervised firms may be uncertain as to the specific requirements of minimum supervisory expectations.
- While guidance is typically issued with a caveat that it should be tailored to firms based on their size, risk, and complexity, in practice this may lead to ambiguity in terms of how to apply guidance in specific cases.
- Areas in which identified risks have been translated into clearly articulated examination procedures are less susceptible to inconsistent treatment by examiners.

Extensive policies and procedures for examiners are available in the banking supervision manuals and via SR and AD letters; however, examiners have indicated that they do not always find these policies and procedures to be accessible and clear. Moreover, while the supervision manuals include examination and inspection procedures in most areas, Board management has long held the view that overly prescriptive examination procedures can be counter-productive, potentially leading to a "check-the-box" approach that fails to take appropriate account of key developments, emerging risks and institution-specific variables.

- In addition, policies and procedures are often developed with the express intent of serving as public statements of agency positions and are not necessarily drafted with execution by

supervisory staff in mind. Consequently, policy development may not always include sufficient attention to implementation considerations.

- Where guidance is issued on an interagency basis, for example, while drafting staff may have a good understanding of how nuanced language should be interpreted, this understanding may not always be made clear to field staff who must interpret for themselves how guidance should be applied or enforced.
- In some cases there may not be thorough follow through from policy development to examiner training to ensure proper execution that reflects the intent of the policies.
- Given issues related to the timeliness of guidance in addressing emerging risks, it may not be clear to examiners the extent to which they are expected to follow specified procedures or should exercise professional judgment in taking a risk-based approach to supervision.
- In some cases where policies and expectation were quite clear, examining explicitly for compliance with regulatory requirements or supervisory expectations was not necessarily viewed as a priority or may have been risk-focused out of the examination process.

Over recent years there has been a strong tendency to issue guidance as interagency products. While it is advantageous to have the multiple banking supervisors speak with a common voice, interagency drafting often results in a “compromise” product. Moreover, the interagency process can be cumbersome, making it difficult to issue products on a timely basis.

Given the focus in recent years on Basel II development, policy staff was directed to forego other policy-related initiatives. Additionally, staff was directed to concede issues both in international negotiations and with the other agencies in some cases to avoid potentially derailing Basel II. Such direction at times left staff with a sense that the final product or Federal Reserve policy negotiating stance had been unnecessarily weakened.

Supervisory Structure

The lack of a single financial regulator in the United States has some benefits, but it also creates certain gaps and vulnerabilities. In addition, the decentralized structure of Federal Reserve supervision provides many benefits, including allowing Reserve Banks to develop and apply appropriate supervisory techniques to the portfolios of firms for which they have responsibility. At the same time it can blur accountability and lead to inconsistent approaches that detracts from the development of an agreed upon and comprehensive view of key developments and risks in the banking system. This is compounded by uncertainties regarding the roles and authorities of the Federal Reserve as an umbrella supervisor.

Structure and/or Functioning of Federal Reserve Supervision

Responsibilities for the activities/process discussed throughout this note are blurred by the myriad groups/participants involved. It is often not clear and/or agreed upon who has the effective authority to make final decisions, who is responsible for ensuring an issue is followed up on and who is accountable (internally) for the outcomes stemming from those decisions.

While the ultimate authority for oversight of supervision resides with the Board, the supervision itself has been delegated through the Director of BS&R to Reserve Banks and the scope of the Board mandate with respect to this oversight role is frequently challenged by Reserve Banks.

- The responsibilities, roles and authority of Board BS&R staff vis-à-vis Reserve Banks need to be explicitly agreed upon, clarified and/or more clearly articulated across the System.
- Importantly, if BS&R is expected to play a more meaningful oversight role with respect to the design, implementation, and execution of supervisory strategy across the System, it will take stronger support from Board management and a general enhancement of resources.

Roles and authorities of Federal Reserve System-wide management groups – e.g., LFIC, LCBOMG, etc – are not always clear. In the case of the LFIC, formalized procedures and mechanisms for resolving differences of opinion with respect to supervisory strategies and activities are lacking.

- Accountability for the successful completion of agreed-upon activities is not always clear. There needs to be a better process for ensuring the work is carried out, reaching conclusions around the topics based on work undertaken, and delivery of an appropriate message to supervised firms.
- Given differing priorities that may exist at different Reserve Banks, it is not clear that decisions taken and guidance given by these groups are seen as a priority for Reserve Bank staff and management, clearly limiting the effectiveness of these groups.

Lack of clarity regarding the roles and responsibilities of various Federal Reserve supervision functions – for example, roles and authority of risk specialists versus onsite supervision teams -- creates confusion. It is often not clear who is accountable within Reserve Banks for outcomes of supervisory activities.

U.S. Regulatory/Supervisory Structure and Regime

Lack of clarity with respect to the role of an umbrella supervisor under the Gramm-Leach-Bliley Act has created confusion among Federal Reserve supervision staff and management as well as other regulators. Uncertainty regarding precisely what the role of an umbrella supervisor is, and a lack of clearly articulated expectations for how this role is to be carried out, has led to the Federal Reserve's over-reliance on bank and functional regulators and inadequate communication/information flow among supervisors and between supervisors and firms.

While many of the principles that support various supervisors' roles, responsibilities and authorities have been articulated in the supervisory community, agreed-upon and detailed procedures for operationalizing these principles are lacking. Consequently, there is often less than optimal coordination between the umbrella supervisor and bank and functional supervisors.

- Limitations on the type and extent of information sharing across supervisors often hinder the ability to make a comprehensive assessment of the consolidated organization and make effective coordination of supervisory reviews and other initiatives difficult.
- Differences in supervisory cultures across different agencies, while valuable in many situations, can lead to different supervisory agendas, strategies and actions that may delay

effectively addressing emerging risk issues. Without strong communication, coordinated priority setting, and good information sharing it is difficult to effectively assess the risks and vulnerabilities of complex supervised entities, both at the functional and consolidated levels.

- Federal Reserve supervision staff reliance on bank and functional regulators to provide views of business activities and associated risks/risk management issues at major subsidiaries of supervised firms weakens the knowledge and expertise of Federal Reserve staff and makes it more difficult to make informed assessments and develop appropriate supervisory plans.
 - Federal Reserve staff and management have often not been assertive with bank and functional regulators, even when information provided by these regulators was inadequate for Federal Reserve staff to make informed assessments.
- Supervisory messages sent to firms may be tempered due to deference to bank or functional regulators or uncertainty regarding the appropriateness of sending a strong and direct message when the activities in question are within an entity for which the Federal Reserve is not a primary supervisor. This can be exacerbated by Federal Reserve supervisors' lack of knowledge regarding the specifics of the issues in question if they were not directly involved in reviews or examinations or these activities.

Current protocols regarding the sharing of information germane to the supervision of foreign banking entities operating in the United States often limit the flow of information critical to understanding the overall organization. This is particularly critical when key activities are carried out in the United States but officially booked in a foreign entity and can lead to inadequate identification of risks and insufficient reviews of risk management practices.

- Federal Reserve supervisors often struggle to obtain information about a firm's global exposures and risk management processes. Attempting to assess a complex financial holding company based on a subset of exposures/positions is not an effective supervisory approach.
- Better information sharing and communication between home/host country supervisors are necessary prerequisites to more effective supervision of global financial institutions.

As noted above, recent market events have highlighted the need for stronger firm-wide risk management practices and more robust supervision and assessment of firm-wide risk controls. While all of the U.S. banking and financial regulators have espoused a philosophy emphasizing the importance of risk management, there has not been unanimity among regulators as to the need for enterprise-wide risk management versus legal entity-based risk management.

- This is largely due to the legal entity-based regulatory structure in the United States, wherein each regulator is compelled to highlight the need for risk management over the entity they supervise, without sufficient regard for whether or not this is the most effective approach.
- Policy guidance has been developed through an interagency process to ensure consistency; however, this interagency process has generally favored a legal entity approach to supervisory guidance, including that which is focused on risk management, rather than an enterprise-wide risk approach.
- Generally, other banking and functional regulators view an emphasis on enterprise-wide risk management and controls as promoting a lessening of the importance of responsibilities and

controls at the legal entity they supervise, and that such policies could cede control for supervision to the Federal Reserve as the consolidated supervisor.

SUPERVISORY ACTIONS TO ADDRESS LESSONS LEARNED

This section outlines some of the supervisory initiatives and actions that are intended to address the lessons learned noted above. Some of these efforts are already underway, while others are just beginning. It should be noted that these are just preliminary steps and other efforts will undoubtedly be required.

Consolidated Supervision Program

As noted earlier the Federal Reserve has field tested and is about to issue an enhanced policy for consolidated supervision, which addresses key objectives, levels, and types of supervisory activities, and coordination with other regulators

- This enhanced guidance outlines key objectives for the conduct of consolidated supervision. Chief among those are making assessments of the banking organization on a consolidated basis in terms of key corporate governance, risk management, and control functions; the strength of its financial condition; and the potential negative impact of non-bank entities on depository institutions.
- The enhanced policy provides clarity to supervisory staff regarding specific expectations for consolidated supervision of BHCs/FBOs across different portfolios.
- While interagency coordination will remain critical to effectively carrying out supervision, there are some specific activities that the Federal Reserve will be expected to undertake in its role as consolidated supervisor. For example, under this program, it is expected that the Federal Reserve will participate in, or lead as necessary, testing activities for control processes at least every three years at key firms for:
 - Internal audit infrastructure (at LFI/LCBO designated firms);
 - Parent company and non-bank funding and liquidity (at LFI/LCBO designated firms);
 - Core clearing and settlement activities (at LFIs); and
 - Activities in critical financial markets in which the firm plays a significant role (at LFIs).
- These periodic supervisory activities will be supplemented by an annual reassessment of changes in inherent risk or control structures, or potential concerns regarding controls.

It is recognized that effective consolidated supervision involves tailoring supervision to the risk and complexity of the banking organization as well as significant interagency coordination.

- While the enhanced guidelines include reliance on the work of other supervisors, if their examination work is not sufficient for the Federal Reserve to make assessments of key areas, there will be independent work done by the Federal Reserve to achieve that objective.
 - For material risks from activities that are not directly supervised or that cut across legal entities, Federal Reserve involvement will be greater.

Other Actions related to Supervisory Programs

The Federal Reserve is about to issue guidance related to firm-wide compliance risk management at large, complex banking organizations. The guidance emphasizes the need for compliance with laws, regulations, and supervisory policies to be treated as a key risk area that is clearly addressed within a banking organization's overall risk management program

BS&R's Risk Committee is enhancing its capabilities for identifying and surfacing emerging risks and for disseminating appropriate supervisory responses through a comprehensive report that is compiled and discussed among both risk and business line leadership. The report will be provided regularly to the system's Supervision Committee and is intended to serve as the basis for tracking supervisory initiatives and follow-up.

Board staff is working with Reserve Banks to identify areas where guidance may lack sufficient clarity. For example, the internal procedures for issuing SR and AD letters were recently revised to include greater emphasis on the need to develop supervisory guidance and procedures concurrently with policy development.

Capital Adequacy

The Federal Reserve and the other U.S. agencies are working with the Basel Committee (BC) to revise the Basel II framework to more appropriately capture the risks of certain banking activities for which the recent turmoil has highlighted the inadequacy of current capital requirements.

These include:

- Complex structured credit products, including securitizations of asset-backed securities; and
- Liquidity facilities for off-balance sheet conduits.

In addition, the BC is revisiting credit exposures in banks' trading books. The BC, in coordination with IOSCO, had already instituted capital requirements for incremental risk slated for a 2010 effective date. In order to ensure VaR measures are adequately supplemented in light of recent events, this charge will be expanded to capture event risks more broadly.

More generally, through the Basel Committee, supervisors will continue to monitor the implementation of Basel II so that parameters can be updated where necessary in a timely manner and pro-cyclical aspects of the framework can be addressed.

Pillar 2 and Risk Management Practices

Through the Basel Committee, supervisors will strengthen guidance with regard to Pillar 2 relating to the management of firm-wide risks, including concentration risk; stress testing and capital planning guidance; and the management of securitizations and off-balance sheet exposures and associated reputational risks.

Pillar 3 and Disclosure and Valuation Practices

The Basel Committee will be developing further guidance to strengthen Pillar 3 disclosure requirements for issuance in 2009. In particular, these will focus on disclosures related to complex securitization exposures and conduits and other off-balance sheet exposures.

The Basel Committee will develop guidance and tools that supervisors can use to assess the rigor of banks' valuation practices to promote risk management in this area.

Domestic Implementation and Related Initiatives

The Federal Reserve, together with the other banking agencies, issued a final rule on the implementation of the advanced approaches to measuring capital adequacy that allowed banking organizations to begin a parallel run in April 2008.

- While a number of institutions have moved back their start dates in light of current events, in the long run adoption of the new capital standards will more closely align regulatory capital requirements to institutions' risk profiles, strengthen risk management practices with regard to capital planning and stress testing, and improve disclosure.

The Federal Reserve, together with the other agencies, will shortly issue a proposal based on the Basel II standardized approach, which would be available to institutions that are not required to adopt the advanced approaches. The capital requirements in this proposal also seek to more closely align regulatory capital requirements with risk.

Federal Reserve staff continues to improve the manner in which they assess the internal process to assess capital adequacy at certain large, complex banks (under SR letter 99-18) and an enhanced program is scheduled to be rolled out to LCBOs in coming months.

The U.S. banking agencies will soon issue final guidance related to Pillar 2 for U.S. banking organization. Among other things, the guidance highlights supervisory expectations for an organization's internal capital adequacy assessment processes.

Other Initiatives

Liquidity Risk

The BC recently issued for consultation sound practice guidance on the management and supervision of liquidity. Additionally, through the Basel Committee, supervisors and central banks will review possible additional steps to promote more robust and internationally consistent liquidity approaches for cross-border banks.

- There will also be continued training efforts on Federal Reserve 2006 liquidity guidance.

Use of External Ratings

The Federal Reserve and other US agencies, working through the PWG, are reviewing the use of external credit agency ratings in their regulatory and supervisory frameworks to ensure it remains appropriate in light of recent events. Changes being made by the rating agencies are being evaluated to determine their efficiency and whether additional changes are warranted.