Monday, October 1, 2012
2:30 PM - 4:00 PM

1302 – Anatomy of a Failure: the Good, the Bad, the Ugly

Robert Bostrom
Partner
SNR Denton

Laura Dorman
Director & Associate General Counsel
Berkeley Research Group

Michael McCurdy
General Counsel
Brookline Bancorp, Inc.

Ashley Watson
VP and Chief Ethics & Compliance Officer
Hewlett-Packard Company

This material is protected by copyright. Copyright © 2012 various authors and the Association of Corporate Counsel (ACC).
Materials may not be reproduced without the consent of ACC.
Reprint permission requests should be directed to ACC's Legal Resources Department at ACC: +1 202.293.4103, x338; legalresources@acc.com

Faculty Biographies

Robert Bostrom
Partner
SNR Denton

Laura Dorman

Laura Dorman is a director and associate general counsel of Berkeley Research Group, LLC, a leading global expert services and consulting firm.

Ms. Dorman has over 25 years of experience in complex business and civil litigation. After a federal court clerkship and a brief stint in Washington, D.C., Ms. Dorman began her legal career in private practice in San Francisco, where she was a shareholder in a highly regarded firm. She represented a number of corporations, financial institutions, and government agencies in significant cases, including class actions and consumer claims. She then spent ten years as in-house senior counsel to two financial institutions, including one of the world’s largest. She was responsible for managing a broad portfolio of litigation, including antitrust, securities, and consumer class actions involving hundreds of millions of dollars. She is expert in all phases of litigation, including trial and arbitration.

Ms. Dorman has taught law as an adjunct and visiting clinical professor; served on several state and local bar committees, and participated as a panelist for the American College of Mortgage Attorneys, the Continuing Education of the Bar, the Recorder Roundtable, and the State Bar of California Annual Meeting. She is a member of ACC, an advisor to the Financial Institutions Committee of the Business Law Section of the State Bar of California, and a member of the State Bar’s Litigation Committee.

Ms. Dorman received her master’s and bachelor's degrees with honors from Stanford University, and her law degree from the University of Southern California.

Michael McCurdy

Michael McCurdy currently serves as the general counsel and corporate secretary for Brookline Bancorp, Inc., a $5 billion multi-bank holding company located in Boston, MA. In his role as general counsel, Mr. McCurdy is a member of the company's Executive Management Committee and is responsible for mergers and acquisitions, SEC & regulatory compliance, litigation management, and corporate governance. Prior to joining Brookline Bancorp, Inc., Mr. McCurdy served as an executive vice president and general counsel for Danvers Bancorp, Inc., a regional, publicly traded commercial bank located north of Boston. Prior to his tenure at Danvers Bancorp, Inc., Mr. McCurdy was

Copyright © 2012 Association of Corporate Counsel

the president and chief executive officer of BankMalden and worked as an associate in a Boston law firm.

Mr. McCurdy is currently a participant in the Executive Leadership Institute, an executive education program offered in conjunction with MIT and Harvard University. Mr. McCurdy is a past participant in the Boston Future Leaders program. Mr. McCurdy earned his JD from Suffolk Law School and his BA from the University of California at Santa Barbara.

Mr. McCurdy serves on the board of directors for Triangle, Inc., a Boston based non-profit organization.

Ashley Watson

Ashley Watson is vice president and chief ethics and compliance officer for Hewlett-Packard Company. She oversees the strategy and implementation of HP's ethics and compliance program, which includes ethical decision making based on HP's standards of business conduct and both internal and external investigations. Her team is also responsible for social and environmental sustainability and compliance, privacy, global records management and the HP Foundation.

Before joining HP, Ms. Watson was vice president, general counsel and corporate secretary at Attenex. In this position, she was responsible for all company legal matters, including M&A, strategic alliances, IP policy, risk management and compliance. She also managed the legal department staff and outside counsel activities. She was previously senior litigation counsel at BellSouth Corporation, responsible for complex litigation.

Ms. Watson holds a JD from the University of Georgia and her undergraduate degree from the University of North Carolina at Chapel Hill.

Copyright © 2012 Association of Corporate Counsel

ANATOMY OF A FAILURE

The Role of Enterprise-wide Risk Management and Crisis-Management in Mitigating Risks and Liability and Improving Business Operations

Association of Corporate Counsel Annual Meeting

September 30, 2012

Robert Bostrom
Partner
snrdenton.com

INTRODUCTION

1. The role that Enterprise-Wide Risk Management Programs and Crisis-Management Plans can play in improving business operations and mitigating risk and liability.
2. How to identify, assess and mitigate risk (including reputational risk) – not just legal.
3. How to structure and implement ERM Programs and Crisis-Management Plans – including a robust, preventative compliance program
4. What to do when a corporate crisis materializes?
5. Steps to reduce exposure
   - Prevention
   - Be prepared for the unanticipated
6. Role of In house Counsel

Copyright © 2012 Association of Corporate Counsel

NEED FOR AN ENTERPRISE-WIDE RISK MANAGEMENT PROGRAM AND CRISIS-MANAGEMENT PLAN

- Start with basic proposition that an Enterprise-wide Risk Management Program and a Crisis Management Plan at the management and Board of Directors levels are essential to:
  - mitigate risks and reduce a company's litigation exposure and in extreme cases, perhaps even critical to a company's survival, and
  - improving business operations by forcing a risk-adjusted analysis of profitability.
- Key in the process is to recognize the interdependence to the company across multiple lines of business, geographies, and product mixes when a crisis materializes in any one of these.

INTRODUCTION

1. ERM to identify, assess and mitigate risk
   - describe a model ERM program.
2. How to manage through the unknown
   - need for a crisis-management template.
3. Crisis-Management Plan for events you
   - cannot anticipate, or
   - those that are low probability and high severity that you cannot afford to mitigate.

Copyright © 2012 Association of Corporate Counsel

NEED FOR AN ERM PROGRAM AND A CRISIS-MANAGEMENT PLAN – LESSONS LEARNED

- An effective Enterprise-wide Risk Management Process and a Crisis Management Plan is essential -- be prepared for the unexpected and unanticipated.
- The velocity and unpredictability of change cannot be anticipated.

NEED FOR ERM PROGRAM

- Consequences flowing from a headline event are extremely severe in the current environment because of:
  1) the politicization of headline events,
  2) the criminalization of corporate events,
  3) the extreme and activist reaction of shareholders and the public, and
  4) the velocity of consequences.
- The importance of preventative enterprise risk management programs and post-event crisis management programs is magnified by the exponential multiplier effect of the consequences of a headline event.

Copyright © 2012 Association of Corporate Counsel

VELOCITY AND POLITICIZATION OF CONSEQUENCES

- For example, a recent headline event led to 14 consequences in the first 10 days of public reporting:

1. SEC investigation
2. DOJ investigation
3. FBI investigation
4. Civil class actions
5. Congressional hearings
6. Internal investigations

VELOCITY AND POLITICIZATION OF CONSEQUENCES

7. Congressional legislative reaction
8. Political reaction
9. Shareholder activism – some unsuccessful efforts to split CEO and Chairman
10. Public vilification
11. Executive officer dismissals
12. Significant market cap loss
13. Fitch rating downgrade
14. CFTC investigation

Copyright © 2012 Association of Corporate Counsel

NEED FOR AN ERM PROGRAM AND A CRISIS-MANAGEMENT PLAN

- Unintended Consequences.
- Publicity and headlines are very "sticky" – they seem to last indefinitely.
- HAVE A PLAN AND YOUR TEAM IN PLACE BEFORE ANYTHING HAPPENS.

ROLE OF ERM AND CRISIS-MANAGEMENT

- Enterprise Wide Risk Management is the process of identifying, assessing, managing and mitigating risk.
- Crisis-Management is the process of addressing a risk that has materialized but ERM is the first step for crisis-management, litigation prevention, and loss mitigation.

Copyright © 2012 Association of Corporate Counsel

SCOPE OF ERM

- Enterprise-wide Risk Management encompasses all of the risks that a company faces including, in no particular order;
  - Financial markets disruption
  - Credit
  - Interest rate
  - Capital
  - HR
  - Transactional
  - Data privacy
  - Legal
  - Enforcement actions by Federal or state criminal authorities
  - FCPA
  - Governmental investigations
  - Regulatory and compliance

SCOPE OF ERM

  - Cyber attacks
  - IT
  - Business Continuity
  - Operational
  - Supply chain
  - Financial disclosure
  - Document retention and disclosure (obstruction of justice or civil contempt)
  - Executive misconduct
  - Brand
  - Reputational - Brand
  - Vendors
  - Business partners
  - Third party service providers
  - Customers
  - Environmental

Copyright © 2012 Association of Corporate Counsel

U.S. LEGAL REQUIREMENTS FOR ERM

- There are a number of reasons to have an effective compliance process and enterprise-wide risk management system.
  - Provisions of Sarbanes-Oxley and disclosure requirements regarding risk factors
  - Federal sentencing guidelines
  - NYSE corporate governance guidelines
  - Credit rating agencies incorporation of ERM
  - D&O Liability and litigation (Caremark, Stone Ritter, Disney, etc., etc., etc.)
- Accounting and audit review standards for Internal Controls Certification.
- Provisions of Dodd-Frank

U.S. LEGAL REQUIREMENTS FOR ERM

- The new requirements of Dodd-Frank for certain financial institutions. Sections 165(b)(1) and 165(h) to be implemented by recently proposed regulations, which among other things, requires (1) a separate Risk Management Committee at the Board Level with specified responsibilities an (2) a Chief Risk Officer with specified duties, powers and reporting lines.

Copyright © 2012 Association of Corporate Counsel

FRB PROPOSED ENHANCEMENT STANDARDS REGULATIONS

- On December 21, 2011 the Federal Reserve Board published for comment Proposed Enhanced Prudential Standards and Early Remediation Requirements for Covered Companies.
- The comment period ended March 31, 2012.
- Comment period extended to April 30, 2012.

RELATED REQUIREMENTS

- New Rules apply to:
  - Board role in risk oversight;
  - Risk in compensation policies;
  - Reporting structure of individuals who oversee risk management.
- Federal Bank Regulations:
  - Living Wills/Resolution Plan;
  - The requirements to create a living will and the elements of a resolution plan are strikingly similar to an ERM plan.
  - Proposed Risk Management Rulemaking noted above

Copyright © 2012 Association of Corporate Counsel

IMPORTANCE OF ERM AS A BUSINESS MANAGEMENT TOOL

- But most importantly, critical ERM is essential to:

A. Assess and analyze business and activities on a risk adjusted basis

– sound strategic planning and financial management requires that all risks of every line of business and activity be assessed and balanced against profitability, and

– higher risk businesses should have higher rate of return to justify and pay for risk mitigation efforts and potential liability.

B. Recognize and prepare for interdependency of events.

IMPORTANCE OF ERM AS A BUSINESS MANAGEMENT TOOL

C. Sound business practice – part of a proactive, preventative compliance culture.

D. Minimize or prevent risks.

E. Mitigate loss from failure to prevent or mitigate risk.

F. Mitigate litigation.

Copyright © 2012 Association of Corporate Counsel

IMPORTANCE OF ERM

- Implementation of a proactive, preventative approach to risk management and compliance at both the board and management level is critical. It sends a clear message to the officers and employees of the company, and to the public, that these issues are not only legal requirements, but also ethical and cultural imperatives, **and represent sound business practices which are part of the company's culture**. In addition, the nature and intensity of regulatory and enforcement responses to problems has increased significantly, and all indications are that this will continue. A proactive, preventative approach to risk management will help to minimize problems and, where problems do occur, to minimize the litigation, regulatory, enforcement, reputational and financial consequences.

IMPORTANCE OF ERM

- Historically an event could lead to SEC, criminal and civil actions -- new era now -- Congressional investigations, State AG's public vilification, political and governmental reaction. Freddie and Fannie were two of the first BUT THEN CAME OTHERS INCLUDING BP, TOYOTA, MASSEY COAL, AND MORE RECENTLY, NEWSCORP, WALMART AND OTHERS.

Copyright © 2012 Association of Corporate Counsel

RESPONSIBILITIES OF MANAGEMENT AND THE BOARD OF DIRECTORS

- It is imperative that management and boards of directors assume a leading role in ensuring that all risks facing a company are identified and assessed, and that a risk management and compliance system is in place to facilitate the proactive identification, assessment, management and mitigation of those risks. The board must make sure that it is fully apprised of risks faced by the company, and that it can make an independent determination that management has implemented and maintained effective enterprise-wide integrated risk management policies and procedures, including internal controls and compliance.

ERM RISK IDENTIFICATION AND ASSESSMENT

- An enterprise-wide risk identification and assessment should be undertaken. In many circumstances it may be appropriate that the assessment be undertaken by an independent third party and that it be updated periodically. This risk assessment is critical to establishing an appropriate risk management process, as outlined below.

Copyright © 2012 Association of Corporate Counsel

ERM RISK IDENTIFICATION AND ASSESSMENT

- Once a risk assessment has been completed, an enterprise-wide risk management process should be implemented. Obviously, no process is appropriate for all companies and the process must be modified to reflect a company's business needs, operating realities and the nature of its regulatory environment. The goal of this process should be to have a holistic approach to risk prioritization, risk tolerance level and mitigation approach.

PROCESS – ESTABLISH AN ERM COMMITTEE AT THE COMPANY

- An example of such a process is described below.
  - An enterprise-wide risk management committee ("ERM") should be established, composed of senior executives from all non-line areas (e.g., IT, finance, audit, legal, compliance, human resources, public/ investor relations), and primary business line areas (e.g., heads of manufacturing, operations, geographic heads or business lines, depending on how the company is organized).
- This approach recognizes the interdependency of products, geographies and business lines.
- Empowerment – not just "check the box".

Copyright © 2012 Association of Corporate Counsel

PROCESS – ESTABLISH AN ERM COMMITTEE AT THE COMPANY

– The ERM committee should assure that all risks faced by the company are identified, analyzed and prioritized, and that internal controls and procedures are in place to manage and mitigate those risks based on frequency and severity.

ERM COMMITTEE

- The ERM committee should report directly to the audit committee of the board or a special risk committee of the board.
- The chairman of the ERM committee should be the Chief Risk Officer and the CEO should be a member.

Copyright © 2012 Association of Corporate Counsel

ERM RISKS

- Risks should be assessed on an ongoing basis, and should include not only business and financial risks, but all risks the company faces, including legal, regulatory, compliance, governmental, operational, treasury, shareholder (activist), unions, communities in which the business operates, vendor, customer, product, political, environmental, international, supply, reputational, human resources, technology, insurance and audit.
- Monthly meetings should be scheduled and run similar to the way in which meetings of the board of directors are scheduled and run.

ERM COMMITTEE PROCESS

- At initial meetings, each member of the committee (or senior officers from the area) should make a formal presentation assessing and identifying risk in the particular area for which he is responsible, and explaining what processes and controls are in place within that area to mitigate and manage risks identified.
- This identification and assessment process should be based upon a "bottom-up" informational gathering, review and assessment and mitigation recommendations. Recommendations regarding prioritization and tolerance should be made as well.

Copyright © 2012 Association of Corporate Counsel

ERM COMMITTEE PROCESS

- Executives in the Divisions should engage in a Sox-like financial reporting certification process to assure that they and their divisions take this process seriously.
- This decentralized bottom-up approach is designed to ensure that the process appropriately reflects, recognizes and assesses risks as identified at the operating levels and puts accountability at these levels of the enterprise.

ERM COMMITTEE PROCESS

- However, by making this presentation to the centralized risk management committee, the members can offer an assessment of how the risk in a particular area interrelates with risk in the various other line and non-line areas of the company. Once the initial meetings have identified, assessed and discussed controls in place to manage and mitigate risk, a risk prioritization should be undertaken to determine the frequency of subsequent presentations.

MOST IMPORTANT

- This should include stress testing and operational war games to determine risks and mitigation in extreme financial, operational, IT, vendor, customer, and supply chain circumstances.

Copyright © 2012 Association of Corporate Counsel

ERM RISK ASSESSMENT

- An ongoing enterprise-wide risk assessment should be prepared based on the presentations so that a holistic, enterprise-wide approach to prioritization, tolerance and mitigation can be adopted.
- The risk prioritization enables the risk management committee to determine the frequency and scope of presentations by each of the line and non-line units similar to the way in which an auditor undertakes a risk prioritization to determine the frequency and scope of audits within a company.

ERM RISK ASSESSMENT

- This assessment must reflect a "heat-mapping" of probability or likelihood and severity.
- The obvious example is BP in the Gulf-low probability but high severity if it happens.

Copyright © 2012 Association of Corporate Counsel

ERM COMMITTEE MEETINGS

- On a scheduled going-forward basis, formal presentations by each division of the company to the ERM Committee should describe and analyze:
  - All risk their areas face;
  - What controls have been or will be put in place to minimize these risks;
  - Where loss has occurred or might occur;
  - What is the probability and severity;
  - What monitoring is being done;
  - What stress testing has been done; and
  - How to assure proper accounting and reporting of financial data disclosure policies and procedures.

ERM SHOULD REVIEW NEW PRODUCT, GEOGRAPHIC EXPANSION OR BUSINESS INITIATIVES

- In addition to regularly scheduled presentations, ongoing meetings should require each line and non-line executive to discuss any new products, activities or significant new relationships, or geographic expansions and assess the risk associated with them for group discussion and incorporation into the ongoing risk assessment, management and mitigation program and as part of a process of calculating risk-adjusted profitability.

Copyright © 2012 Association of Corporate Counsel

OVERSIGHT OF THE ERM PROCESS – SELF ASSESSMENT

- In order to assure the oversight and accountability of the ERM process, there should be a risk self-assessment process by each division and a periodic audit or review by the risk management division or by audit to independently review the risk identification, assessment and mitigation results of each division.
- The results of this process should be evaluated as part of employee performance evaluations.
- What should the role of audit be? Should the ERM function be audited?

ERM BOARD REPORTING

- The Audit Committee or Risk Management Committee of the Board should receive regular written and oral reports from the risk management committee and the Chief Risk Officer so that it can independently assess the approach of management through the ERM Committee in identifying, assessing, prioritizing and mitigating risk.

Copyright © 2012 Association of Corporate Counsel

ERM BOARD REPORTING

- There are several Board Models for ERM Reporting and Oversight at the Board level:
  1. Audit Committee
  2. Audit and another Committee
  3. Business/Finance Committee
  4. Risk Committee
  5. Full Board

CRISIS-MANAGEMENT PLAN

- Crisis Management is what to do when a risk materializes - whether identified or not.

- A plan in place to minimize loss and litigation including:
  - PR
  - Board involvement and role
  - Political
  - Regulatory
  - Enforcement
  - Reputational
  - Legal – strategy for simultaneous actions:
    1. SEC
    2. DOJ
    3. Civil Shareholder suits

Copyright © 2012 Association of Corporate Counsel

CRISIS-MANAGEMENT PLAN

4. Internal investigations
5. Congressional investigations
6. Regulatory investigations
7. State attorney general actions

- – Management's role
- – Employees (How do you keep them going? Tired, demoralized, uncertain, scared, angry)
- – Customers
- – Vendors
- – Suppliers

- A plan properly developed and implemented reduces the risk of litigation and the losses and reputational risk if litigation occurs.

CRISIS MANAGEMENT PLAN: Business Continuity Plan

- For certain types of risks, it is essential to have a business continuity plan in place as well.

Copyright © 2012 Association of Corporate Counsel

A CRISIS IS LIKE AN ICEBERG, YOU CAN REALLY ONLY SEE THE LITTLE PART STICKING OUT OF THE WATER BUT IT IS THE MASS OF ICE UNDERNEATH THAT CAN DO THE MOST DAMAGE

- When management and Boards think about a crisis that might result in an investigation or litigation, it is critical to be prepared to get on top of the issue quickly. In this environment, a headline grabbing crisis -- the tip of the ice berg -- results in simultaneous or rapid sequential civil litigation, governmental investigations by the SEC, DOJ, primary regulatory agency, congressional investigations, and actions by state Attorney Generals. The strategies for each are different and require an integrated, coordinated, holistic response. The key is to get the facts quick – most often an independent investigation is necessary to get the facts.
- In addition to legal issues, these events generate customer, vendor, supplier, local community, reputational, and employee reaction.

IMPORTANCE AND IMPACT OF INVESTIGATIONS

- Misinformation or bad information can often times create more problems than the underlying acts.
- An immediate factual investigation is imperative.
- Information disclosure - advertent and inadvertent.
- The impact of these investigations and the facts for the company and the employees can be paralyzing and distracting. The political and public relations issues are overwhelming. But there is customer, consumer, producer, shareholder and public reaction as well.
- Must proactively monitor social media and blogs to gather intelligence on what is happening and what messaging is going on, including allegations or facts that may impact the investigative process.

Copyright © 2012 Association of Corporate Counsel

Failure of boards and companies in responding can result in creditors, suppliers and customers all acting irrationally that can quickly send a company into a death spiral. What are the quick step actions for boards that all crisis plans should include?

- A predetermined list of advisors who know the company, and immediate fact-finding -- a careful, truthful, deliberate response is necessary no matter how painful.
- The Board should decide ahead of time what its role will be -- how involved it will be. I believe that in this environment, and this is not a widely-held view, that a Board, or a committee, must be intimately and actively involved with management. Communications and information flow to the Board is critical. There should be no surprises.

BOARD'S ROLE DURING THE CRISIS – LEVEL OF INVOLVEMENT-- How Much and How

- Chair/Lead Director/Audit Committee Chair/ Special Committee Chair
- Updates, Special meetings
- Information flow
- Key decisions, alternatives, implications

Copyright © 2012 Association of Corporate Counsel

COMMUNICATION PLAN

- A communications plan to all stakeholders and constituencies including employees, vendors, customers, suppliers, regulators -- is imperative. Again there must be confirmed, fact-based, open and honest communication. Immediate action and government cooperation is critical in mitigating punishment under the Sentencing Guidelines.

COMMUNICATION PLAN

Must get the facts:

- Must be confirmed and irrefutable to maintain credibility and trust as soon as possible.
- No premature or false or misleading statements.

Copyright © 2012 Association of Corporate Counsel

WHAT ARE THE LOOMING RISKS THAT SEEM TO BE THE UP AND COMING THAT WILL THREATEN COMPANIES AND QUICKLY CHANGE BOARD AGENDAS?

- Varys industry to industry but --
  a. Volatile financial environment - short selling, volatility and stock price pressure;
  b. Chief executive conduct (HP, Chesapeake Energy, Best Buy);
  c. Succession (Apple);
  d. Environmental and product liability; (BP and Toyota);
  e. Data security breaches, export controls, FCPA;
  f. Financial markets disruption.

WHAT ARE THE LOOMING RISKS THAT SEEM TO BE THE UP AND COMING THAT WILL THREATEN COMPANIES AND QUICKLY CHANGE BOARD AGENDAS?

g. Whistleblowers creating transparency and the impact of these events on reputation;
h. Cyber attacks;
i. Environmental event;
j. Industrial espionage, labor events – strikes, stoppages;
k. Government enforcement action;
l. Actions of business partners or third party service providers;
m. Shareholder activism;
n. Cloud computing failures.

But in a recessionary economic environment, problems are created or exacerbated, for ex., Occupy Wall Street movement or near riots in London.

Copyright © 2012 Association of Corporate Counsel

LOOMING RISKS – UNANTICIPATED OR UNKNOWN

- But the biggest worry is what you cannot anticipate all the high severity/ low probability events. It is critical to have a crisis management process that enables a company to react to an event that it cannot predict, prevent or that the probability of occurrence is so low it cannot ration resources to seek to mitigate.

ADVICE TO MANAGEMENT AND BOARD'S OF DIRECTORS ON MITIGATING RISKS AND REDUCING LITIGATION EXPOSURE

FIRST --

Prevention, Prevention, Prevention.

- I believe many crises could be prevented or mitigated by effective tone at the top, ethics and compliance programs that detect a crisis before it materializes. Many crises are the result of long-standing business behavior that has been tolerated or rationalized by management.
- Effective ERM Program is a critical component of prevention – by identifying, assessing and implementing risk mitigation efforts some events can be prevented and others mitigated.

Copyright © 2012 Association of Corporate Counsel

ADVICE TO MANAGEMENT AND BOARD'S OF DIRECTORS ON MITIGATING RISKS AND REDUCING LITIGATION EXPOSURE AND MAKING SOUND BUSINESS DECISIONS

SECOND --

- Carefully establish effective ERM systems that
  - can identify and assess risks and put risk mitigation programs in place, including business continuity plans, and that there is an adequate level of stress testing; and
  - provide risk adjusted analysis of a company's existing and proposed business lines, products, activities and geographic operations.

ADVICE TO MANAGEMENT AND BOARD'S OF DIRECTORS ON MITIGATING RISKS AND REDUCING LITIGATION EXPOSURE

THIRD --

- Be prepared for what you cannot anticipate, have a crisis management process in place. In the U.S., under the COSO framework the Board has the ultimate responsibility for risk management. Part of risk management is crisis management and part of crisis management is business continuity planning.

Copyright © 2012 Association of Corporate Counsel

THE ROLE OF IN-HOUSE COUNSEL

1. Executive Management ERM Process
   - Persuade Executive Management and the Board of Directors to create a holistic, empowered substantive Enterprise Risk Management process at the executive management level as described in this presentation reporting directly to the Board of Directors to mitigate liability and risk exposure, and

THE ROLE OF IN-HOUSE COUNSEL

- Analyze best practices and advise and counsel executive management how ERM should be structured and the business benefits of risk identification and assessment of business expansion and activities so that they can be assessed for profitability on a risk adjusted basis.

Copyright © 2012 Association of Corporate Counsel

THE ROLE OF IN-HOUSE COUNSEL

2. Legal Risk and the ERM Process
   - As part of the executive management ERM process in-house counsel should identify assess, prioritize and take steps to prevent or mitigate legal risk and liability.

THE ROLE OF IN-HOUSE COUNSEL

3. Board of Directors ERM Process
   - Analyze and advise the Board of Directors with respect to its roles of oversight and responsibility for ERM.
   - Advise the Board of Directors as to a corporate governance structure at the Board level to oversee and assess the executive management ERM process and appropriate independent reporting lines from the chief risk officer and executive management ERM committee to the Board or a Board Committee.

Copyright © 2012 Association of Corporate Counsel

Senior Supervisors Group

Risk Management Lessons from the Global Banking Crisis of 2008

October 21, 2009

BANQUE DE FRANCE

EUROSYSTÈME

BaFin

OSFI
BSIF

Copyright © 2012 Association of Corporate Counsel

CANADA
Office of the Superintendent of Financial Institutions

FRANCE
Banking Commission

GERMANY
Federal Financial Supervisory Authority

JAPAN
Financial Services Agency

SWITZERLAND
Financial Market Supervisory Authority

UNITED KINGDOM
Financial Services Authority

UNITED STATES
Board of Governors of the Federal Reserve System

Federal Reserve Bank of New York

Office of the Comptroller of the Currency

Securities and Exchange Commission

SENIOR SUPERVISORS GROUP

October 21, 2009

Mr. Mario Draghi, Chairman
Financial Stability Board
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Dear Mr. Draghi:

On behalf of the Senior Supervisors Group (SSG), I am writing to convey *Risk Management Lessons from the Global Banking Crisis of 2008*, a report that reviews in depth the funding and liquidity issues central to the recent crisis and explores critical areas of risk management practice warranting improvement across the financial services industry. This report is a companion and successor to our first report, *Observations on Risk Management Practices during the Recent Market Turbulence*, issued in March 2008.

The events of 2008 clearly exposed the vulnerabilities of financial firms whose business models depended too heavily on uninterrupted access to secured financing markets, often at excessively high leverage levels. This dependence reflected an unrealistic assessment of liquidity risks of concentrated positions and an inability to anticipate a dramatic reduction in the availability of secured funding to support these assets under stressed conditions. A major failure that contributed to the development of these business models was weakness in funds transfer pricing practices for assets that were illiquid or significantly concentrated when the firm took on the exposure. Some improvements have been made, but instituting further necessary improvements in liquidity risk management must remain a key priority for financial services firms.

In the attached report, we identify various other deficiencies in the governance, firm management, risk management, and internal control programs that contributed to, or were revealed by, the financial and banking crisis of 2008. Our report highlights a number of areas of weakness that require further work by the firms to address, including the following (in addition to the liquidity risk management issues described above):

- the failure of some boards of directors and senior managers to establish, measure, and adhere to a level of risk acceptable to the firm;
- compensation programs that conflicted with the control objectives of the firm;
- inadequate and often fragmented technological infrastructures that hindered effective risk identification and measurement; and
- institutional arrangements that conferred status and influence on risk takers at the expense of independent risk managers and control personnel.

In highlighting the areas where firms must make further progress, we seek to raise awareness of the continuing weaknesses in risk management practice across the industry and to evaluate critically firms' efforts to address these weaknesses. Moreover, the observations in this report support the ongoing efforts of supervisory agencies to define policies that enhance financial institution resilience and promote global financial stability.

Copyright © 2012 Association of Corporate Counsel

This analysis builds upon the first SSG report, which identified a number of risk management practices that enabled some global financial services organizations to withstand market stresses better than others through the end of 2007. The extraordinary market developments that transpired following the release of the first report prompted the SSG to launch two new initiatives. First, the group conducted interviews with thirteen firms at the end of 2008 to review specific funding and liquidity risk management challenges faced, and lessons learned, during the year. Second, in our supervisory capacities, we asked twenty global financial institutions in our respective jurisdictions to assess during the first quarter of 2009 their risk management practices against a compilation of recommendations and observations drawn from several industry and supervisory studies published in 2008. During the spring of 2009, SSG members reviewed the assessments and held follow-up interviews with fifteen of these firms to explore areas of continued weakness, as well as changes to practice undertaken recently. This report presents the SSG's primary findings from these initiatives.

In their self-assessments, firms generally indicated that they had either fully or partially complied with most of the recommendations. SSG members, however, found that the assessments were, in aggregate, too positive and that firms still had substantial work to do before they could achieve complete alignment with the recommendations and observations of the studies. In particular, supervisors believe that a full and ongoing commitment to risk control by management, as well as the dedication of considerable resources toward developing the necessary information technology infrastructure, will be required to ensure that the gaps between actual and recommended practice are closed in a manner that is robust and, especially important, sustainable.

As with the first report, we are simultaneously releasing our findings to relay the conclusions of our initiatives to the broader industry and to call attention to critical areas of risk management in which further effort is warranted.

Sincerely,

William L. Rutledge
Chairman

Copyright © 2012 Association of Corporate Counsel

CONTENTS

I. INTRODUCTION 1

II. SUMMARY OF KEY OBSERVATIONS AND CONCLUSIONS 2

III. FUNDING AND LIQUIDITY RISK MANAGEMENT 6

A. Background on Major Funding Stresses 6
1. General Firm and Market Stresses 6
a. Secured Funding/Triparty Repo Transactions 7
b. Deposit Trends 8
c. Interbank Deposits, Unsecured Funding, and the Foreign Exchange Swap Market 9
2. Prime Brokerage 9
3. Unwinding of Securities Lending Transactions 10
4. 2a-7 Money Market Mutual Funds and Non-2a-7 Funds 12

B. Funding and Liquidity Risk Management Observations 13
1. Risk Management Changes Broadly Applicable to General Firm and Market Stresses 13
2. Risk Management Changes Associated with Prime Brokerage 16
3. Risk Management Changes Associated with Securities Lending 17
4. Risk Management Changes Associated with Money Market Mutual Funds 18

IV. SUPERVISORY EVALUATION OF SELF-ASSESSMENTS AND CRITICAL AREAS FOR CONTINUED FIRM IMPROVEMENTS 20

A. Background on Self-Assessment Exercise 20

B. Overview of Results 20
1. Practices Assessed by Firms as Most Aligned with Recommendations 20
2. Practices Assessed by Firms as Least Aligned with Recommendations 21

C. Areas for Continued Improvement 22
1. Board Direction and Senior Management Oversight 22
2. Articulating Risk Appetite 23
3. Compensation Practices 24
4. Information Technology Infrastructure 25
5. Risk Aggregation and Concentration Identification 25
6. Stress Testing 26
7. Counterparty Risk Management 26
8. Valuation Practices and Loss Recognition 27
9. Operations and Market Infrastructure 27
10. Liquidity Risk Management 28

APPENDIX A: SELF-ASSESSMENT: FIRMS' REPORTED DEGREE OF ALIGNMENT WITH RECOMMENDATIONS AND OBSERVATIONS OF INDUSTRY AND SUPERVISORY STUDIES 29

APPENDIX B: MEMBERS OF THE SENIOR SUPERVISORS GROUP 30

GLOSSARY 31

Copyright © 2012 Association of Corporate Counsel

I. INTRODUCTION

On March 6, 2008, the Senior Supervisors Group (SSG) released its first report, *Observations on Risk Management Practices during the Recent Market Turbulence* (the "first report"). The report conveyed our assessment of the risk management practices that made some firms better able than others to withstand market stresses in the fall of 2007. At that time, firms faced the collapse of the leveraged loan market, a near total loss of liquidity in the asset-backed commercial paper market, and a sharp loss in the value of subprime mortgages and of certain structured products such as collateralized debt obligations and securities backed by subprime mortgages. These and other significant difficulties undermined the confidence of investors and counterparties, challenged the resilience of highly interconnected global financial institutions, and destabilized the global financial system, setting the stage for a deep financial crisis.

Following the release of our first report, the decline in housing prices became even more pronounced, triggering a far greater loss of value in mortgage-related exposures and other financial assets and ultimately leading to a weakening of the global economy. Financial losses and public concern grew to the point that investors doubted the accuracy of firms' balance sheets and ultimately their creditworthiness. Around the globe, large financial firms failed, were forced to negotiate their sale to others, or restructured themselves. In other cases, public authorities undertook extraordinary and controversial measures to alleviate the stress, not just on financial organizations, but more broadly on their national economies.

In response to the continuing crisis, the SSG—a forum composed of senior supervisors of major financial services firms from Canada, France, Germany, Japan, Switzerland, the United Kingdom, and the United States—undertook to evaluate for a second time how weaknesses in firms' risk management and internal controls may have contributed to the industry's severe distress. In this report, we review key developments since the first report, share our risk management observations (primarily on funding and liquidity risk issues) for 2008, and discuss the industry's own sense of its compliance with recommendations put forward in various supervisory and industry studies in 2008.[1]

To capture the industry view, members of the SSG met with senior managers at thirteen of the largest financial institutions in late 2008 to review the funding and liquidity risk challenges they faced that year and the lessons they learned from these challenges.

In late 2008, the SSG members, in our supervisory capacity, asked twenty major global financial firms in our respective jurisdictions to assess their risk management processes to identify any gaps with previously issued industry or supervisory recommendations. The surveyed financial institutions completed these self-assessments during the first quarter of 2009 and presented the results to both their boards of directors and their primary supervisors. The primary supervisors then evaluated the quality of the assessments and held discussions with the firms on their remediation efforts. In light of the continuing stress in the financial markets, SSG members held a second round of interviews with fifteen institutions during the first half of 2009 to explore the broader lessons learned from recent events.

[1] Studies referenced in the exercise include Senior Supervisors Group, *Observations on Risk Management Practices during the Recent Market Turbulence* (March 2008); Financial Stability Forum, *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience* (April 2008); Institute of International Finance, *Final Report of the IIF Committee on Market Best Practices: Principles of Conduct and Best Practice Recommendations* (July 2008); and Credit Risk Management Policy Group III, *Containing Systemic Risk: The Road to Reform* (August 2008). In addition, U.S. firms were asked to consider recommendations and observations in President's Working Group on Financial Markets, *Policy Statement on Financial Market Developments* (March 2008).

Copyright © 2012 Association of Corporate Counsel

II. Summary of Key Observations and Conclusions

Many of the weaknesses highlighted in our first report continued to contribute to financial strains. Despite the passage of many months since we published our first survey in March 2008, we found that a large number of firms had not fully addressed the issues raised at that time. The fact that they had not done so is due in part to the considerable investment and expertise needed to effect necessary changes across globally active, complex financial institutions, and in part to the increased funding and liquidity risk management challenges that arose over 2008 and into 2009. The four firm-wide risk management practices that we had identified in our first report as differentiating better performance from worse were:

- effective firm-wide risk identification and analysis,
- consistent application of independent and rigorous valuation practices across the firm,
- effective management of funding liquidity, capital, and the balance sheet, and
- informative and responsive risk measurement and management reporting.

Implementing these practices comprehensively across large, complex organizations requires considerable resources and expertise, and it was evident that many firms still fell short in these areas.

In addition, events following the release of our first report in the spring of 2008 exposed further weaknesses at the largest financial institutions in corporate governance and control procedures, as well as in liquidity and capital management processes. In particular, the failure of liquidity risk management practices has been at the heart of the evolving crisis in this period. Funding and liquidity risk management practices may, moreover, be among the most difficult to adjust under pressure, because they are often closely tied to each firm's central strategies.

Funding and Market Liquidity Problems

The events of 2007-09 demonstrated on a large scale the vulnerabilities of firms whose business models depended heavily on uninterrupted access to secured financing markets. Many firms relied on excessive short-term wholesale financing of long-term illiquid assets, in many cases on a cross-border basis—a practice that made it difficult for the firms to withstand market stresses absent deposits and sovereign and central bank support. Borrowers had taken advantage of the opportunity the market afforded to obtain short-term (often overnight) financing for assets that should more appropriately have been funded with long-term, stable funding. Faced with uncertainty about the value of specific instruments and mindful of the higher volatility of assets more generally, lenders demanded substantial cushions, or "haircuts," on the assets they were willing to finance.

Firms that were least affected by market developments had the a priori discipline to resist excessive short-term funding. Some larger and more diverse financial institutions were able to weather events initially by drawing on other sources of funding, such as deposits, liquidity pools consisting of sovereign bonds and, when available, central bank lending facilities.

Some firms' business models also relied on excessive leverage, which, combined with doubts about the realizable value of the firm's assets, heightened solvency and business-model concerns among the firms' creditors and counterparties. Firms permitted excessive leverage and reliance on short-term financing to develop over time because of a combination of risk governance weaknesses and misaligned incentives (as explained below), incomplete risk capture in management reports, limitations or unintended consequences of regulatory requirements, and ineffective market discipline. These structural issues affected a wide range of financial institutions, including various U.S. investment banks, certain U.S. and U.K. mortgage banks, some German Landesbanks, and some banks that had recently completed acquisitions that strained their capital base with the assets and risks acquired. However, market stresses affected nearly all major global financial institutions, with most requiring some form of assistance. In this environment, exceptional official sector support was necessary to maintain the viability of the financial system.

The disruption of the secured financing market highlighted a number of issues relating to the U.S. triparty market for repurchase agreements (repos). Securities dealers often depended on the triparty repo market to fund certain kinds of securities—increasingly, as time passed, illiquid and hard-to-price securities—and were consequently vulnerable to disruptions in that market.

Copyright © 2012 Association of Corporate Counsel

Lenders funded through triparty arrangements significant volumes of illiquid securities that they would be prohibited from retaining should a borrower fail. Clearing agent banks took on significant credit risk by extending intraday credit without fully considering whether they would be able to liquidate collateral should the need arise. Borrowers failed to anticipate the collateral amounts that their clearing agents would require when faced with providing intraday funding for a weak borrower with a deteriorating collateral pool.

Similarly, the bankruptcy of Lehman Brothers International (Europe)—LBIE—highlighted the risks of relying on the rehypothecation of clients' securities as a source of funding. Many counterparties of LBIE elected to have accounts that allowed Lehman to rehypothecate securities positions to obtain funding. After LBIE declared bankruptcy, prime brokerage clients sought to withdraw from these arrangements. However, these clients were deemed unsecured creditors of the estate and found themselves without access to their positions. The failure of Lehman Brothers generated concern among hedge fund customers relating to the fact that, in certain instances, their prime brokerage free credit balances and other assets in the United Kingdom were not subject to segregation; in many cases, customers decided to withdraw from these arrangements. Firms whose U.K. dealer subsidiaries relied on rehypothecating clients' securities to obtain funding did not recognize that this source of funding would be lost when Lehman Brothers declared bankruptcy.

Firms also failed to realize that two important sources of funding, securities lending and money market funds, could impose further demands on firm liquidity during periods of stress. Traditional sources of funding, especially for European banks, such as securities lending reinvestment pools and money market mutual funds, faced significant and immediate pressures to reduce their investment positions. These pressures became apparent following the announcement of losses in the Primary Fund series of the Reserve Fund in the United States.

Firms' Reevaluation of Existing Practices

The global financial firms participating in the liquidity and self-assessment exercises have begun reevaluating existing practices at the corporate and business line level.

Many firms acknowledged that, if robust funds transfer pricing practices had been in place earlier, they would not have carried on their trading books the significant levels of illiquid assets that ultimately led to large losses and would not have built up significant contingency liquidity risks associated with off-balance-sheet exposures. Firms have reported that substantial efforts are under way to implement or enhance funds transfer pricing practices, including both broadening the scope of business activities subject to transfer pricing and integrating transfer pricing more deeply with firm processes.

In addition, many firms are reevaluating how they measure their future needs for funding. Before the crisis, most firms relied heavily on a "months of [contractual] coverage" metric that did not adequately reflect the contractual and behavioral demands triggered in a stressful market environment. For example, the coverage metric did not capture many of the stresses that developed during the crisis, such as meeting demands for collateral from clearing agents and counterparties, accepting credit default swap (CDS) novations, and—even when not contractually required to do so—supporting instruments and vehicles such as sponsored funds, structured investment vehicles, and money market and similar funds. Recognizing the weakness of their existing measures of funding needs, firms are now enhancing their calculations of "stress needs."

A key lesson of the crisis, drawn by both firms and supervisors, was that complex corporate structures hindered effective contingency funding. Firms found that complex corporate structures, often created to arbitrage tax and regulatory capital frameworks, also imposed significant constraints on the flow of funds across the firm between legal entities. As a result, firms are acknowledging the importance of a bottom-up approach to contingency planning, which includes the preparation of contingency funding plans at the individual legal entity level. This is an area of considerable supervisory interest going forward.

Supervisory Evaluation of Firm Self-Assessments and the Identification of Critical Areas for Continued Improvement

Amid rising losses in 2008, numerous public and private sector groups published studies after the first SSG report that articulated practices or principles thought to be critical to the resilience of internationally active financial institutions. Prompted by general agreement on the benefits of many of these practices and principles, the SSG members invited twenty firms to evaluate their practices against the findings of these studies.

Most of the participating firms offered favorable self-assessments, albeit to varying degrees across the set of recommendations. While the SSG generally agrees with the *relative* ranking of compliance with specific

Copyright © 2012 Association of Corporate Counsel

recommendations, we believe that *absolute* rankings were too positive and that substantial work is still needed to achieve full alignment with the existing recommendations and observations. Two factors in particular drive the gaps between current practices and those advocated by industry groups and supervisors. First, many firms' information technology (IT) infrastructure is inadequate to monitor risk exposures accurately, a problem long in the making that will also take time to remedy. Second, firms need to reexamine the priority they have traditionally given to revenue-generating businesses over reporting and control functions.

Section IV below details ten critical areas for improvement that emerged from the self-assessment results and interviews and that are broadly relevant across firms. Supervisors believe that considerable work remains in the areas of governance, incentives, internal controls, and infrastructure. The absence of action in some critical areas, such as the proper alignment of incentives and improvements to firms' IT infrastructure, should raise questions for boards of directors, senior managers, and supervisors about the effectiveness and sustainability of recent changes. Closing some of the acknowledged gaps, particularly those associated with infrastructure, will be resource- and time-intensive. Continued oversight on the part of supervisors and sustained discipline and commitment on the part of firms will both be required if the necessary investments and adjustments to practice are to be successfully made.

An overarching observation that relates to many of the areas singled out for improvement is that weaknesses in governance, incentives, and infrastructure undermined the effectiveness of risk controls and contributed to last year's systemic vulnerability. In the interviews we conducted for this report, we found that many firms—regardless of whether they required government support—and their supervisors had concluded that the incentives and controls in place throughout the industry had failed. These failures reflected four challenges in governance:

- the unwillingness or inability of boards of directors and senior managers to articulate, measure, and adhere to a level of risk acceptable to the firm,
- arrangements that favored risk takers at the expense of independent risk managers and control personnel,
- compensation plans that conflicted with the control objectives of the firm, and
- an inadequate and often fragmented infrastructure that hindered effective risk identification and measurement.

A key weakness in governance stemmed from what several senior managers admitted was a disparity between the risks that their firms took and those that their boards of directors perceived the firms to be taking. In addition, supervisors saw insufficient evidence of active board involvement in setting the risk appetite for firms in a way that recognizes the implications of that risk taking. Specifically, only rarely did supervisors see firms share with their boards and senior management a) robust measures of risk exposures (and related limits), b) the level of capital that the firm would need to maintain after sustaining a loss of the magnitude of the risk measure, and c) the actions that management could take to restore capital after sustaining such a loss. Supervisors believe that active board involvement in determining the risk tolerance of the firm is critical to ensuring that discipline is sustained in the face of future market pressures for excessive risk taking.

Within firms, the stature and influence of revenue producers clearly exceeded those of risk management and control functions. Belatedly responding to this imbalance, virtually all firms have strengthened the authority of the risk management function and increased the resources devoted to it. Nevertheless, firms face considerable challenges in developing the needed infrastructure and management information systems (MIS).

Some of the imbalance we noted between risk and rewards can be seen in the approaches to remuneration. There is broad recognition that industry compensation practices were driven by the need to attract and retain talent and were often not integrated with the firms' control environments. Among the critical weaknesses that the firms cited are the following:

- Historical compensation arrangements evidenced both insensitivity to risk and skewed incentives to maximize revenues.
- The accrual of compensation pools historically did not reflect all appropriate costs.
- Schemes for measuring individual performance often failed to take into account true economic profits, adjusted for all costs and uncertainty.

Firms are considering changes to their compensation regimes—including modifications to the accrual of bonus pools, the allocation of pools to business units and individuals,

Copyright © 2012 Association of Corporate Counsel

and the form of compensation paid out—with the goal of better aligning practices with the control objectives of the firm. Among the changes that have been, or are being, put in place or considered are:

- tying bonus accrual and performance measurement more directly to economic profit by incorporating the costs of risk, liquidity, and capital;
- integrating the input of control functions with performance evaluations; and
- reviewing deferred compensation plans with an eye toward longer vesting and distribution periods.

Overall, the crisis highlighted the inadequacy of many firms' IT infrastructures in supporting the broad management of financial risks. In some cases, the obstacle to improving risk management systems has been the poor integration of data that has resulted from firms' multiple mergers and acquisitions. This problem has been seen as affecting firms' ability to implement effective transfer pricing, consistently value complex products throughout an organization, estimate counterparty credit risk (CCR) levels, aggregate credit exposures quickly, and perform forward-looking stress tests. Building more robust infrastructure systems requires a significant commitment of financial and human resources on the part of firms, but is viewed as critical to the long-term sustainability of improvements in risk management.

While firms reported enhancements to, and increased use of, stress testing to convey risk to senior management and the board of directors, supervisors noted that significant gaps remained in firms' ability to conduct firm-wide tests. Firms cited significant management support for enhancements to stress-testing practices—a reversal of past experiences. Nevertheless, most firms still do not have the ability to perform regular and robust firm-wide stress tests easily, although significant efforts are under way to address this issue.

Finally, although this report focuses mainly on individual firms' efforts to improve their practices—and our assessment of the limitations of those efforts—we note that the industry's substantial efforts to standardize practices and reduce backlogs of unconfirmed over-the-counter (OTC) derivatives positions appear to have significantly mitigated a substantial systemic risk. Firms reported progress in streamlining business processes to achieve same-day matching, in adopting and implementing standard technology platforms, and in improving collateral management practices and reducing notional amounts of CDS outstanding through portfolio compression. Despite this significant effort to mitigate risk, further improvements are needed in key personnel's knowledge of financial market utilities and communication with settlement infrastructure providers.

Copyright © 2012 Association of Corporate Counsel

III. Funding and Liquidity Risk Management

Funding and liquidity problems were central to the financial crisis in the fall of 2008. In this section, we first provide background on the funding challenges experienced by many financial firms during the crisis, and then discuss observed and planned changes in funding and liquidity risk management practices.

A. Background on Major Funding Stresses

The unusual—and, in some cases, unprecedented—strains in a range of funding markets were a defining characteristic of the crisis from March 2008 onward and are therefore a primary focus of this report. SSG member agencies and the firms participating in the SSG exercises were largely in agreement concerning the nature of the funding stresses, notwithstanding their differing vantage points and the varying relevance of the observations in this section to individual firms and jurisdictions. We do not provide an exhaustive or definitive record of all funding challenges faced by firms during this period. Rather we focus on the issues and developments characterized as most fundamental by many of the firms and those that stood out most prominently to SSG member agencies in our supervisory capacities during the crisis.

1. General Firm and Market Stresses

The events of 2007-09 underscored the vulnerabilities of those firms whose business models were highly dependent on uninterrupted access to secured funding markets.

Beginning in the summer of 2007 and continuing through 2009, lenders' willingness to finance less traditional, harder to price collateral diminished. In addition, counterparties and creditors sought to lessen their exposure to firms perceived to be "weaker" by reducing the amount of credit provided, increasing haircuts on positions financed, and shortening the term for which credit was extended. Moreover, secured lenders tightened their definitions of acceptable collateral. These trends posed particular difficulties for firms that, lacking adequate liquidity reserves or contingent sources of funding, relied heavily on short-term repo funding collateralized by illiquid assets.

The near-collapse of Bear Stearns in March 2008 illustrated several important dimensions of the funding crisis:

- the drain on firms' liquidity created by their reliance on the short-term secured funding markets to finance long-term illiquid assets;
- the vulnerability of firms to the loss of secured funding when they have no access to central bank liquidity;
- the critical role of the triparty repo clearing agent; and
- the number of ways in which client and investor apprehensions about a firm's prospects are expressed—not only through falling stock prices and the widening of credit default swap spreads, but also through the withdrawal of prime brokerage free credit balances and the increased novations of trades away from the firm.

Concerns among Bear Stearns' prime brokerage clients, triggered by rumors about the firm's viability, led to outflows of free credit balances over a short period. Most critically, Bear Stearns faced a sudden and dramatic loss of repo counterparty confidence, such that the firm's secured funding base essentially disappeared. While repo financing has always been susceptible to rollover risks, Bear Stearns' over-reliance on overnight repos to fund less liquid assets proved to be particularly problematic. Ultimately, fueled by the firm's declining stock price and widening credit spreads, lenders' unwillingness to provide funding to Bear Stearns even on a secured basis led to its forced sale.

The dynamics of the subsequent Lehman Brothers failure were similar to the Bear Stearns dynamics just described. However, because Lehman Brothers actually entered bankruptcy, the firm's failure had far greater consequences for financial markets:

- Custody of assets and rehypothecation practices were dominant drivers of contagion, transmitting liquidity risks to other firms. In the United Kingdom, there was no provision of central bank liquidity to the main broker-dealer entity, Lehman Brothers International (Europe), and no agreement was struck to transfer client business to a third-party purchaser. As a result, LBIE filed for bankruptcy while holding significant custody assets that would not be returned to clients for a long time, and therefore could not be traded or easily hedged by clients. In addition, the failure of LBIE exposed the significant risks run by hedge funds in allowing their prime broker to exercise rehypothecation rights over their securities.[2] Under U.K. law, clients

[2] London-based Lehman Brothers International (Europe) filed administration proceedings on September 15, 2008. On the same day, Lehman Brothers Holdings Inc. filed for Chapter 11 bankruptcy in the United States. On September 17, 2008, Barclays announced an agreement to purchase Lehman Brothers Inc., the U.S. broker-dealer subsidiary.

Copyright © 2012 Association of Corporate Counsel

stand as general creditor for the return of such assets. The loss of rehypothecated assets and the "freezing" of custody assets created alarm in the hedge fund community and led to an outflow of positions from similar accounts at other firms. Some firms' use of liquidity from rehypothecated assets to finance proprietary positions also exacerbated funding stresses.

- Money funds liquidated investments in financial institutions perceived to be vulnerable. The Primary Fund series of the Reserve Fund "broke the buck" following Lehman Brothers' bankruptcy because of its holdings of Lehman commercial paper. When this event was combined with rising concern that certain money market mutual funds (MMMFs) might be holding paper of distressed financial firms, institutional investors began a run, prompting many money funds to liquidate their investments to honor such redemption requests.
- Securities lending cash reinvestment funds also reduced funding to vulnerable financial institutions. As traditional purchasers of financial institutions' debt, cash reinvestment pools' demand for these investments declined, particularly when market forces caused the values/prices of such debt to decline and become less liquid. Also, reinvestment pools' need for cash increased dramatically as borrowers deleveraged, the value of the stocks on loan declined, and beneficial owners withdrew cash collateral from pools experiencing illiquidity and losses.
- Interbank lending, particularly in Europe, collapsed as investors became extremely concerned about institutional creditworthiness following the failure of Lehman Brothers and losses on Washington Mutual holding company and bank debt.[3]

Underpinning many of the dynamics observed in the Bear Stearns and Lehman cases were weaknesses in secured funding markets that became starkly apparent at the peak of the crisis.

a. Secured Funding/Triparty Repo Transactions

- **Risks arose from the increased use of short-term triparty repos to fund longer term illiquid assets and from clearing banks' provision of intraday credit.**

A substantial reliance by financial institutions on secured funding markets to finance either lesser quality or less easily priced instruments on a short-term basis contributed to a false sense of comfort with firms' liquidity positions.

The triparty repo market grew to be an important source of funding for broker-dealers and other financial entities that did not have access to stable deposit pools or lower cost, unsecured lines of credit. The legal structure of the product varied between the U.S. and European models. In the United States, clearing banks (the third party in triparty repo agreements) act as agents and facilitate the daily unwinding of securities and cash by providing intraday credit. This intraday funding is secured by the same securities used the previous night in the triparty repo transactions. Each morning, the clearing banks have the right to decline to provide intraday funding. They might do so if they have credit concerns about a particular borrower or are uncertain of their own ability to liquidate collateral without loss in times of volatile market conditions. If the clearing bank chooses not to unwind the transaction, then lenders have the right to liquidate the collateral and the borrower will not regain its inventory of securities. In the European triparty repo model, by contrast, there is no daily unwinding of the transaction. Instead, borrowers can make substitutions into and out of the collateral pool that they have posted with the third-party agent provided that they continue to comply with the margin requirements, limits set on asset quality, concentration limits, and so forth.

Market events in September-October 2008 highlighted potential difficulties in the U.S. unwinding mechanism and in both U.S. and European protocols for dealing with troubled borrowers. From the borrower's perspective, the daily unwinding of triparty repo transactions and the very short maturities of the loans mean that lenders can withdraw from a particular borrower in a matter of days and often overnight. Significantly, most money market mutual funds (which make up the bulk of lenders in this market) may not be permitted to invest directly in the securities that serve as collateral in their repo transactions, so that the investors might be required to dispose of such collateral as soon as possible upon default of the counterparty. However, while liquidity levels fluctuate over time, a good percentage of securities financed through triparty repos are, in fact, illiquid. As such, the forced sales by these lenders could cause losses and put downward pressures on market prices.

To the clearing banks that must provide intraday funding each morning, the risks and costs of liquidating a large pool of collateral are elevated when markets are volatile. As a borrower deteriorates, it is often selling and using its most liquid collateral elsewhere, and the pool of collateral financed in triparty repo transactions becomes increasingly riskier and less liquid. Further, the failure of a major bank is likely to cause

[3] J.P. Morgan Chase did not purchase the assets or assume the liabilities of the holding company, nor assume the unsecured senior debt, subordinated debt, or preferred debt of the bank—with the result that Washington Mutual's bondholders received minimal, if any, recovery value while creditors were moved to reevaluate the risk of holding company and unsecured debt. These outcomes further heightened investors' concerns about the riskiness of bank and holding company debt.

Copyright © 2012 Association of Corporate Counsel

the securities held as collateral to fall rapidly in value. While clearing banks have the right to charge their own haircuts for intraday funding, high liquidity premiums are generally not applied. Thus, clearing banks also have an incentive to move first, and either notify borrowers that they cannot rely on intraday funding or keep triparty repo transactions locked so that lenders retain the securities (and the liquidation risks). In practice, when faced with the risk of a weak borrower and a large pool of illiquid assets, the clearing bank will often first seek to obtain additional liquid collateral to reduce its credit exposure. Such a step represents a further incremental demand on the borrower's liquidity resources.

Triparty repo transactions bring together three very different types of participants with different abilities to address the risks associated with these transactions. Moreover, the disorderly liquidation of a large pool of collateral, concurrent with the failure of a large borrower, poses systemic risks for the financial markets. For these reasons, a collaborative effort to address the risks that arise with collateral liquidation may be the best way to apply the lessons learned. The issues and incentives around triparty repo transactions are complex; firms noted several areas in which lenders, borrowers, and clearing banks could modify their practice:

- Lenders were funding considerable amounts of harder to price collateral, much of it with extended tenors that they would not be able or willing to invest in directly. Firms questioned whether lenders have set the correct investment parameters, such as margins, concentration limits, limits on illiquid collateral, and limits on the overall size of the collateral pool, to prevent a borrower default and the subsequent "fire sale" liquidation of the collateral from causing material harm to the lender. Firms also questioned whether some lenders have the operational ability to undertake liquidation.
- Several firms noted that many borrowers had relied too heavily on short-term triparty repo, particularly to fund longer term illiquid assets, without substitute sources of liquidity, and that this was not prudent. Several borrowers had no effective limits on the amount of illiquid securities that could be funded through triparty repos, and failed to restrict their overall dependence on this one market. One firm suggested applying a framework that would identify alternative sources of funding to allow firms to function if triparty transactions were not renewed with investors at maturity.
- Clearing banks for the U.S. triparty repo market are pursuing enhancements to their risk controls to prevent repo transactions from posing undue risks to firms and the financial markets. While not principal to the original transactions, clearing banks should ensure that the provision of intraday liquidity collateralized by triparty repo securities is executed within an appropriate risk management framework. Firms suggested that this framework should address concentrations of securities, potential exposure to securities that are of lower credit quality or are illiquid, and haircut policies. In addition, firms suggested that credit risk managers independent of the business area should monitor borrower creditworthiness and behavior, transaction and collateral trends, and the resulting credit exposures in relation to the capital of the clearing bank. Finally, firms are reviewing their risk management reporting, escalation policies, and collateral liquidation procedures and processes.

b. Deposit Trends

- **Vulnerable firms faced sustained outflows; firms perceived to be strong gained new deposits.**

Banks perceived by market participants to be more vulnerable experienced sharp outflows during the crisis, particularly in commercial and wealth management deposits. One bank saw its deposits decline more than 13 percent during the weeks following Lehman Brothers' bankruptcy; another bank lost more than 50 percent of its deposits over a six-month period. The subsequent market stress had divergent effects on financial firms that were considered strong or too-big-to-fail and others that were perceived as susceptible to the stress. Uninsured deposits, in particular, moved to banks perceived to be more financially resilient. Banks that benefited from the flight to quality experienced significant increases in retail and commercial deposits, drawing in institutional money, in particular, that was moving from higher risk institutions and from uncertain markets. Banks that benefited from deposit inflows primarily placed funds at central banks, assuming that these sudden increases in deposits were "transitory." Many of these banks, apprehensive about the creditworthiness of counterparties, were reluctant to lend out their increased balances to firms with significant funding needs.

For relatively stronger firms, assumptions about depositor behavior did not change significantly, although firms were now more focused on maintaining relationships with clients. Competition for deposits increased substantially, according to several firms. Pricing and promotions expanded, but firm managers reported that signaling also became a concern. For example, the management of one firm believed that it had experienced large inflows of retail and wholesale deposits precisely because the rates offered were low relative to the rates

Copyright © 2012 Association of Corporate Counsel

paid by peers—a signal to the market that the firm was not in distress. Depositors became aware that some of the best rates offered during the eighteen-month crisis came from firms that soon went out of existence.

c. *Interbank Deposits, Unsecured Funding, and the Foreign Exchange Swap Market*

- **Counterparty concerns led to the near-cessation of interbank funding.**
- **The funding available was increasingly concentrated in short-term tenors.**

The interbank deposit market, a particularly important market for European financial institutions, had only a few large net providers of funds before the liquidity crisis, according to firm reports, and became an altogether unreliable source of funding during the crisis. In essence, during the turmoil that followed the Lehman Brothers bankruptcy, few firms were willing to increase their credit exposure to other market participants. Most, if not all, firms sought to conserve their liquidity and reduce exposures to other institutions that they perceived as vulnerable. Central banks began directing liquidity into the market and became the counterparty and funds provider of choice for many market participants. Other institutions, including smaller financial firms and those thought to be vulnerable to the market crisis, were effectively shut out of the interbank funding market because of firms' heightened risk awareness.

Traditionally a significant source of funds, the term issuance of debt obligations (obligations with maturities greater than one year) was only available in limited amounts to some firms during the twelve months ending in mid-September 2008 and stopped abruptly with the bankruptcy of Lehman Brothers. Subsequently, funding became increasingly concentrated in short-term tenors, specifically six months or less. In light of the particular challenges experienced in September-October 2008, managers at several firms were pleased that they had had the discipline to build term funding up to a year earlier, even though it had seemed as if they were paying an excessive rate for the funds at the time.

The dollar-yen and dollar-euro swap markets dried up after Lehman's collapse, posing a particular risk for certain European and Japanese firms that had chosen to finance illiquid U.S. dollar assets with short-term funding. This development proved to be especially problematic for some European firms that had developed large concentrations of U.S. dollar-denominated assets before the crisis but did not have direct access to dollar deposits through U.S. branches or subsidiaries. As a result, beginning in September 2008, firms experienced severe difficulties swapping euros or yen for U.S. dollars. This mismatch, which lasted for a relatively long period, necessitated an expansion of bilateral foreign exchange swap facilities at central banks—an arrangement that allowed firms to cope with their deteriorating access to U.S. dollar funding by drawing on the facilities.

2. Prime Brokerage[4]

- **Firms underestimated the funding vulnerabilities created by prime brokerage.**
- **The case of Lehman Brothers International (Europe) highlights the contagion risk that rehypothecation in insolvency proceedings poses for both firms and investors.**
- **The near-failure of Bear Stearns highlights the "frictional" liquidity issues that arose as clients withdrew balances, creating a temporary need for funding.**
- **Asymmetrical unwinding of client positions was a material drain on liquidity.**

Before the crisis, many broker-dealers considered the prime brokerage business to be either a source of liquidity or a liquidity-neutral business. As a result, the magnitude and unprecedented severity of events in September-October 2008 were largely unanticipated.

Lehman Brothers International (Europe): The Contagion Risk of Rehypothecation in Insolvency Proceedings

When LBIE went into administration on September 15, 2008, all client assets it held in prime brokerage accounts, whether in custody or rehypothecated, were frozen. In the United Kingdom, hedge funds could elect to establish segregated accounts at their prime broker, but in most cases they entered into prime brokerage agreements that enabled LBIE to rehypothecate clients' securities to obtain funding. By granting rehypothecation rights over their assets to the prime broker, clients typically obtained cheaper margin loan pricing. Those assets that had been rehypothecated were not, by definition, segregated; thus, hedge fund clients became general creditors on the estate with respect to those assets. When assets were held in segregated custody arrangements,

[4] Prime brokerage, a service offered by securities firms to hedge funds and other professional investors, may include centralized custody, the execution and clearance of transactions, margin financing, securities lending, and other administrative services such as risk reporting. The growth of the hedge fund sector over the last decade was supported by a concurrent growth in the prime brokerage businesses within the investment banks that serviced these funds.

Copyright © 2012 Association of Corporate Counsel

they would not be released to clients quickly, and these assets could not be traded or easily hedged in the interim. The scale of these issues compelled hedge funds to take account of the level of credit and operational risk that they were exposed to through their prime brokerage relationships.

Because of these concerns, immediately following LBIE's default, a number of hedge funds and other prime brokerage clients withdrew their portfolios from remaining prime brokers with similar arrangements if these firms were perceived to be vulnerable. These prime brokers experienced an extraordinary outflow of funds, causing significant liquidity and operational stresses.

Free Credit Balances: Frictional Liquidity Issues in the United States and the Demand for Segregation in the United Kingdom

In March 2008, the clients of Bear Stearns' prime brokerage service became increasingly concerned about the ability of the firm to meet its obligations; the clients sought to move their accounts to competitors perceived to be of higher credit quality and, in the process, to withdraw substantial amounts of free credit balances.[5] This development happened quickly at Bear Stearns, with client free credit balances declining drastically in the course of one week.

At that time, when a client of a U.S. broker-dealer withdrew balances from its account, known as free credit balances, the broker-dealer had to borrow to finance the remaining customer debits. Moreover, the amount of customer free credit balances withdrawn was still subject to segregation, or "lockup," under rule 15c3-3 of the Securities and Exchange Commission (SEC) until the lockup requirement was recalculated. The calculation generally took place weekly before the crisis, but was undertaken more frequently, even daily, during the crisis. Thus, prime brokerage arms of firms subject to large customer withdrawals satisfied clients' free credit balance withdrawals from the investment banks' own liquidity until the next 15c3-3 lockup calculation was performed. The overnight delay in the release of locked-up funds resulted in an additional temporary, or frictional, loss of liquidity for the period that funds withdrawn were still subject to segregation. Following the failure of LBIE, prime brokers received an enormous number of requests from hedge fund clients for the repayment of free cash balances and excess margin. When free cash was not withdrawn totally, numerous requests were received for amounts either to be transferred to the U.S. broker-dealer where balances could be subject to the 15c3-3 lockup protections or to be placed in segregated accounts in the United Kingdom. In both cases, the U.K. prime broker suffered a loss of cash that could otherwise have been used for financing its balance sheet.

Absolute Loss of Liquidity Associated with the Asymmetrical Unwinding of Client Positions

The asymmetrical unwinding of client positions was a particular challenge, exacerbated by the short selling bans imposed globally by regulators on financial stocks. Some prime brokers had adopted a cross-client portfolio-based funding model that financed one client's long position by matching it with a second client's short position.[6] As one client's short position was closed out, the other client's long position had to be refinanced by the prime broker in a highly stressed market for secured funding transactions.

3. Unwinding of Securities Lending Transactions

- **A number of U.S. cash collateral reinvestment funds experienced reduced liquidity and/or fair market value losses as the issuers of certain assets in which the funds had invested defaulted, as other assets experienced decreasing market values, and as the market for such assets froze up. Such reinvestment funds experienced additional pressures as some borrowers redeemed cash collateral and some lenders curtailed lending or withdrew (or attempted to withdraw) cash collateral.**
- **Reinvestment funds were forced to pull back from triparty reinvestments in broker-dealers and other firms. Even though some reinvestment funds increased the percentage of their holdings invested in triparty repo transactions, the overall effect was a reduction in the size of investment pools and decreased funding to triparty repo borrowers on an absolute basis.**

The severity of the risks associated with securities lending activities—as with prime brokerage—caught many participants by surprise. Before the crisis, many market participants considered securities lending to be low-risk and liquidity-positive, because cash was typically reinvested in

[5] Hedge funds typically leave free credit balances, or balances in excess of margin requirements, on account at the prime broker. This is done to signal the creditworthiness of the fund to the prime broker, to earn returns directly or indirectly provided by the prime broker on these funds, and to ensure adequate funds to address frictions in the movement of balances. A hedge fund's decision to leave free credit balances on account at a prime broker will also depend on its perception of the creditworthiness of the prime broker. In turn, prime brokers may make use of this cash, albeit subject to different regulatory considerations in the United States and United Kingdom.

[6] If the client short position and the rehypothecated long position involved different securities, the prime broker might contract with a third party to essentially swap one stock for the other, or otherwise use one client's asset as collateral for a third-party stock loan that would cover the other client's short position.

Copyright © 2012 Association of Corporate Counsel

short-term, highly liquid money market instruments that were typically over-collateralized. As a result, some beneficial owners and firms managing reinvestment funds may have become complacent about the liquidity, credit, market, and operational risks inherent in securities lending and failed to anticipate the severity of the liquidity risks in a highly stressed market environment.

Until the recent crisis, the securities lending market had grown dramatically over the past thirty years, owing in part to the increase in the number of hedge funds and others engaged in short selling (a practice that relies on borrowed securities), as well as other needs for securities borrowing. Custodial banks and other global financial firms sought to capitalize on this trend, offering global securities lending services to pension funds, endowments, insurance companies, and other institutional investors with large inventories of securities.

Heightened Awareness of Reinvestment Risks during the Crisis

In the United States, where securities lending transactions have typically been collateralized by cash,[7] risk associated with the reinvestment of the cash collateral has always existed. For example, if the loan requires the payment of a borrower rebate, there is always a risk that the borrower's rebate rate could exceed the reinvestment interest rate. There is also the risk that the instruments in which the cash collateral is invested could become illiquid or incur losses. The beneficial owner, not the borrower, is typically responsible for any losses incurred in the cash collateral investments.

During the crisis, this risk became a reality as a number of cash collateral reinvestment vehicles experienced illiquidity and losses. The causes for this are varied and remain under study. In some cases, the cash collateral was invested in debt instruments, including asset-backed commercial paper (ABCP), Lehman and other broker commercial paper, and structured investment vehicles (SIVs). In some cases, the term to maturity of these instruments was longer than that of, for example, instruments found in registered money market funds. During the crisis, some of these instruments defaulted, and many experienced a decline in price, value, and liquidity.

A number of these instruments may have been highly rated and liquid when acquired, but became less highly rated and increasingly illiquid as market events unfolded. The longer their remaining maturity, the more vulnerable the instruments were. Once the instruments became illiquid or incurred losses, some beneficial owners and their cash collateral managers had to decide whether to sell the instruments in an illiquid market (if that was possible) and realize significant losses, or to retain the instruments in the hope of riding out the crisis.

Impact of Securities Lending Turmoil on the Size of Reinvestment Pools and the Volume of Funding Available to Repo Borrowers

Major credit disruptions such as the bankruptcy of Lehman Brothers and the large financial losses of AIG, along with the turmoil in closely linked markets, triggered an unwinding of securities lending transactions and strained many beneficial owners' and agent lenders' securities lending businesses, in some cases significantly. Securities lenders retreated across the major markets, reducing exposures by recalling securities on loan, severely curtailing new loans, and reducing the tenors of new transactions.

The need to borrow securities also declined as hedge funds and other market participants moved to deleverage and to preserve cash in the face of falling stock prices, regulatory bans on short selling, and rising redemptions of hedge fund shares. The values of securities and other types of noncash collateral fell, and certain trades such as long/short equity, convertible arbitrage, and equity upgrades came to a halt, largely because of dramatically reduced demand for less transparent securities. As a result of this dynamic and the sharp decline in the value of equity markets, some firms' securities lending pools and outstanding transactions dropped substantially in September-October 2008 in both the U.S. and European markets. The unwinding of transactions caused significant liquidity pressures and operational challenges.

The liquidity stress was greatest in the United States, owing to its larger emphasis on cash collateralized transactions, and greatest where the lending program's focus was on "volume/securities finance" lending rather than "intrinsic value" lending.[8] Agent lenders faced a huge demand to return securities to the beneficial owners and cash collateral to

[7] Contrast this with Canada and the United Kingdom, where noncash collateral has been the norm in securities lending transactions.

[8] The "volume/securities finance" approach to securities lending in the United States seeks to lend out as many securities as possible, including securities that are not in high demand. When securities not in high demand are lent out, the lender typically must pay the borrower a rebate, which is usually based on the federal funds rate. If the loan requires the payment of a rebate to the borrower, then the cash collateral reinvestment rate must exceed the borrower rebate rate. The "intrinsic value" approach focuses on lending securities that are in high demand, for which the borrower rebate will be smaller or zero. In some cases, the lent security will be in such great demand that the borrower will pay the lender a rebate. When the borrower rebate is small or nonexistent, the beneficial owner does not need to be as concerned that the return on cash reinvestment will exceed a borrower rebate or be a separate profit center, and the cash collateral can be reinvested in very short-term government instruments with the goal of protecting principal.

Copyright © 2012 Association of Corporate Counsel

borrowers, along with a high number of margin calls. The funds thus experienced shortages of cash associated with the overall maturity mismatch of investments, falling asset values and the inability to sell assets into a stressed market, demands for cash associated with the return of securities from deleveraging hedge funds, and margin calls, attributable to declines in equity prices, from borrowers of equity securities. The extreme liquidity demands on the funds and their general inability to sell assets into a frozen market—as well as potential reputational risk—prompted at least two agent lender firms to support their reinvestment funds through cash infusions, purchases of assets, and capital support agreements.

In Europe and elsewhere, the greater prevalence of noncash collateral facilitated a more rapid unwinding of loans because of the absence of cash reinvestment risks. In addition, equity collateral in particular afforded a degree of price transparency not observed in certain fixed-income collateral.

Operationally, the pullback by the beneficial owners contributed substantially to the spike in "fails" (the failure of trades to settle) in September 2008. The number of beneficial owners (including many foreign central banks) calling their securities back for fear of dealing with any broker-dealers reduced the supply of Treasury securities available to make settlement. In response, regulators introduced an economic incentive to reduce fails of U.S. Treasury securities with the recently implemented Treasury Market Practices Group fails charge. While the measure may lower the risk of fails, it does not address some of the broader risks associated with securities lending.

Securities lending cash reinvestment funds (along with money market mutual fund investors) are significant lenders in triparty repos.[9] Even as some reinvestment funds increased the percentage of their holdings invested in triparty repos, the reduction in the size of securities lending programs and their investment pools substantially reduced the funding provided to triparty repo borrowers on an absolute basis, particularly for less easily valued forms of collateral.[10]

4. 2a-7 Money Market Mutual Funds and Non-2a-7 Funds

- **MMMFs significantly reduced, or even halted, their purchases of commercial paper and other short-term investments as concerns about firms' viability escalated.**
- **For banks with sponsored funds, the decline in the value of the funds' investments and the funds' inability to liquidate certain investments prompted bank sponsors to provide support to stabilize net asset values and meet redemptions.**

Withdrawal of Money Market Mutual Funds from the Market

MMMFs are one of the largest buyers of bank short-term liabilities and are a key provider of liquidity to global financial firms. These funds have come under pressure several times since the summer of 2007 because of losses related to SIVs and concerns about the assets backing ABCP programs. For this reason, firms' access to the MMMF investor base was already reduced in periods prior to the events of September-October 2008.

In mid-September, expected losses on Lehman paper led to a run on the Primary Fund series of the Reserve Fund in the wake of the Lehman bankruptcy.[11] News of this run prompted institutional investors to seek additional redemptions in other funds. For example, in the United States, SEC-registered nongovernment (including prime) funds targeted to institutional investors experienced a 30 percent decline in net assets over the four weeks ending October 8, 2008, as investors sought to move cash to government money funds.[12] According to firms interviewed, money market mutual funds quickly retreated from purchasing financial firm issuances of commercial paper, ABCP, repo investments, and certificates of deposit following the Primary Fund's collapse. MMMFs not only reduced purchases of these securities, but also refused to roll the securities they already held and significantly shortened tenors of any lending agreements with financial institutions. Firms indicated that most of the MMMF sector would not invest in

[9] As noted earlier, the distinguishing feature of a triparty repo transaction is that a custodian bank or international clearing organization acts as an intermediary between the lender and the borrower. The triparty agent is responsible for the administration of the transaction, including collateral allocation, marking to market, and substitution of collateral. Both the lender and borrower of cash enter into these transactions to avoid the administrative burden of bilateral repo transactions.

[10] In the aftermath of the crisis, commenurate declines in the repo and securities lending markets meant that reinvested cash collateral from securities lending transactions has continued to be approximately 25 percent of the approximately $2 trillion triparty market globally.

[11] The fund's breaking of the buck was due to the decline in the value of its Lehman holdings. The resulting drop in net asset value to $0.97 exacerbated redemption activity, which totaled more than $40 billion (approximately 67 percent of the fund's net assets) in the days surrounding these events. The Fund subsequently made five partial pro rata distributions amounting to approximately 92 percent of the Fund's assets as of the close of business on September 15, 2008. Approximately $3.5 billion remained in the Fund as of October 2009.

[12] See <http://www.ici.org/pdf/mm_data_2009.pdf>.

Copyright © 2012 Association of Corporate Counsel

unsecured commercial paper of financial institutions and would provide funds only rarely, on an overnight basis and at extremely high cost. Several financial firms remarked on the speed with which short-term funding secured by private label assets and other less easily valued assets dried up. MMMFs also requested that firms "bid back" existing investments to augment the funds' cash reserves and to prepare them for further redemptions. Several of the firms interviewed reported that bid-back requests were particularly high during the week of September 15, 2008, following the Lehman default.

Contributing to this dynamic were the MMMFs' concerns about both the underlying assets that they were financing and the creditworthiness of the counterparties to the transaction. On the other side of most repo transactions are longer dated assets that generally cannot be held by certain money market funds because of tenor restrictions. In the event of a counterparty default, these assets would then have to be sold into a poorly performing secondary market.

Sponsors' Actions in Support of Their Funds

In addition to facing reduced funding from the MMMF sector, a significant number of financial firms supervised by SSG agencies provided some form of support to sponsored funds to prevent a possible "breaking of the buck" scenario. The support provided by these financial institutions to date has mainly taken the form of asset purchases, capital support agreements, and direct investments in the fund. A small number of firms have provided support in the multibillion dollar range to affiliated funds, but the majority of firms have provided more limited sums.

B. Funding and Liquidity Risk Management Observations

In this section, we describe the risk management lessons and changes conveyed to supervisors in meetings with management of firms. We begin by addressing broadly applicable changes that many firms were considering, including significant attention to funds transfer pricing. We then discuss the changes being made in response to specific issues involving secured financing, prime brokerage, and securities lending.

1. Risk Management Changes Broadly Applicable to General Firm and Market Stresses

- **Firms are seeking to ensure that they have global control of liquidity by strengthening the role of corporate treasury, enhancing the infrastructure to support funding-related MIS and stress testing, and attempting to tighten limits and build stronger liquidity buffers.**
- **Particular emphasis is being placed on improving the funds transfer pricing process.**
- **The complexity of firm structure complicates contingency funding plans.**

Almost all of the firms surveyed have sought to strengthen structures and processes to enhance the governance of liquidity. Firms were taking steps to improve the structure of their treasury, liquidity risk management, and related functions. In addition, they were seeking to enhance liquidity reporting and other forms of communication about liquidity between these areas and the business lines as well as to senior management and the boards of directors. Funds transfer pricing processes and many aspects of contingency planning were also being enhanced. An important question for firms and supervisors is the extent to which such changes are formalized into policies and procedures and prove to be effective in the management of funding and liquidity risks over time.

Treasury/Liquidity Risk Management Structure

Firms observed that the organization and interaction of treasury, risk management, and the businesses lines undermined in some cases the effectiveness of liquidity management during the peak of the crisis in September-October 2008. Firms reported that they were undertaking changes that reflect this awareness.

- Some firms—particularly those that attributed a less comprehensive identification of risk to the fact that risk management was not part of the treasury function—were considering moving liquidity risk oversight responsibilities to the chief risk officer (CRO) or embedding an autonomous liquidity risk management unit in treasury.
- Firms were moving to more centralized treasury models to address funding and liquidity issues. Other changes noted by certain firms were the integration of the secured financing function with treasury and the

Copyright © 2012 Association of Corporate Counsel

separation of cash management activities from the business line.

- Some firms looked to improve coordination between such areas as treasury, prime brokerage units, secured funding desks, and unsecured funding desks; coordination between the last two functions is especially important because of the risk of losing secured funding and the need to replace the financing of assets with unsecured funding.
- Communication channels between risk control functions were also established or strengthened. Some firms stated that the treasury function's relationship with credit was critical for the effective evaluation of liquidity risk and monitoring of counterparty status. For example, in one case, margin loans had been approved only by the credit department; now they are jointly approved by both the credit and funding functions.

Liquidity Management Information Systems

Many firms acknowledged shortcomings in their MIS infrastructure and in their ability to produce useful reports during the crisis, recognizing that better-quality and more timely liquidity reporting was essential to effective management of liquidity and funding issues during a crisis. In light of this, a number of firms said they were increasing their spending on infrastructure, improving their data, and strengthening the quality and timeliness of their reporting.

Liquidity reports did not capture fully the risks in several key areas, in particular:

- secured borrowing and lending, including information on maturity mismatches and asset liquidity;
- derivatives businesses, including collateral outflows resulting from rating changes and asset price movements; and
- off-balance-sheet funding vehicles and certain non-contractual obligations, providing greater transparency into contingency funding risks.

During the crisis, liquidity reports were produced increasingly on a daily and intraday basis to enable firms to better assess the funding flows of major asset and liability categories, in turn highlighting areas more vulnerable to funding draws or withdrawals. Most firms felt that the speed of information became critical to managing through the peak period of the crisis.

Firms said they undertook improvements to liquidity gap management reports as well as to key ratios and stress-testing metrics in standard liquidity MIS. By late 2008, liquidity reports were becoming more comprehensive, according to interviewees. These reports better captured information on discount window collateral, deposit pricing, deposit flows, daily positions and the outlook, cash surplus and consumption of cash, unsecured funding, long-term debt issuance, and changes in balance sheet, capital, and leverage ratios.

Liquidity Stress Testing

Market conditions and the deteriorating financial state of firms exposed weaknesses in firms' approaches to liquidity stress testing, particularly with respect to secured borrowing and contingent funding needs. These deteriorating conditions underscored the need for greater consideration of the overlap between systemic and firm-specific events and longer time horizons, and the connection between stress tests and business-as-usual liquidity management.

Firms sought to enhance scenarios used to stress liquidity positions, particularly with the overlay of systemic scenarios. As a result, firms have recognized the need to move beyond traditional stress tests involving deteriorating credit quality, rating downgrades, and/or historically based scenarios and to look increasingly at hypothetical situations that are more systemic in nature and longer in duration. Some firms said they were aiming to apply several scenarios to each stress test and/or to include both short- and long-term horizons. Firms have also focused on improved reporting of stress-test results and increased coordination between business lines. More specific examples of change include the following:

- Some firms reported a wide range of new scenarios and stress tests, including the loss of secured funding of certain asset classes, a collapse in foreign exchange swaps, operational crisis, counterparty failure, mutual fund redemptions, and ABCP illiquidity.
- Stress-testing time horizons varied significantly. For example, one firm applied a one-month horizon for a firm-specific scenario and a two-week horizon for a market scenario. Another firm applied time horizons from three to six months, to one year—the latter reflecting the reality for many firms of prolonged stressed conditions during the crisis.
- Firms cited the importance of reviewing and retesting assumptions associated with stress tests. Market stresses during the crisis yielded additional information on the behavior of various on- and off-balance-sheet items during an event. For example, firms revised their assumptions about the availability of term funding and/or securitizations during a crisis,

Copyright © 2012 Association of Corporate Counsel

as well as the ability to continue to obtain secured funding of certain asset classes, the extent to which haircuts can vary across different forms of collateral, and the ability to monetize less liquid collateral. However, some firms observed that other assumptions might have been too extreme. For instance, the assumptions of no liquidity in the residential mortgage market or of significant draws on loan commitments seemed to overstate the risks in those exposures during this crisis. Nonetheless, most firms' own data reflected a "survivor's bias"; that is, because the firms did not fail, there were no data on behavior under severe firm-specific duress.

- Firms reported the need to analyze deposits more thoroughly to better understand which deposits were more likely to leave. A more granular analysis was needed to evaluate the differing vulnerabilities of insured versus uninsured, international versus domestic, and corporate versus retail deposits, as well as those of high-net-worth customers. One firm modeled a full depositor run, noting that the main constraints to outflow were operational, such as website crashes or cash machine depletions.
- Most firms believed that they were now effectively identifying legally binding contingencies. Following the initial awareness of significant ABCP issues starting in August 2007, firms have anticipated better ABCP conduit onboarding. In terms of loan commitments, firms have studied draws closely, but they generally did not see them as a primary issue during the crisis as of late 2008. Firms did not attribute corporate draw-downs to the obligor's concern about the banking firm's own liquidity. Instead, interviewed firms generally believed that corporate draw-downs were driven more by adverse changes in macroeconomic conditions. More broadly, firms were considering how to overlay behavioral assumptions on contractual requirements. For instance, firms were reviewing their assumptions about loan renewals, as the crisis had highlighted the importance of considering potential signaling effects about the availability of funds for such renewals.
- Many firms reported a need to identify and prepare more effectively for noncontractual contingencies. Several of these "reputational" contingencies were still not accounted for in some firms' planning scenarios. These contingencies included the provision of support to money market funds, tender option bonds, and auction rate securities as well as the need to support secondary markets in assets as a market maker or in secondary bids for paper. Most contingency funding plans did not include all relevant scenarios of this kind, suggesting that work remains for firms to identify potential noncontractual contingencies.

Liquidity Cushions and Limit Structures

Interviewed firms typically calculated and maintained a measurable funding cushion, such as "months of coverage," which is conceptually similar to rating agencies' twelve-month liquidity alternatives analyses. Some institutions were required to maintain a liquidity cushion that could withstand the loss of *unsecured* funding for one year. Many institutions found that this metric did not capture important elements of stress that the organizations faced, such as the loss of secured funding and demands for collateral to support clearing and settlement activity and to mitigate the risks of accepting novations. Some firms said they were looking to complement their traditional "time-to-funding" measures with stress-coverage measures.

The liquidity crisis underscored for many firms the importance of holding sizable unencumbered liquidity pools, diversifying funding sources, and maintaining limit structures and approval requirements that are appropriate for a firm's risk appetite and liquidity risk profile. Most firms said they tightened or strengthened funding-related limits and approvals and developed a greater appreciation for the importance of diversifying funding sources and maturities. Firms generally set or tightened limits on wholesale funding and on the type of wholesale funding collateral, tenor, and domicile. In some instances, firms significantly reduced limits, and senior management had to approve all material funding transactions during peak periods of the crisis. At some firms, material new credit extensions now require treasury function approval.

The crisis emphasized for firms the need to strengthen collateral management and securities financing practices given the degree to which counterparty acceptance of less liquid collateral types can decline and haircuts and other terms can tighten in times of stress. Ultimately, following the failure of Lehman Brothers, many major firms required access to central bank liquidity facilities.

Funds Transfer Pricing

Managers acknowledged that if robust funds transfer pricing practices had been in place earlier, and if the systems had charged not just for funding but for liquidity risks, their firms would not have carried the significant levels of illiquid assets on their trading books and the significant risks that were held off balance sheet that ultimately led to sizable losses. Most firms reported that funds transfer pricing mechanisms have

Copyright © 2012 Association of Corporate Counsel

become more robust, with refined charges for the provision of liquidity, including contingent liquidity, and/or better alignment of incentives in business lines with established risk appetite.

Firms said they were increasing the scope of business activities covered in funds transfer pricing—including off-balance-sheet exposures—and applying funds transfer pricing more comprehensively across business lines and down to trading desk levels and beyond, where appropriate. Liquidity premiums have been added to certain activities to encourage stable funding. In addition, penalties have been assigned to discourage dependence on the parent or on short-term unsecured funds. Firms said they were working to integrate funds transfer pricing practices more fully into the overall liquidity risk management structure to ensure that established costs and incentives are having the desired effect and to avoid producing unintended arbitrage opportunities. Two firms were considering ways to charge businesses for stressed funding risk, as measured by their maximum cash outflow metrics.

Some treasurers transfer priced funds based on the expected holding period of the positions—irrespective of the position term or maturity. In many cases, the stated holding period was short term (trading) and the asset liquidity was unquestioned. As value and liquidity dissipated, the effective funding mismatch grew.

Firms found that increasing the cost of funds did not always work to control the balance sheet, as many trading desks and businesses had developed their own funding sources. For example, one firm found that upon receiving a higher cost of funds from corporate treasury, the prime brokerage unit would in turn offer clients a lower but attractive yield on deposits. In this case, prime brokerage would become a source of funding that would resell these funds to treasury—reducing the funds required from other sources. The prime brokerage funds, however, were extremely credit sensitive and departed from the firm at the first sign of distress. Some treasurers have introduced a bid/offer mechanism in transfer pricing in order to account for the likelihood that business units will source their own liquidity and arbitrage treasury.

Contingency Funding Plans

Most firms' contingency funding plans were, to some degree, inadequate for the events of the second half of 2008. Firms generally agreed on the need to enhance their plans, which had become overly focused on institution-specific events often typified by credit rating downgrades by the rating agencies.

A key lesson of the crisis, observed by firms and supervisors, was that complex corporate structures hindered effective contingency funding. Firms found that these structures, which were often created to arbitrage tax and regulatory capital frameworks, also created significant constraints on the flow of funds across the firm between legal entities. Treasurers had often devised contingent funding plans on a consolidated basis and failed to recognize the constraints on funds flow created by legal complexity. In some cases, the complexity of the organizational structure prevented firms from readily accessing secondary sources of liquidity, such as central bank discount facilities. As a result, firms acknowledged the importance of a "bottom-up" approach to contingency planning, which includes the preparation of contingency funding plans at the individual legal entity level.

2. Risk Management Changes Associated with Prime Brokerage

- **Internal limits are being established on the use of rehypothecated client collateral and free credit balances.**
- **Firms are strengthening controls over client balance transfers.**
- **Dealers and clients are discussing the segregation of initial margins.**

Limits on Rehypothecation of Client Securities

Growing out of the LBIE experience, documentation and contractual rights were subsequently renegotiated with hedge fund clients. In particular, limits were imposed on rehypothecation rights and caps were agreed to in international prime broker agreements where previously none had existed. Such rehypothecation caps were typically set at levels to cover margin debits and collateral haircuts and to allow for operational friction. There was also a push by prime brokers to ensure that client service and operational expectations were aligned with contractual provisions contained in governing agreements. Some hedge funds arranged to transfer unencumbered securities that exceeded rehypothecation caps out of prime broker accounts and into custodian or triparty accounts. In response, some firms said they have developed their own bankruptcy remote or custody solutions to address client demands for asset protection. In other cases, firms have established tight internal limits on their own reliance on rehypothecated client collateral.

Enhanced Controls over Requests for Balance Transfers and Financing Commitments

During the period of crisis that followed Lehman's failure, the senior management of some firms said they became actively engaged in centrally monitoring and controlling firm-wide liquidity and the status of funding on a real-time basis. This

Copyright © 2012 Association of Corporate Counsel

became especially important for firms with significant prime brokerage operations, where previously cash management had been conducted locally within the business unit. Because of the client service orientation of prime brokerage operations, client requests for immediate or real-time balance transfers were often met without consideration for the frictional impact on the liquidity profile of the business.

In addition to implementing new controls on outflows of funds, senior management imposed additional restrictions on accepting new transactions with funding implications. These restrictions placed a low or even zero limit on the amount of client financing that the sales force could commit to without explicit senior management approval.

Reduced Reliance on Free Credit Balances

Following the experiences associated with Bear Stearns—and with growing market awareness of the magnitude of free credit balance outflows experienced by Bear Stearns prior to its acquisition—prime brokers have taken steps to adjust their assumptions on stress outflows, including their assumptions of the impact of severe market events on the level of free credit balances. By fall 2008, firms were able to accommodate these outflows more effectively.

Returns provided to prime brokerage clients on free credit balances were repriced by international prime brokers when their value as a relatively inexpensive source of funding diminished. This reassessment of value has largely been driven by internal controls and new risk-based funds transfer pricing arrangements established by centralized corporate treasury functions. The repricing has reduced the level of returns that hedge funds achieve on free credit balances.

Before the crisis, firms recognized that free credit balances could be drawn down quickly. However, some firms were unprepared for the scale and immediacy of the outflows of client portfolios and cash balances following the Lehman Brothers default. Consequently, internal reporting and transfer pricing had to be adapted to take account of this new liquidity risk profile. The latter change was necessary in order to reduce reliance on this relatively unstable, noncore source of funding.

Most prime brokers are making adjustments to transfer pricing and management reporting arrangements. The adjustments are intended to ensure that tight controls are placed on the financing side of the business and that liquidity risk pertaining to the prime brokerage business is within limits so that such risk does not impair the firm's overall liquidity risk profile.

Segregation of Margin

A number of prime brokerage clients requested that independent amounts (initial margin) under the International Swaps and Derivatives Association's Credit Support Annex be held in segregated accounts. The purpose was to mitigate client exposure to a dealer's failure. Although some requests were met, overall the banks resisted these moves. Of note, there was a pricing implication associated with locking up initial margin, as these amounts are generally used for liquidity purposes, such as posting margin by the banks to clearing houses to cover exchange margining requirements. Many investment banks said the number of these requests declined as credit concerns eased. Still, as a result of the observed prime brokerage stresses in 2008, prime brokers started to provide hedge funds with more frequent (sometimes daily) and comprehensive management information presenting details and usage of all rehypothecated assets.

3. Risk Management Changes Associated with Securities Lending

- **Beneficial owners tightened reinvestment guidelines applied by agents and are becoming more discriminating in their choice of counterparties.**
- **Firms are strengthening controls over commingled accounts; additionally, there has been some migration of clients from commingled to separate accounts.**

Firms have responded to the new environment following September and October 2008 by undertaking formal and informal changes to risk management and control practices. Firms have focused most on improving collateral and CCR management and on strengthening liquidity in their reinvestment funds. In addition, according to some, there has been a significant shift to "intrinsic value" lending by beneficial owners that previously may have taken a "volume/securities finance" approach.[13]

Higher Standards for Acceptable Collateral

Beneficial owners and their agent lenders were establishing more conservative guidelines for their reinvestment programs. Outside of the United States, participants reported a move away from non-central-bank–eligible forms of collateral, such as equities and convertibles, and other asset classes generally perceived to hold greater credit and liquidity risk. Securities

[13] For an explanation of the intrinsic value and volume/securities finance approaches to securities lending, see footnote 8.

Copyright © 2012 Association of Corporate Counsel

lacking transparency—for example, collateralized debt obligations and private-label mortgage-backed securities—were among the least desirable forms of collateral since September 2008.

Agents have engaged in more rigorous collateral reviews—for example, CUSIP-by-CUSIP assessments in some cases (despite the prohibitive expense that some see)—and in the establishment of a formal funding review of collateral in addition to a credit review.

Higher Liquidity Targets

Prior to the onset of financial stress, some cash reinvestment fund managers sought higher yields in a low-interest-rate environment by investing in somewhat riskier assets that were still considered safe. Many of these securities proved to be illiquid during the crisis. As a result, agent lenders sought to increase the overall liquidity in their cash reinvestment funds as conditions deteriorated.

Overnight liquidity ratios in cash reinvestment funds varied as of December 2008, but in some cases they ranged between 20 and 30 percent, compared with approximately 10 percent prior to the financial crisis. As of December 2008, improvements in such ratios were attributed to maturing assets, new reinvestment business, and, in certain cases, sponsor support, and less to successful asset sales. Going forward, some firms are targeting higher overnight liquidity ratios, in the range of 30 to 50 percent of the fund's asset value.

Greater Counterparty Focus

Beneficial owners and agent lenders were much more focused on counterparty risk and daylight exposures than they were before the crisis. Some agent lenders noted the importance of diversifying counterparties for the purposes of their own transactions.

Agent lenders said their existing credit concentration limits have generally not been faulted for significant losses in reinvestment funds. However, dramatic reductions in the size of firms' reinvestment books resulted in larger counter-party exposures exceeding issuer concentration limits in the aftermath of the crisis. As a result, fund managers were unable to purchase additional investments involving exposure to these counterparties.

Controls over Commingled Accounts

Agent lenders reported strengthened controls over commingled reinvestment funds because of risks that surfaced in 2008. Commingled funds tended to have higher targeted liquidity levels, for example, approximately 50 percent of total net assets at one firm with significant commingled accounts.

Some managers of cash collateral reinvestment funds also imposed controls to restrict or slow cash redemptions by permitting beneficial owners to redeem in cash only for ordinary course redemptions (that is, to pay back borrowers), and required beneficial owners to maintain then-current levels of lending or the beneficial owners would be completely redeemed out in-kind.

One practice among cash collateral reinvestment funds that sustained losses was to lock down the losses in a manner that ensured a fair distribution of losses across the full investor base while allowing shareholders to redeem a "vertical slice" of fund investments.[14] In some instances, concerns about the effectiveness of these controls, including the timing or fairness of their application, have been the focus of lawsuits against agent lenders and have underscored the importance to firms of reviewing controls to protect themselves against legal and reputational risks.

4. Risk Management Changes Associated with Money Market Mutual Funds

- **Sponsored funds are revisiting the adequacy of their liquidity buffers to protect against extreme tail events; while such events were not typical before the crisis, several firms were incorporating into their contingency funding plans support for MMMFs and/or conducting some form of stress testing by the September-October 2008 period.**

Several sponsoring firms said they revised their assumptions about the reliability of funding from MMMFs in an extreme scenario. Several firms said they focused on the level of liquidity in their funds, and several sources improved their contingency planning. The MMMF crisis underscored the need for greater consideration of leading practices in investment management appropriate for funds with a stable net asset value (NAV).[15] Events during the crisis also reinforced the importance of transparency to investors on the composition of portfolio holdings, particularly if firms are promising shareholders a stable NAV.

[14] A vertical slice is the pro-rata portion of the fund's holdings received by an investor.

[15] Under paragraph (c)(7)(ii) of SEC Rule 2a-7, the firm's board must adopt (and periodically review) written procedures requiring the fund to calculate the extent of any deviation between the fund's NAV, determined by reference to the amortized cost, and the market value of the portfolio "at such intervals as the board of directors determines appropriate and reasonable in light of current market conditions." If the deviation exceeds 50 basis points, the board "shall promptly consider what action, if any" it should take. (Under Rule 2a-7(c)(1), a money market fund is able to rely on the amortized cost method of valuation only as long as the board believes it fairly reflects the market-based NAV.) The 50 basis point threshold is a trigger for when the board must get involved; it does not require the board to take any particular action.

Copyright © 2012 Association of Corporate Counsel

Adequacy of Liquidity Buffers

One large sponsor noted that liquidity in its MMMFs tended to be approximately 10 percent of total net assets prior to the crisis and was subsequently raised to 25 to 35 percent. This move appeared consistent with the broader trend among funds to improve their liquidity profiles.

Contingency Planning

A few firms did incorporate fund support into their contingency funding plans (CFPs) before the crisis. Others had little or no reference to fund support in their CFPs prior to the September-October 2008 period. Regardless of prior approach, sponsoring firms did not anticipate the franchise and reputational risks associated with the run on MMMFs, and were generally unprepared for the extent of liquidity demands on their business lines and on the consolidated firm.

Proposed Regulatory Reform

Several amendments to Rule 2a-7 and related rules governing money market funds are being considered in the United States. These changes are designed to enhance the resilience of funds to withstand short-term market turbulence and to provide greater protection for investors. The amendments would require funds to maintain a portion of their portfolios in instruments that can be readily converted into cash, to reduce exposure to long-term debt, and to limit investments to the highest quality securities. The modifications under consideration would also permit funds that have "broken the buck" to suspend redemptions to allow for the orderly liquidation of fund assets.

Copyright © 2012 Association of Corporate Counsel

IV. SUPERVISORY EVALUATION OF SELF-ASSESSMENTS AND CRITICAL AREAS FOR CONTINUED FIRM IMPROVEMENTS

A. Background on Self-Assessment Exercise

- **Twenty firms were asked to benchmark their practices to industry standards.**

In November 2008, supervisors asked twenty major global financial firms to conduct self-assessments of their current risk management practices. Supervisors asked firms to benchmark their practices against the recommendations and observations of five industry and supervisory studies published in 2008.[16] Taken together, these studies identified a wide range of 1) risk management control weaknesses that contributed considerably to reducing firms' financial resilience during the ongoing financial crisis and 2) risk management practices believed to have enhanced firms' abilities to withstand future market turbulence.

As instructed, the firms completed the self-assessments, presented the findings to their boards of directors, and submitted the self-assessments to their primary supervisors during the first quarter of 2009.[17] Supervisors reviewed, aggregated, analyzed, and discussed the results. Senior Supervisors Group member agencies subsequently participated in interviews to discuss the lessons that firms learned from the crisis and the changes made to their risk management practices since the issuance of the first SSG report in March 2008. Notably, and commendably, a few firms had already conducted self-assessments against several of these industry reports prior to the supervisory request.

The observations in this report represent the collective view of the SSG. This collective view is based on the SSG's evaluation of the self-assessment submissions, bilateral supervisory discussions with the firms, and fifteen collective supervisory interviews conducted with a sample of the firms that completed the self-assessments.[18]

[16] See footnote 1 for a list of the studies.

[17] The SSG compiled the recommendations and observations of these reports in a suggested template. The recommendations and observations were organized by theme and clustered according to subthemes to create thirty-two assessment topics. For each assessment topic, firms were asked to review the list of recommendations and observations and indicate if the firm's practices were fully, partially, or not aligned with them. A copy of the template is included in the supplement to this report.

B. Overview of Results

- **Firms overall consider themselves well aligned with recommendations and observations, although to varying degrees across the set.**
- **Supervisors see more extensive gaps that still need to be closed.**

Supervisors found that many of the firms submitted thoughtful and substantive responses to the self-assessment exercise, but supervisors did not always agree with the firms' conclusions. Participating firms in aggregate were considerably more favorable in assessing their alignment with recommendations and observations than were their supervisors. Some of the differences arose because firms were giving themselves full credit for enhancements planned or only partially completed. While supervisors acknowledge some progress over the last twelve months since the crisis began, they see a clear need for broad-scale further remediation and believe that firms have to take significant additional action to institutionalize the recent changes that have been made. Supervisory views were generally more critical than those of the firms on the current state of board and senior management oversight, articulation of risk appetite, incentives, controls, and IT infrastructure. These issues are discussed in detail below.

1. Practices Assessed by Firms as Most Aligned with Recommendations

Firms rated their practices regarding governance and certain aspects of liquidity monitoring and planning as those that were most aligned with recommendations (Table 1). Notably, firms determined that they have made the most progress on governance and liquidity topics. These areas may have received the most attention because of the leading roles they played in earlier events. Many of the changes cited by firms represent "low-hanging fruit" that could be made quickly without substantial investments in new infrastructure.

[18] It is important to note that the observations reported here are based on the firms' submissions. The supervisors did not validate these submissions and, at times, had views that differed from an individual firm's assertions. Some firms may have held themselves to a higher or lower standard than their peers in assessing the state of their controls. Nevertheless, the SSG members believe that, in aggregate, the relative order of alignment of firm practices with specific topics that emerged from the self-assessment exercise was broadly representative of the state of industry practice.

Copyright © 2012 Association of Corporate Counsel

TABLE 1

Assessment Topics with Which Firms Consider Themselves Most Aligned*

Assessment Topic	Number of Firms			
	Fully Aligned	Partially Aligned	Not Aligned	NA/NR
Governance: Roles and responsibilities	20	0	0	0
Governance: Policies	20	0	0	0
Governance: Internal coordination and communication	20	0	0	0
Governance: Risk committee	19	1	0	0
Disclosure and transparency: Risk disclosure and transparency	16	3	0	1
Governance: Role of the chief risk officer	16	2	0	2
Liquidity risk: Monitoring and planning	18	2	0	0
Liquidity risk: Funding and reserve management	17	3	0	0

*Firms assessed their risk management practices as being fully aligned with (assigned a "3"), partially aligned with ("2"), not aligned with ("1"), or not applicable to (NA) the individual recommendations and observations underlying each assessment topic. NR indicates no response. Firms' overall alignment with each assessment topic is based on an average of their alignment with the individual recommendations and observations. In total, the self-assessment template included 188 recommendations and observations and 32 assessment topics.

TABLE 2

Assessment Topics with Which Firms Consider Themselves Least Aligned*

Assessment Topic	Number of Firms			
	Fully Aligned	Partially Aligned	Not Aligned	NA/NR
Identification and measurement: Monitoring	6	12	1	1
Liquidity risk: Transfer pricing	7	13	0	0
Counterparty risk: Risk monitoring and mitigation	9	11	0	0
Counterparty risk: Close-out practices	7	13	0	0
Identification and measurement: Concentration risk	7	13	0	0
Stress testing: Scope of scenarios	7	13	0	0
Identification and measurement: New products	7	11	1	1
Stress testing: Governance	10	9	0	1

*Firms assessed their risk management practices as being fully aligned with (assigned a "3"), partially aligned with ("2"), not aligned with ("1"), or not applicable to (NA) the individual recommendations and observations underlying each assessment topic. NR indicates no response. Firms' overall alignment with each assessment topic is based on an average of their alignment with the individual recommendations and observations. In total, the self-assessment template included 188 recommendations and observations and 32 assessment topics.

2. Practices Assessed by Firms as Least Aligned with Recommendations

Firms rated their practices associated with identification and measurement of risk, transfer pricing, counterparty monitoring, and stress testing as those that were least aligned with recommendations (Table 2). The supervisors agree with this assessment. Supervisors, however, view the challenges associated with closing the gaps as more critical and difficult than do the firms, in aggregate, and note that resolution of each of these areas will likely require substantial investments in technological infrastructure. Failure to address these weaknesses will potentially undermine the effectiveness of practices viewed as aligned with the recommendations.

Copyright © 2012 Association of Corporate Counsel

C. Areas for Continued Improvement

Ten critical areas of needed improvement that are broadly relevant across firms emerged from the self-assessment results and interviews. Supervisors believe that considerable work remains in these areas, encompassing governance, incentives, internal controls, and infrastructure. The absence of action in some critical areas, such as the alignment of incentives and infrastructure-related matters, should raise questions for boards of directors, senior managers, and supervisors about the effectiveness and sustainability of recent changes. Supervisors will critically evaluate the progress on these and other issues.

Firms have reported progress in their alignment with some industry standards related to areas explored below, such as those associated with corporate governance and with liquidity planning and monitoring. The SSG believes that some of the noted adjustments, such as modifications of reporting lines or expanded metrics in liquidity reports, may represent less time- and resource-intensive actions, or "low-hanging fruit." Such changes must be ingrained in firm culture and must be validated by boards, senior management, auditors, and supervisors as to their effectiveness in bringing about desired results.

In key areas explored, supervisors remain unconvinced that firms are undertaking the full scope and depth of needed improvements, irrespective of the self-assessment results. Further, if left unaddressed, certain gaps could potentially undermine the effectiveness of progress already made. For example, the postponement of needed IT infrastructure investment may limit firms' ability to bring about meaningful change in liquidity planning and monitoring, including the timeliness and comprehensiveness of MIS reports, and firms' ability to develop a centralized, aggregated view of their liquidity needs. More broadly, weaknesses in risk capture and misaligned incentives have the potential to limit the effectiveness of oversight and controls, particularly those associated with recent enhancements to practices.

Closing some of the acknowledged gaps, particularly those associated with infrastructure, is a resource- and time-intensive process. Continued oversight by supervisors and concerted discipline and commitment by firms will be required to undertake the needed investments and adjustments to practices.

Some of the highlighted areas of greatest need, such as board and management oversight, articulation of risk appetite, and compensation practices, are potentially a result of the aforementioned imbalance between the stature and resources allocated to firms' revenue-generating businesses and those afforded to the reporting and control functions. Other areas, such as risk aggregation and concentration identification, stress testing, and credit and counterparty risk management, can also be attributed to the weak condition of many firms' IT infrastructure. While considered central to sound firm governance and risk management, the areas of continued improvement addressed here are not exhaustive. Firms and supervisors have identified a broad range of remediation needs in addition to these areas, many of which are addressed in the SSG's first report. Additionally, the relevance and priority of improvement needs noted below may differ across institutions.

1. Board Direction and Senior Management Oversight

- **Firms are generally undertaking adjustments to increase board and executive engagement and to strengthen the resources, stature, and authority of risk management; however, it is not yet clear whether these changes have contributed to stronger governance.**

Although firms reported that they had been operating for some time with a relatively high level of alignment with existing industry and supervisory expectations on governance, many have recently undertaken significant changes related to:

- increasing board and senior management engagement in risk management;
- improving risk reporting to the board and senior management;
- strengthening committee charters and the role of auditors and risk managers, including the chief risk officer's membership on management committees; and
- incorporating finance into the risk management processes.

Many changes that firms have undertaken are organizational and appear to have been relatively easy to implement. Less clear is whether these organizational changes will—without further effort—improve future governance practices.

While firms reported alignment with recommendations on the need for boards of directors to have technical expertise sufficient to understand risk management issues, the assessments provided little supporting information. Only a few firms offered clear evidence of improvements in their board members' financial or more specific banking business expertise, primarily noting recent appointments of new board members with such relevant knowledge. Several firms also discussed recent efforts to train board members to better understand complex risks through orientation, seminars,

Copyright © 2012 Association of Corporate Counsel

individual tutorials, modules, or the engagement of third parties.

Firms said they grappled with increased expectations for boards of directors. Several firms acknowledged that the increased accountability and expectations of board members are inconsistent with the historical depth of their interaction with the firm. Because of the greater demands on people assuming this role, some firms are concerned that knowledgeable and competent executives may be deterred from becoming board members. Several firms also suggested that the expanded expectations of board members appear increasingly to overlap with responsibilities assigned to firm management.

Firms indicated that they are reviewing closely the processes by which chief executives, other senior officers, and the board of directors engage in risk management. Some firms are observing increased rigor and sophistication in the dialogue taking place at senior levels about risk management practices.

Virtually all firms have strengthened their risk management functions. Having gained a better understanding of the costs of failure, boards of directors and senior managers have given their risk management functions greater resources, independence, authority, and influence.

Organizational changes have focused on strengthening the chief risk officer position, with the introduction of more independent reporting lines, greater stature and authority on management and other committees, and, at a number of firms, direct involvement in business line compensation decisions. At most firms, risk management personnel assigned to business lines now formally report to the firm's chief risk officer and, in many cases, retain a weaker, "dotted-line" reporting responsibility with the business line executive. A few outlier firms, however, have yet to sever the joint reporting lines of risk management personnel to both the business line and the independent risk management function.

2. Articulating Risk Appetite

- **Supervisors see insufficient evidence of board involvement in setting and monitoring adherence to firms' risk appetite.**
- **Risk appetite statements are generally not sufficiently robust; such statements rarely reflect a suitably wide range of measures and lack actionable elements that clearly articulate firms' intended responses to losses of capital and breaches in limits.**

Most firms acknowledged some need for improvement in their procedures for setting and monitoring risk appetite. While boards of directors reportedly approve risk appetites and strategies as articulated by management, most firms did not present much evidence of active board involvement in overseeing the setting or monitoring of the company's risk appetite or of board understanding of the firm's current risk position relative to its risk appetite. In several cases, firms admitted a disparity between the risks that the firm took and those that the board perceived it to be taking. Many firms indicated that they are in the process of revamping the way information is presented to their boards.

Firms said they were expanding the range of metrics for measuring risk appetite. Several firms that had previously calibrated limits to capital metrics were now focusing more on the level of quarterly earnings. Conversely, other firms were now paying more attention to "tail risks." These additional areas of focus, as well as the intense market interest in financial institutions' risk profiles since the onset of the crisis, underscore the need for firms to apply multiple measures of risk appetite, to develop a range of perspectives, and to consider a broad distribution of possible outcomes. These changes also suggest a need for firms to consider further what management actions are realistically feasible for restoring capital or reducing risk in adverse environments.

Many firms acknowledged that a conditional value-at-risk measure, using historical volatilities and correlations over a short period, does not generate the extreme outcomes necessary for the estimation and allocation of capital. Most firms are reviewing their use of economic capital risk measurement models in the wake of the crisis as well as expanding their use of these models. At least one firm said it has increased its internal charges on trading assets relative to the same position held on the banking book.

Supervisors view board direction as critical to sustaining a disciplined risk appetite for the firm when faced with market demands for increased risk taking. While the industry has not settled on a common way of expressing risk appetite, supervisors do see particular opportunities for needed improvement, which firms have undertaken to varying degrees:

- firms rarely compile for their boards and senior management relevant measures of risk (for example, based on economic capital or stress tests), a view of how risk levels compare with limits, the level of capital that the firm would need to maintain after sustaining a loss of the magnitude of the risk measure, and the actions that management could take to restore capital after sustaining a loss;

Copyright © 2012 Association of Corporate Counsel

- few boards are willing to address risk appetite in a manner that not only clearly articulates individual risk limits but expresses the sum total of these limits as an overall risk appetite for the firm;
- firms' risk appetite statements often lack actionable elements that reflect their intended response to a range of possible events, such as a loss of capital or a breach of limits;
- few firms present their boards with a dynamic, or "flow," view of the capital account that details the sources of capital generation as well as the proposed uses of capital.

3. Compensation Practices

- **Most firms recognize that past compensation practices were driven by the need to attract and retain staff and were often not integrated within firms' control environments.**
- **Firms note the need to align better compensation with the risk appetite and are considering initial steps in this direction.**
- **Supervisors are concerned about the durability of proposed changes.**

Most firms recognized the need to improve incentive and compensation policies. Many indicated in self-assessments and subsequent interviews that they were working toward that goal. For example, one firm determined that there was a lack of corporate oversight of compensation plans. Upon review, the firm found that it had more than 150 different plans, and set a goal of substantially reducing this number. This firm's risk management function reviewed all of its compensation programs and found that incentives were in some cases misaligned, with no adequate deferral or claw-back arrangements. (The claw-back is an explicit statement by management that some portion of deferred compensation granted may be withdrawn prior to vesting, at the discretion of management.)

Firms undertaking these changes suggested that the incentives created by industry compensation practices were key contributors to the failure to ensure that the risk taken was properly controlled. In addition, they said compensation practices were inconsistent with the earning power and capital of the business and that competition to retain people led to some of this inconsistency.

Other firms, particularly a few that have fared comparatively well over the last two years, remained relatively comfortable with their compensation practices and saw little need for change. These firms cited industry competition for talent as an obstacle to change. They believed that modifying compensation practices to be more conservative would lead to competitive disadvantages.

All firms, however, felt that compensation incentives needed to be reconsidered as part of the firm's control framework. Firms appeared to be exploring changes to all components of their compensation regimes: the accrual of bonus pools, allocation of pools to business units and individuals, and the form of compensation paid out, with a goal of better aligning practices with control objectives. Some frequently noted issues were:

- Historical compensation arrangements were generally not sensitive to risk and skewed incentives to maximize revenues. Firms generally acknowledged, and supervisors agreed, that compensation practices have been insensitive to the levels of risk taken to generate income and to costs associated with the long-term commitment of funds required to hold illiquid assets. Firms largely acknowledged that current compensation practices, or those in place prior to the crisis, created strong incentives to maximize revenues rather than risk-, capital-, and liquidity-adjusted earnings.
- Accrual of compensation pools historically did not reflect all appropriate costs. In many cases, industry practice previously defined the pool of funds available for distribution as incentive compensation in any year to be a simple percentage accrual of net revenues, excluding many expenses and the costs of liquidity and capital. Several firms indicated that aggregate incentive compensation pools will no longer represent a simple accrual of top-line revenues but instead will be a function of the bottom-line return on risk the firm achieves. Others indicated that they would now base the aggregate pool on profit and use net income, rather than net revenue, for accruals.
- Individual performance measurement schemes have often not reflected true economic profits, adjusted for known costs and uncertainty. At many firms, performance measurement schemes used to distribute the bonus pool did not incorporate the costs of the capital and liquidity employed in the generation of revenue. Moreover, revenues contributing to performance measurement schemes were often specifically constructed by management and, in some cases, excluded material risks to the firm. In other cases, future potential revenues whose realization

Copyright © 2012 Association of Corporate Counsel

remained highly uncertain were incorporated into current-year performance income.

As a result, firms are considering changes to their practices:

- Recognizing these weaknesses, most firms that had not integrated performance measurement schemes with the costs of liquidity and capital were now implementing these practices. Firms said they were developing the transfer pricing mechanisms to ensure that internal performance measurement schemes included both the cost of capital employed in the generation of revenues and the cost of funds consistent with the liquidity of the positions funded. Liquidity surcharges based on the characteristics of positions funded were to be added to the transfer-priced cost of funds.
- Some firms found that performance evaluations lacked the input of control functions, a practice that the firms are now looking to change. The chief risk officer is now involved directly in business-line compensation decisions at a number of firms. Additionally, certain firms are now engaging risk or compliance personnel in compensation decisions at the sub-business level.
- Deferred compensation plans are being reviewed by firms with an eye toward longer vesting and distribution periods, although views on the effectiveness of deferred compensation measures varied. Some firms were exploring extending the length of the deferral beyond the conventional two-to-three-year period. One firm stated that executive compensation should have a deferral component that mimics the tail risk assumed by the firm. However, some firms felt that the deferred vesting and delivery of some portion of compensation in the form of restricted stock or stock options has had little impact on individual bankers and traders beyond motivating retention.
- Several firms have attempted to align compensation with longer term performance by implementing a claw-back provision in deferred compensation as a standard part of their compensation practices. Where claw-back provisions existed in the past, they were typically very limited, that is, to cases of material misstatement or illegal activities. Firms considering expanded use of claw-backs are working to develop standards for when a claw-back may be invoked.

4. Information Technology Infrastructure

- **The importance of a resilient IT environment with sufficient processing capacity in periods of stress is becoming increasingly evident.**
- **Firms are constrained in their ability to effectively aggregate and monitor exposures across counter-parties, businesses, risk strands, and other dimensions because of ineffective information technology and supporting infrastructure.**

Many firms, in their self-assessment submissions and in subsequent discussions, said they are making considerable investments in risk management infrastructure. Many projects, however, are in the planning stages or in the infancy of execution, with significant work remaining.

One challenge to improving risk management systems has been poor integration resulting from multiple mergers and acquisitions. One firm suggested that acquisitions over the years have produced an environment in which static data are largely disaggregated. Another firm echoed this view, reporting that certain products and lines of business have not been included in data aggregation and analysis processes. A third firm reported that having two systems for the same business results in duplication of processes.

Another critical infrastructure concern during recent market events was the ability of firms to process record-high volumes of product transactions during periods of market stress. Transactions in equities, foreign exchange, government securities, and other instruments spiked sharply during the market disruption, taxing some firms' systems. Proactive firms are responding to this challenge by adding capacity to key system platforms to ensure that they can process volumes well in excess of previous peak levels.

5. Risk Aggregation and Concentration Identification

- **Self-assessment responses suggest that identification of risk concentrations is an area of weakness; firms are looking to automate identification of concentrations by counterparty, product, geography, and other classes.**

Data aggregation remained a central issue limiting firms' risk management capabilities, most notably in the management of CCR. Many firms lacked the ability to aggregate exposures, particularly gross and net exposures to institutional counterparties, in a matter of hours. This challenge includes the aggregation of exposures at the legal entity level. A number of firms also experienced difficulties integrating credit and market risks at the enterprise level and evaluating the two jointly in a consistent manner. Fragmented infrastructure and an overreliance on manual data compilation were among the factors impairing firms' ability in this regard. In addition, firms noted "off-line" trades that were not captured

Copyright © 2012 Association of Corporate Counsel

in the main exposure model, but that represented a disproportionately large percentage of their overall measured CCR exposure. Excluding these "add-ons" diminishes the reliability of aggregate measures.

One firm noted that it had the ability to aggregate data to a *single* large counterparty within a day; however, during some periods in fall 2008, information was needed on a dozen or more counterparties that were of concern. Two-thirds of firms indicated that they were only partially aligned with regard to the capacity to estimate asset class concentrations and institutional counterparty exposures within hours.

Two-thirds of firms responded that they were only partially aligned with the recommendations that credit risks be viewed in aggregate, that consideration be given to the effects of correlations between exposures, and that counterparty risk consider the size and direction of positions a counterparty has with other firms. Many firms cited large-scale IT projects planned or under way to address these infrastructure and aggregation deficiencies. In the past, many such projects have fallen behind schedule because of inadequate investment and resources. In the current environment, these projects will require a significant dedication of funds, sponsorship, and commitment from the board and senior management during challenging economic times to ensure that technology platforms are constructed to handle unexpected spikes in volumes and to effectively produce aggregated data and appropriate management information for credit, liquidity, market, and other risk metrics.

6. Stress Testing

- **Firms report enhancements to and increased use of stress testing to convey risk to senior management and boards, although significant gaps remain in their ability to conduct firm-wide tests; credibility of extreme scenarios, despite recent events, remains an issue for some firms.**

Firms reported that they have been developing and implementing more robust stress-testing regimes and are placing a greater reliance on these tools. In contrast to the past, firms now report significant management "buy-in" to enhancements. According to the self-assessment results, most firms made some improvement in the frequency, flexibility, and number of scenarios and risk types in their stress testing as well as increased their senior management's involvement in stress-testing programs.

Nevertheless, interviews confirm that most respondents still do not have regular, robust, firm-wide stress tests. Many participants noted significant efforts under way to develop such tests. However, much of the progress to date appeared to be short-term and tactical in response to increased interest on the part of management and requests from firms' boards to conduct specific scenarios, as opposed to progress that is strategic and forward-looking.

While more firms now perform stress tests based on hypothetical scenarios, many others still do not have the necessary infrastructure to allow them to develop easily and consider forward-looking scenarios, representing a significant weakness for the industry as a whole. Even when forward-looking stress tests are conducted, the process is resource-intensive, owing to infrastructure limitations. Reverse stress testing, a forward-looking approach advocated in CRMPGIII (p. 84),[19] was reported to still be in its infancy; only two firms indicated that they run a reverse stress test designed to identify scenarios or risk factors that can cause a significant stress event for the firm or business line.

Firms repeatedly cited credibility as the primary criterion for stress and scenario analysis to influence management behavior, even after the events of September-October 2008. For this reason, the most common stress tests conducted have generally been those subjecting trading or credit accounts to extreme historic events. Still, some firms are relying increasingly on research and economic teams to forecast events that risk teams can then simulate.

7. Counterparty Risk Management

- **Flexibility in some firms' CCR management systems proved particularly valuable; in contrast, the inability of other firms' CCR systems to identify directional risk drivers limited these institutions' responsiveness to sharp changes in exposures.**

The range of significant counterparty concerns during the financial crisis illustrates the value of flexible risk systems that permit firms to "drill down" and understand how their exposures would react as market conditions change. The flexibility and drill-down capabilities of models and systems facilitate a nuanced understanding of specific risk drivers within particular exposures. In addition to risk monitoring, these capabilities enable firms to more effectively determine desired changes to their hedging in response to changes in risk exposure. Of note, firms that had well-developed systems in place were able to hedge or flatten risk proactively and were able to react quickly to sharp changes in exposures.

[19] See <http://www.crmpolicygroup.org/docs/CRMPG-III.pdf>.

Copyright © 2012 Association of Corporate Counsel

Firms still focus on current and potential exposure as the primary measures of CCR but, because of the crisis, they have been investing more heavily in counterparty stress-testing capabilities. The integration of stress testing as a meaningful concentration management tool will continue to be a focus going forward. In addition, some firms are developing other measures of risk to complement potential exposure measures and stress testing, but these efforts are still nascent and in some cases informal. Many firms recognize that potential exposure and stress-testing measures are not designed to capture all forms of counterparty credit risk. In response, they place value on utilizing additional risk analysis, such as crowded trade analysis, wrong-way risk identification, jump-to-default loss estimations, and credit valuation adjustment sensitivities.

8. Valuation Practices and Loss Recognition

- **The loss of confidence among creditors, counterparties, and clients in firms' valuation practices for certain assets during the crisis contributed directly to the withdrawal of funding and other liquidity drains on firms in varying forms.**
- **Many firms are reviewing the oversight of their valuation function and working to increase the rigor of processes associated with, for example, enforcing uniform pricing across the firm, valuing models, and escalating valuation disputes; nonetheless, substantial work remains for firms to adhere to industry standards for valuation practices.**

From a risk management and governance perspective, the finance department plays an essential corporate control role in underpinning the effectiveness of valuation practices and robust loss recognition. Several firms expressed agreement that the finance department, and the areas responsible for carrying out key valuation processes, must be independent and maintain sufficient stature and influence in the firm. For example, several firms noted that if there is a difference in views between control and business personnel over a valuation in the absence of a clearly established, market-based price, escalation processes must be clear and the control function's view must ultimately prevail.

Based on the self-assessment results, most firms did have some mechanisms in place to enforce uniform pricing across legal entities and to decrease material valuation inconsistencies, yet some firms were uncertain that the same instrument held by different business units was marked at the same price. Multiple systems and valuation models with differing pricing sources for the same product set were obstacles to achieving consistency, according to firms.

Some firms cited issues in ensuring that price-sensitivity analysis was performed consistently and formally across all financial instruments. Several firms acknowledged that they did not devote sufficient analytical resources to checking valuations and making adjustments during periods of low liquidity and to establishing a specialized financial control staff to perform fundamental analysis of underlying positions and to enforce discipline internally in marking their assets to their established prices.

One firm has increased the rigor of its profit-and-loss explanation process. Risk management must now explain the profit and loss to senior management, complementing the traditional controller's explanation. This firm stated that risk managers have a different perspective than that of controllers and can better tie profit and loss to risk positions.

Based on the interviews, firms gained a new appreciation for the importance of timely recognition of losses. A lesson learned by some firms was to maintain and adhere as much as possible to asset disposal schedules, even if at less desirable prices, in order to reduce the likelihood of much larger losses.

9. Operations and Market Infrastructure

- **Firms are making substantial progress standardizing practices, reducing backlogs of unconfirmed OTC derivatives positions, and improving collateral management techniques.**
- **Notwithstanding the significant efforts by firms to mitigate risk, work remains to improve key personnel's detailed knowledge of financial market utilities and communication with settlement infrastructure providers.**

Many firms expressed a better appreciation for the operations and risk-reduction benefits provided by the financial market utilities. In light of the importance of payment and settlement, chief risk officers and other key decision-makers were working to refresh their knowledge of utilities such that, when institutions are informed of time-sensitive issues, they have a baseline understanding of the systems in question. A few firms stated that front-office and risk management personnel lacked sufficiently detailed knowledge of the processes of financial market utilities and that the firms were working to establish awareness at the staff

Copyright © 2012 Association of Corporate Counsel

and senior executive levels. Overall, firms cited the importance of effective communication between firms and settlement infrastructure providers.

In OTC derivatives, firms reported progress streamlining business processes toward the goal of same-day matching, adoption, and implementation of standard technology platforms as well as improving collateral management practices and reducing notional amounts of outstanding CDS transactions through portfolio compression.

On a positive note, as the SSG has previously reported, the processes around the resolution of Lehman's OTC derivatives book were far less disruptive than regulators and market participants had feared. Substantial industry efforts to standardize practices and reduce backlogs of unconfirmed positions appear to have significantly mitigated a substantial risk. Out of the approximately 900,000 Lehman OTC derivatives transactions, only a very few have been disputed to date, an indication that efforts to reduce unconfirmed trades have had a positive impact.

10. Liquidity Risk Management

- **As a result of lessons from the crisis, firms are making meaningful progress improving funding and liquidity risk management practices, but supervisors and some firms acknowledge that substantial work remains to align fully with industry standards.**

Almost all firms have sought to strengthen structures and processes to enhance firm-wide governance of liquidity. Firms have taken steps to improve the structure of their treasury, liquidity risk management, and related functions, and to enhance liquidity reporting and other forms of communication for the entire firm. Funds transfer pricing processes and many aspects of contingency planning are being enhanced. It is important to note that no firm's contingency plan proved fully effective during the crisis. Among a range of issues, firms found that stress scenarios should overlay firm-specific shocks with systemic shocks. Firms also learned that complex corporate structures, by constraining the flow of funds between legal entities, hindered their ability to effectively manage firm-wide funding needs during the crisis. Section III provides an elaborate discussion of firms' reported enhancements to funding and liquidity risk management practices as a result of lessons from the crisis.

Some of the changes that firms have made are among the more easily achievable enhancements, such as organizational efforts to improve the coordination and interaction between the treasury function, the risk management function, and the business lines. The extent to which such changes are formalized into policies and procedures—and more important, ingrained into the corporate culture—will determine their sustainability and effectiveness. Other structural changes—such as improvements to firms' liquidity reports, collateral management practices, and funds transfer pricing—are more resource- and time-intensive. Concerted discipline and commitment on the part of boards of directors, senior management, and supervisors will be required to undertake the IT infrastructure investments needed to support these changes and to continue to improve the robustness of these liquidity risk management systems.

Copyright © 2012 Association of Corporate Counsel

Appendix A

Self-Assessment: Firms' Reported Degree of Alignment with Recommendations and Observations of Industry and Supervisory Studies*

	Number of Firms			
Assessment Topic	Fully Aligned	Partially Aligned	Not Aligned	NA/NR
Governance				
Policies	20	0	0	0
Roles and responsibilities	20	0	0	0
Internal coordination and communication	20	0	0	0
Risk committee	19	1	0	0
Risk appetite	13	7	0	0
Incentives and compensation	14	4	0	2
Role of the chief risk officer	16	2	0	2
Resources	17	3	0	0
Identification and measurement				
Scope and procedures	10	10	0	0
Metrics	13	7	0	0
Monitoring	6	12	1	1
New products	7	11	1	1
Concentration risk	7	13	0	0
Counterparty risk				
Close-out practices	7	13	0	0
Risk monitoring and mitigation	9	11	0	0
Liquidity risk				
Funding and reserve management	17	3	0	0
Monitoring and planning	18	2	0	0
Transfer pricing	7	13	0	0
Market risk				
Valuations: Oversight, accountability, policies, and procedures	17	2	0	1
Valuations: Metrics and analysis	13	6	0	1
Trading patterns	12	4	0	4
Market infrastructure	10	7	0	3
Origination standards	15	3	0	2
Securitization and complex products				
Appropriate investors	12	4	0	4
Documentation	9	6	0	5
Risk management	12	7	0	1
Stress testing				
Scope of scenarios	7	13	0	0
Governance	10	9	0	1
Disclosure and transparency				
Prospectus disclosure	8	4	0	8
Standardization and increased transparency	11	5	0	4
Risk disclosure and transparency	16	3	0	1
Valuations disclosure and transparency	12	4	1	3

*Firms assessed their risk management practices as being fully aligned with (assigned a "3"), partially aligned with ("2"), not aligned with ("1"), or not applicable to (NA) the individual recommendations and observations underlying each assessment topic. NR indicates no response. Firms' overall alignment with each assessment topic is based on an average of their alignment with the individual recommendations and observations. In total, the self-assessment template included 188 recommendations and observations and 32 assessment topics. The results reported here are based on the firms' own assessments of their risk management practices. Some firms may have held themselves to a higher or lower standard than their peers in assessing the state of their controls.

Copyright © 2012 Association of Corporate Counsel

Appendix B

Members of the Senior Supervisors Group

CANADA

Office of the Superintendent of Financial Institutions

Kent Andrews
Chris Elgar
Ted Price
Mark White

FRANCE

Banking Commission

Didier Elbaum
Patrick Montagner
Guy Levy-Rueff
Frédéric Visnovsky

GERMANY

Federal Financial Supervisory Authority

Claudia Grund
Ludger Hanenberg

JAPAN

Financial Services Agency

Tomoko Amaya
Toshiyuki Miyoshi
Yu Ozaki
Yasushi Shiina

SWITZERLAND

Financial Market Supervisory Authority

Tim Frech
Roland Goetschmann
Daniel Sigrist

UNITED KINGDOM

Financial Services Authority

Andy Murfin
Nicholas Newland
Simon Stockwell

UNITED STATES

Board of Governors of the Federal Reserve System

Mary Arnett
Jon D. Greenlee

Federal Reserve Bank of New York

Arthur G. Angulo
Brian L. Peters
William L. Rutledge *(Chairman)*
Marc R. Saidenberg

Office of the Comptroller of the Currency

Mike Brosnan
Kathy E. Dick
Kurt Wilhelm

Securities and Exchange Commission

Denise Landers
Michael A. Macchiaroli

Secretariat

Alexa Philo, Morgan Bushey, Brian Begalle, Jeanmarie Davis, Clinton Lively, and Jainaryan Sooklal, all of the Federal Reserve Bank of New York, and Kerri Corn of the Office of the Comptroller of the Currency

Copyright © 2012 Association of Corporate Counsel

Glossary

Term	Definition*
2a-7 funds	2a-7 money market funds are U.S. open-end management investment companies that are registered under the Investment Company Act and regulated under Rule 2a-7 under the Act. Unlike other investment companies, 2a-7 funds are able to use the amortized cost method of valuing their portfolio securities rather than mark-to-market valuation, which allows them to maintain a stable net asset value, typically U.S. $1.00 per share.
Asset-backed commercial paper	A short-term investment that encompasses the use of a special purpose vehicle or conduit; the conduit serves as the commercial paper issuer. The commercial paper is backed by physical assets such as homes, automobiles, or other physical property.
Bid-back request	An investor's request to a borrower to unwind a transaction earlier than contractually agreed upon.
Break-the-buck	A condition that occurs when a money market fund determines to discontinue the use of the amortized cost method of valuing its portfolio securities and to reprice the fund's shares below $1.00 per share.
Claw-back	A provision in a law or contract that limits or reverses a payment or distribution for specified reasons.
Commingled funds	In securities lending, commingled funds refer to a pooling of cash collateral from multiple beneficial owners/lenders that is then used to purchase securities.
Contingency funding plan	A comprehensive plan that financial institutions have in place to maintain sufficient liquidity resources in a contingency scenario. Contingency funding plans typically include cash flow projections that estimate funding needs under adverse conditions, and should present courses of action for addressing unexpected short-, medium-, and long-term liquidity needs.
Credit default swap	An agreement between two parties in which the seller provides protection to the buyer against nonpayment of unsecured corporate or sovereign debt. The "protected" party pays an initial or ongoing scheduled fee in exchange for a guarantee that, if a bond/loan goes into default, the protection seller will provide compensation.
Credit valuation adjustment	The mark-to-market estimate of the counterparty credit risk from a firm's derivatives exposures.
CUSIP number	A number identifying all stocks and registered bonds, assigned by the Committee on Uniform Securities Identification Procedures (CUSIP). Brokers use a security's CUSIP number to obtain further information on the security; the number is also listed on trade confirmation tickets. The CUSIP system makes it easier to settle and clear trades. Foreign securities use a similar identification system: the CUSIP International Numbering System, or CINS.
Daylight exposure	Credit extended for a period of less than one day. In a credit transfer system with end-of-day final settlement, daylight credit in effect is extended by a receiving institution if it accepts and acts on a payment order even though it will not receive final funds until the end of the business day.
Free credit balance	The cash held by a broker in a customer's margin account that can be withdrawn by the customer at any time without restriction. This balance is calculated as the total remaining money in a margin account after margin requirements, short-sale proceeds, and special miscellaneous accounts are taken into consideration.
Funds transfer pricing	An internal cost-accounting system or methodology that transfers a cost-of-funds expense to profit centers that generate assets requiring funding and a funds credit to profit centers that provide funding.
Haircut	The percentage by which an asset's fair market value is reduced for the purpose of calculating lendable value/borrowing capacity.
Interbank deposit	Any deposit held by one bank for another bank. In most cases, the bank for which the deposit is held is known as the correspondent bank. The interbank deposit arrangement requires both banks to hold a "due to account" for the other.
Net asset value	An investment company's total assets minus its total liabilities.

*Based on publicly available and supervisory sources.

Copyright © 2012 Association of Corporate Counsel

Glossary *(Continued)*

Term	Definition*
Novation	An agreement to replace one party to a contract with a new one. The novation transfers rights as well as duties and requires the consent of both the original and new parties.
OTC derivatives market	The over-the-counter, or OTC, market where derivatives transactions are executed directly between two parties through a telephone or computer network, without use of an exchange. A derivative is a financial contract (usually a bilateral contract) whose value is derived from another asset, index, event, or condition.
Portfolio compression	A market-wide exercise to reduce the gross notional outstanding and trade population by eliminating offsetting trade positions within the same product types and across multiple counterparties. Portfolio compression thus reduces the counterparty credit exposure and operational risk attached to superfluous outstanding trade positions that offer no additional economic benefits. Currently, credit and interest rate derivatives have regular cycles for portfolio compression.
Prime brokerage	A service offered by securities firms to hedge funds and other professional investors. Prime brokerage may include execution/clearance of transactions, margin financing, centralized custody, securities lending, and other administrative services such as risk reporting. The growth of the hedge fund sector over the last decade was supported by concurrent growth in the prime brokerage business of the investment banks that service these funds.
Rehypothecation	A practice in which a prime broker can take control, and in some jurisdictions legal title, over a client's assets, subject to an obligation to return the same or economically similar assets at a future time. By taking legal title over the assets, the prime broker is free to utilize the assets as it sees fit, including the sale of such assets or the pledging of them as security for amounts borrowed from counterparties. In practice, rehypothecation rights are used by prime brokers to obtain secured funding to finance margin loans provided to clients; however, such rights also enable prime brokers to cross-fund other positions on a portfolio basis in certain circumstances. The secured funding obtained through rehypothecation rights enables a prime brokerage business to be largely self-financing, as loans to clients are funded through rehypothecation of client assets.
Repurchase agreement	An agreement between a seller and a buyer of securities in which the seller agrees to repurchase the securities at an agreed-upon price, usually at a stated time.
Reverse stress test	A stress test in which the starting point of the analysis is an assumption that over a short period of time, an institution incurs a very large, multi-billion-dollar loss. The analysis then works backward to identify how such a loss could occur given actual positions and exposures prevailing when the stress test was conducted. If the assumed loss were truly large, it is highly likely that the possible sequence of events producing the loss would entail elements of contagion or systemic forces. Thus, the reverse stress test is likely to require institutions to address issues that are not normally captured in stress tests.
Same-day matching	A process that occurs when parties to an OTC derivatives trade obtain legal confirmation of the transaction on the same day the trade is executed, also known as "T+0 matching" or "same-day confirmation." Same-day matching continues to be an operational efficiency goal for the post-trade processing of OTC derivatives.
Triparty repo	In a triparty repo model, a custodian bank helps to administer a repo (repurchase) agreement between two parties. An investor places its money with a custodian bank, which in turn lends it to another institution; assets are then pledged as collateral for the loan. The triparty agent is responsible for administration of the transaction, including collateral allocation, marking to market, and substitution of collateral. Both the lender and borrower of cash enter into these transactions to avoid the administrative burden of bilateral repos.
Upgrade trade	For less liquid securities financed on behalf of hedge fund clients, prime brokers may enter into upgrade trades. In such a trade, the less liquid securities are exchanged with certain stock lenders for more liquid securities that are then monetized by the prime broker through repurchase arrangements.
Value-at-risk	A measure of expected loss over a given time interval under normal market conditions at a specified confidence level.

*Based on publicly available and supervisory sources.

Copyright © 2012 Association of Corporate Counsel

Press Releases

FDIC Report Examines How An Orderly Resolution of Lehman Brothers Could Have Been Structured Under the Dodd-Frank Act

FOR IMMEDIATE RELEASE
April 18, 2011

Media Contact:
Andrew Gray (202) 898-7192
E-mail:

The FDIC on Monday released a report examining how the FDIC could have structured an orderly resolution of Lehman Brothers Holdings Inc. under the orderly liquidation authority of Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act had that law been in effect in advance of Lehman's failure.

The report concludes that the powers provided to the FDIC under the Dodd-Frank Act to act decisively to preserve asset value and structure a transaction to sell Lehman's valuable operations to interested buyers -- which are drawn from those long used by the FDIC in resolving failing banks -- could have promoted systemic stability while recovering substantially more for creditors than the bankruptcy proceedings -- and at no cost to taxpayers. The report estimates that given the substantial, though declining, equity and subordinated debt of Lehman in September 2008 and the power for the FDIC to implement a prompt structured sale while providing short-term liquidity to continue value-adding operations, general unsecured creditors could have recovered 97 cents on every $1 of claims, compared to the estimated 21 cents on claims estimated in the most recent bankruptcy plan of reorganization. While there remains no doubt that the orderly liquidation of Lehman would have been incredibly complex and difficult, the report concludes that it would have been vastly superior for creditors and systemic stability in all respects to the bankruptcy process as it was applied.

FDIC Chairman Sheila C. Bair said, "This new report is an important step in ensuring that the public and market participants understand how the FDIC's new resolution authority for large systemic firms works. The powers to implement an FDIC liquidation of a systemic financial company during a future crisis give us the tools to end Too Big to Fail and eliminate future bailouts. Much work remains to be done, and we look forward to working with key stakeholders to ensure that this process is effective in achieving its goals. The Lehman failure provides an excellent model to contrast the tools available to the FDIC to effectuate an orderly resolution of a large financial institution against the process used in bankruptcy which, unlike our process, is not specifically designed to deal with the failure of a financial entity. I commend the professional staff for completing this comprehensive and rigorous analysis. It will add tremendous value to the public understanding of the FDIC's resolution process under Dodd-Frank."

Lehman's bankruptcy filing on September 15, 2008, was a signal event of the financial crisis. The disorderly and costly nature of the bankruptcy -- the largest financial bankruptcy in U.S. history -- contributed to the massive financial disruption of late 2008. The lengthy bankruptcy proceeding has allocated resources elsewhere that could have otherwise been used to pay creditors. Through February 2011, more than $1.2 billion in fees have been charged by attorneys and other professionals principally for administration of the debtor's estate.

Copyright © 2012 Association of Corporate Counsel

The FDIC report concludes that Title II of the Dodd-Frank Act could have been used to resolve Lehman by effectuating a rapid, orderly and transparent sale of the company's assets. This sale would have been completed through a competitive bidding process and likely would have incorporated either loss-sharing to encourage higher bids or a form of good firm-bad firm structure in which some troubled assets would be left in the receivership for later disposition. Both approaches would have achieved a seamless transfer and continuity of valuable operations under the powers provided in the Dodd-Frank Act to the benefit of market stability and improved recoveries for creditors. As required by the Dodd-Frank Act, there would be no exposure to taxpayers for losses from Lehman's failure.

The powers provided under the Dodd-Frank Act are critical to these results. Among the critical powers highlighted in the report are the following:

- **Advance resolution planning:** The resolution plans, or living wills, mandated under Title I of the Dodd-Frank Act would have required Lehman to analyze and take action to improve its resolvability and would have permitted the FDIC, working with its fellow regulators, to collect and analyze information for resolution planning purposes in advance of Lehman's impending failure.
- **Domestic and International Pre-planning:** The Lehman resolution plan would have helped the FDIC and other domestic regulators better understand Lehman's business and how it could be resolved. This would have laid the groundwork for continuing development of improved Lehman-specific cross-border planning with foreign regulators to reduce impediments to crisis coordination.
- **Source of Liquidity:** A vital element in preserving continuity of systemically important operations is the availability of funding for those operations. The FDIC could have provided liquidity necessary to fund Lehman's critical operations to promote stability and preserve valuable assets and operations pending the consummation of a sale. These funds are to be repaid from the receivership estate with the shareholders and creditors bearing any loss. By law, taxpayers will not bear any risk of loss.
- **Speed of Execution:** The FDIC would conduct due diligence, identify potential acquirers and troubled assets, determine a transaction structure and conduct sealed bidding – all before Lehman ever failed and was put into receivership under Title II. A suitable acquirer would be ready to complete the acquisition at the time of Lehman's failure. A critical element in quickly completing a transaction is the power, provided by the Dodd-Frank Act, to require contract parties to continue to perform under contracts with the failed financial company so long as the receiver continues to perform. This is particularly critical to avoid the lost value, as exemplified in the Lehman bankruptcy, when counterparties immediately terminate and net financial contracts and liquidate valuable collateral.
- **Flexible transactions:** The FDIC's bidding structure would provide potential acquirers with the flexibility to bid on troubled assets (e.g., questionable real estate loans) or leave them behind in the receivership. Similarly, creditors could receive advance dividends (i.e., partial payment on their claims) to help move money back out into the market and further promote financial stability. Advance dividends would not be provided if they would expose the receivership to loss.

These powers would enable the FDIC to act to preserve the financial stability of the United States and to maximize value for creditors by preserving franchise value and by rapidly moving proceeds into creditors' hands.

The very availability of a comprehensive resolution system, which sets forth in

Copyright © 2012 Association of Corporate Counsel

advance the rules under which the government will act following the appointment of a receiver, could have helped to prevent a "run on the bank" and the resulting financial instability.

The report was prepared using publicly available information about the events leading up to and following the filing of the Lehman bankruptcy petition. The report was prepared by FDIC staff from the Division of Insurance and Research, Office of Complex Financial Institutions, and the Legal Division.

The full report can be found here: http://www.fdic.gov/bank/analytical/quarterly/2011_vol5_2/lehman.pdf (PDF Help)

The FDIC's actions to date on the implementation of Dodd-Frank can be found here: http://www.fdic.gov/regulations/reform/

###

Congress created the Federal Deposit Insurance Corporation in 1933 to restore public confidence in the nation's banking system. The FDIC insures deposits at the nation's 7,760 banks and savings associations and it promotes the safety and soundness of these institutions by identifying, monitoring and addressing risks to which they are exposed. The FDIC receives no federal tax dollars – insured financial institutions fund its operations.

FDIC press releases and other information are available on the Internet at www.fdic.gov, by subscription electronically (go to www.fdic.gov/about/subscriptions/index.html) and may also be obtained through the FDIC's Public Information Center (877-275-3342 or 703-562-2200).
PR-76-2011

Copyright © 2012 Association of Corporate Counsel

Feature Article:

The Orderly Liquidation of Lehman Brothers Holdings Inc. under the Dodd-Frank Act

Introduction

The bankruptcy filing of Lehman Brothers Holdings Inc. (Lehman or LBHI) on September 15, 2008, was one of the signal events of the financial crisis. The disorderly and costly nature of the LBHI bankruptcy—the largest, and still ongoing, financial bankruptcy in U.S. history—contributed to the massive financial disruption of late 2008. This paper examines how the government could have structured a resolution of Lehman under the orderly liquidation authority of Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) and how the outcome could have differed from the outcome under bankruptcy.

The Dodd-Frank Act grants the Federal Deposit Insurance Corporation (FDIC) the powers and authorities necessary to effect an orderly liquidation of systemically important financial institutions. These authorities are analogous to those the FDIC uses to resolve failed insured depository institutions under the Federal Deposit Insurance Act (FDI Act).[1] The keys to an orderly resolution of a systemically important financial company that preserves financial stability are the ability to plan for the resolution and liquidation, provide liquidity to maintain key assets and operations, and conduct an open bidding process to sell the company and its assets and operations to the private sector as quickly as practicable. The FDIC has developed procedures that have allowed it to efficiently use its powers and authorities to resolve failed insured institutions for over 75 years. The FDIC expects to adapt many of these procedures, modified as necessary, to the liquidation of failed systemically important financial institutions.

The Events Leading to the Lehman Bankruptcy

Background

The events leading up to Lehman's bankruptcy are documented in a number of books and articles; but perhaps most extensively in two documents: the Report of Anton R. Valukas, Examiner, Bankruptcy of Lehman Brothers Holdings Inc., and the Trustee's Preliminary Investigation Report of the Attorneys for James W. Giddens, Trustee for the Securities Investors Protection Act (SIPA) Liquidation of Lehman Brothers, Inc. The analysis in this paper assumes that the events leading up to Lehman's bankruptcy filing took place roughly as described in these two reports.

Prior to 2006, Lehman had been described as being in the "moving business," primarily originating or purchasing loans and then selling them through securitizations.[2] Beginning in 2006, the firm shifted to an aggressive-growth business strategy, making "principal" investments in long-term, high-risk areas such as commercial real estate, leveraged lending and private equity. Even as the sub-prime crisis grew, the firm continued its rapid growth strategy throughout 2007.

At the beginning of 2008, with no end of the sub-prime crisis in sight, Lehman again revised its business strategy and began the process of deleveraging. However, by the end of the first quarter of 2008, the firm had made no substantial progress in either selling assets or in raising large amounts of equity. Richard S. Fuld, Jr., Lehman's CEO, told the Examiner that he had decided that Lehman would not raise equity unless it was at a premium above book value.[3]

After Bear Stearns failed and was purchased by JPMorgan Chase on March 15, 2008, Lehman was seen by many as the next most vulnerable investment bank.[4] At this time, Lehman began raising equity and seeking investment partners. In late March, Lehman contacted Warren E. Buffett, unsuccessfully seeking an investment from either Mr. Buffett or one of Berkshire Hathaway's subsidiaries. At the beginning of April, Lehman completed a $4 billion convertible preferred stock issuance. In late May, Lehman began talks with a consortium of Korean banks, but no deal was reached. On June 7, Lehman announced a $2.8 billion loss for the

[1] 12 U.S.C. § 1811 *et seq.*

[2] Anton R. Valukas, *Examiner's Report: Bankruptcy of Lehman Brothers Holdings Inc.*, Vol. 2, 43, (Mar. 11, 2010) (hereinafter, Examiner's Report).

[3] *Id.* at 150–52. Lehman did raise capital at a later date. Presumably more could have been raised at this time if Lehman had been willing to consider less favorable terms to the then-current shareholders.

[4] *Id.* at 612–13.

Copyright © 2012 Association of Corporate Counsel

second quarter and on June 12 it raised $6 billion in preferred and common stock, resulting in $10 billion in the aggregate of new capital for the second quarter of 2008.

By mid-June, Lehman recognized that its commercial real estate portfolio was a major problem and began to develop a "good bank-bad bank" plan to spin off the portfolio. It identified $31.6 billion in assets that would be placed in a so-called bad bank to be named SpinCo, which would reduce Lehman's balance sheet and shed risky assets. For a number of reasons, the plan never came to fruition.[5]

Although the consortium of Korean banks withdrew from negotiations, one of the consortium's banks, the government-owned Korean Development Bank (KDB), continued to express an interest in buying or making a substantial investment in Lehman. The talks between Lehman and KDB went through a number of iterations, with KDB becoming increasingly concerned about Lehman's risky assets. In August, KDB proposed an investment in a "Clean Lehman," where all risk of future losses (risky assets) would be spun off from Lehman. By late August, KDB decided that the deteriorating global financial situation and the declining value of Korea's currency made that transaction too problematic and withdrew from further negotiations.[6]

In July 2008, Lehman contacted Bank of America with a proposal whereby Bank of America would buy a 30 percent interest in LBHI, but the discussions never culminated in a transaction. In late August, Lehman again contacted Bank of America, this time about helping finance SpinCo. Lehman subsequently asked Bank of America to consider buying the entire firm, but Bank of America did not pursue a transaction.

MetLife had also been in contact with Lehman about a possible purchase. MetLife began due diligence in early August, but decided within a few days that Lehman's commercial real estate and residential real estate assets were too risky. Also in August, the Investment Corporation of Dubai explored a potential investment principally in Lehman's Neuberger Berman wealth and asset management business. Discussions ceased in early September.[7]

By the late summer of 2008, Lehman's liquidity problems were becoming acute. Lehman's urgent need to find a buyer was precipitated in part by panic in the financial markets following the two largest players in the U.S. mortgage market, Fannie Mae and Freddie Mac, being placed into conservatorship on September 7, 2008, and the ensuing devaluation of those institutions' common and preferred stock. On September 9, Treasury Secretary Henry M. Paulson, Jr. contacted Bank of America and asked it to look into purchasing Lehman.[8] During that conversation on September 9, Secretary Paulson informed Bank of America that the government would not provide any assistance.[9] Bank of America began due diligence, and on September 11 told Secretary Paulson that there were so many problems with the assets on Lehman's balance sheet that Bank of America was unwilling to pursue a privately negotiated acquisition. Secretary Paulson then told Bank of America that, although the government would not provide any assistance, he believed a consortium of banks could be encouraged by the government to assist Bank of America in an acquisition of Lehman by taking the bad assets in a transaction similar in certain respects to the 1998 rescue of Long-Term Capital Management.[10] Bank of America then agreed to continue to consider the purchase of Lehman. At various times in the following two days, Bank of America discussed its analysis of Lehman with the Treasury Department and concluded that Lehman had approximately $65-67 billion in commercial real estate and residential mortgage-related assets and private equity investments that it was unwilling to purchase in any acquisition without the government providing loss protection. Independently, on September 13, Merrill Lynch approached Bank of America and shortly thereafter Bank of America agreed to acquire Merrill Lynch.[11]

Lehman reported further losses on September 10, and announced plans to restructure the firm.[12] The panic also affected Lehman's trading counterparties, which began to lose confidence in the firm. Many of these counterparties withdrew short-term funding, demanded increasingly greater overcollateralization on borrowings or clearing exposures, demanded more collateral to cover their derivatives positions and subsequently began to move their business away from Lehman. Lehman's clearing banks also began to demand billions of dollars of additional collateral.

[5] *Id.* at 640–62.
[6] *Id.* at 668–81.
[7] *Id.* at 687–94.

[8] Henry M. Paulson, Jr., *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, 177 (2010) (hereinafter, *On the Brink*).
[9] *Id.* at 177, 184–85.
[10] *Id.* at 199–206.
[11] Examiner's Report at 696–703.
[12] Lehman Brothers Holdings Inc., Periodic Report on Form 8-K, Sept. 10, 2008.

Copyright © 2012 Association of Corporate Counsel

A final attempt at a sale of Lehman occurred on September 11, 2008, when Lehman was contacted by Barclays, a large U.K. commercial and investment bank.[13] Barclays commenced due diligence of Lehman on September 12 and soon identified $52 billion in assets that it believed Lehman had overvalued and that Barclays would not purchase as part of the transaction. As in the case of Bank of America, these assets were concentrated in commercial real estate, residential real estate, and private equity investments. For a variety of reasons, Barclays could not get immediate regulatory approval from the U.K. authorities and the transaction was abandoned on September 14.[14]

LBHI started work on a plan for an "orderly" wind-down. The plan estimated it would take six months to unwind Lehman's positions and made the assumption that the Federal Reserve Bank of New York would assist Lehman during the wind-down process.[15] On September 14, 2008, the Federal Reserve Bank of New York told LBHI that, without the Barclay's transaction, it would not fund Lehman.

Chapter 11 Filing

With no firm willing to acquire LBHI and without funding from the central bank, LBHI filed for Chapter 11 bankruptcy on September 15, 2008.[16] On that date, a number of LBHI affiliates also filed for bankruptcy protection and Lehman's U.K. broker-dealer, Lehman Brothers International (Europe) (LBIE), filed for administration in the United Kingdom. These events adversely affected the ability of Lehman's U.S. broker-dealer, Lehman Brothers Inc. (LBI), to obtain adequate funding and settle trades. LBI remained in operation until September 19, when it was placed into a SIPA liquidation.[17]

The Lehman bankruptcy had an immediate and negative effect on U.S. financial stability and has proven to be a disorderly, time-consuming, and expensive process.[18] Of Lehman's creditors, the one that experienced the most disruption was the Reserve Primary Fund, a $62 billion money market fund. On the day of the filing, the fund held $785 million of Lehman's commercial paper, representing 13.8 percent of the amount outstanding as of May 31, 2008.[19] The fund immediately suffered a run, facing redemptions of approximately $40 billion over the following two days. With depleted cash reserves, the fund was forced to sell securities in order to meet redemption requests, which further depressed valuations. The fund's parent company announced it would "break the buck" when it re-priced its shares at $0.97 on September 16, 2008. During the remainder of the week, U.S. domestic money market funds experienced approximately $310 billion in withdrawals, representing 15 percent of their total assets and eventually prompting the U.S. Treasury to announce a temporary guarantee of money market funds.[20]

LBHI's default also caused disruptions in the swaps and derivatives markets and a rapid, market-wide unwinding of trading positions for those financial markets contracts not subject to the automatic stay in bankruptcy. For example, LBHI's bankruptcy filing affected LBI's exposure in the commodities markets via its positions that settled on markets operated by CME Group. LBI's assets on CME Group markets were largely contracts to hedge risk for the energy business conducted in its other entities. LBHI typically was guarantor of the swap contracts of its subsidiaries and affiliates. For those derivative financial instruments for which LBHI acted as guarantor, the Chapter 11 filing of LBHI constituted a default under the International Swaps and Derivatives Association agreements governing the swaps, which had the effect of allowing termination of those trades. This left naked hedges and exposed LBI to considerable pricing risk since it was not able to offer both sides of the hedge when liquidating the portfolio.[21] Similarly, the Options Clearing Corporation (OCC) threatened to invoke its emergency clearing house rules which

[13] Similar to the case of Bank of America, Barclays contacted Lehman at Treasury's encouragement. Barclays and Bank of America were proceeding under similar expectations that there would not be any government assistance.

[14] Examiner's Report at 703–11 and *On the Brink* at 203–11.

[15] Examiner's Report at 720–21.

[16] LBHI filed for bankruptcy protection on Monday, September 15, 2008, at 1:30 am EDT. *Id.* at 726.

[17] LBHI's demise left LBI unable to obtain adequate financing on an unsecured or secured basis. LBI lost customers and experienced both an increase in failed transactions and additional demands for collateral by clearing banks and others. See *Trustee's Preliminary Investigation Report of the Attorneys for James W. Giddens, Trustee for the SIPA Liquidation of Lehman Brothers, Inc.*, 10, 25-26, 56.

[18] After more than two years in bankruptcy proceedings, total fees paid to advisers involved in the Lehman bankruptcy have exceeded $1 billion. *See* Liz Moyer, *Lehman Fees Hit $1 Billion and Counting*, Wall Street Journal, Nov. 23, 2010, *available at* http://online.wsj.com/article/SB20001424052748704243904575630653803513816.html.

[19] Lehman used November 30 as its year end for financial reporting purposes. Accordingly, May 31, 2008, was the date of the close of its second quarter financial period.

[20] *President's Working Group on Financial Markets: Money Market Fund Reform Options* (Oct. 2010), *available at* http://www.treasury.gov/press-center/press-releases/Documents/10.21%20PWG%20Report%20Final.pdf.

[21] SIPA Trustee Report Section V.B., p. 66.

Copyright © 2012 Association of Corporate Counsel

would allow it to liquidate all of LBI's positions unless a performing third party agreed to assume the positions. The Depository Trust & Clearing Corporation (DTCC) shared the same concerns as the CME Group and the OCC, and was unwilling to perform settlement and transfer functions for LBI unless a performing third party assumed all potential liability. When Barclays refused to assume the potential liability, the DTCC began liquidating LBI's positions as a broker-dealer whose membership had been terminated on September 22, 2008. Consequently, account transfer requests from customers that were already in process were canceled. The DTCC also reversed all account transfers that had taken place on September 19, 2008, a Friday. As a result, $468 million of customer assets that otherwise would have been immune from seizure were seized.[22] It was not until February 11, 2009, that a court order restored the reversed transactions.

Other unsecured creditors of LBHI are projected to incur substantial losses. Immediately prior to its bankruptcy filing, LBHI reported equity of approximately $20 billion; short-term and long-term indebtedness of approximately $100 billion, of which approximately $15 billion represented junior and subordinated indebtedness; and other liabilities in the amount of approximately $90 billion, of which approximately $88 billion were amounts due to affiliates. The modified Chapter 11 plan of reorganization filed by the debtors on January 25, 2011, estimates a 21.4 percent recovery for senior unsecured creditors. Subordinated debt holders and shareholders will receive nothing under the plan of reorganization, and other unsecured creditors will recover between 11.2 percent and 16.6 percent, depending on their status.[23]

Just prior to Lehman's bankruptcy filing, the firm had identified $31.6 billion in commercial real estate assets of questionable value. Potential acquirers of Lehman had identified additional problematic assets—for a total value between $50 billion and $70 billion. Even if there had been a total loss on these assets, which would have eliminated any shareholder and subordinated debt holder potential for recovery, a quick resolution of LBHI that maintained the operational integrity of the company including its systems and personnel could have left general unsecured creditors with substantially more value than projected from the bankruptcy. By preserving the going-concern value of the firm, creditors could have been provided with an immediate payment on a portion of their claims through either an advance dividend or the prompt distribution of proceeds from the sale of assets. The panic selling that ensued—further precipitating a decline in asset values and a decline in the value of collateral underlying the firm's derivatives portfolio—could have been avoided and markets would likely have remained more stable.

The Resolution and Receivership Process for Failed Banks

Resolution Process

The FDIC has been successful in using its authority under the FDI Act to maintain stability and confidence in the nation's banking system, including in the resolution of large, complex insured depository institutions. The FDIC, as receiver for an insured depository institution, is given broad powers and flexibility under the FDI Act to resolve an insured depository institution in a manner that minimizes disruption to the banking system and maximizes value. The FDIC is given similar tools to those under the Dodd-Frank Act to accomplish these goals, including the ability to create one or more bridge banks, enforce cross-guarantees among sister banks, sell and liquidate assets, and settle claims.

When an insured bank fails, the FDIC is required by statute to resolve the failed bank in the least costly way, to minimize any loss to the deposit insurance fund, and, as receiver, to maximize the return on the assets of the failed bank.[24] Banks and thrifts are typically closed by their chartering authority when they become critically undercapitalized and have not been successful in their plan to restore capital to the required levels.[25] The

[22] *Id.* at 73.

[23] Joseph Checkler, *Lehman's New Creditor Plan Doesn't Factor in Key Group,* Wall Street Journal, Jan. 27, 2011. The plan of reorganization is subject to approval by creditors.

[24] The FDIC is required, pursuant to 12 U.S.C. § 1823(c)(4), to resolve failed insured depository institutions in the manner that is least costly to the deposit insurance fund. The Dodd-Frank Act does not require that a least cost determination be made in respect of a covered financial company, though the FDIC is required, to the greatest extent practicable, to maximize returns and minimize losses in the disposition of assets. *See* section 210(a)(9)(E) of the Dodd-Frank Act, 12 U.S.C. § 5390(a)(9)(E).

[25] Some banks, particularly large banks, may also be closed due to a liquidity failure (an inability to pay debts as they become due).

Copyright © 2012 Association of Corporate Counsel

FDIC is then appointed receiver.[26] When structuring a bank resolution, the FDIC can pay off insured depositors and liquidate the bank's assets, sell the bank in whole or in part (a purchase and assumption transaction, or P&A), or establish a bridge institution—a temporary national bank or federal thrift—to maintain the functions of the failed bank during the process of marketing the bank's franchise. Senior management and boards of directors are not retained, and no severance pay or "golden parachutes" are permitted.

Final planning and marketing for a bank resolution normally begins 90–100 days prior to the institution being placed into receivership, though the process may be accelerated in the event of a liquidity failure. It begins when a bank's problems appear to be severe enough to potentially cause it to fail. During this period, the FDIC coordinates its actions—including the scheduling of the failure—with other regulators. When a bank becomes critically undercapitalized, the primary federal regulator (PFR) has up to 90 days to close the institution and appoint the FDIC as receiver. The FDIC and the PFR require that the bank seek an acquirer or merger partner, and insist that top management responsible for the bank's failing condition leave in order to improve the prospects for such, before the FDIC has to exercise its powers as receiver. The FDIC's authority to take over a failed or failing institution, thus wiping out stockholders and imposing losses on unsecured and uninsured creditors, not only provides an incentive for management to actively seek an acquirer, but also encourages the institution's board of directors to approve (or recommend for approval to shareholders) such transactions to avoid the risk of an FDIC receivership.

During this planning phase, the FDIC collects as much information as possible about the bank and structures the resolution transaction. This information assists the FDIC in determining the best transaction structures to offer potential acquirers. The FDIC also values bank assets and determines which assets may be particularly problematic for an acquiring institution and may need to be retained in the receivership for disposition after resolution or covered by some level of risk protection. Qualified bidders are contacted to perform due diligence, subject to a confidentiality agreement. Due diligence is offered both on-site and off-site through the use of secure internet data rooms. Bidders are then asked to submit bids on the basis of the transaction structures offered by the FDIC. The FDIC analyzes the bids received and accepts the bid that resolves the failed bank in the least costly manner to the deposit insurance fund. The least-cost requirement ensures that the deposit insurance fund will not be used to protect creditors other than insured depositors and prevents differentiation between creditors except where necessary to achieve the least costly resolution of the failed bank. Then, at the point of failure, the institution is placed into receivership and immediately sold—with the sale resulting in a transfer of deposits and assets that renders the process seamless to insured depositors. The FDIC is also able to make an immediate payment, or advance dividend, to uninsured creditors not assumed by the assuming institution based upon estimated recoveries from the liquidation.

The Orderly Liquidation of Covered Financial Companies

Introduction

Title II of the Dodd-Frank Act defines the framework for orderly resolution proceedings and establishes the powers and duties of the FDIC when acting as receiver for a covered financial company.[27] The policy goal of the Dodd-Frank Act is succinctly summarized in section 204(a) as the liquidation of "failing financial companies that pose a significant risk to the financial stability of the United States in a manner that mitigates such risk and minimizes moral hazard." Creditors and shareholders are to "bear the losses of the financial company" and the FDIC is instructed to liquidate the covered financial company in a manner that maximizes the value of the company's assets, minimizes losses, mitigates risk, and minimizes moral hazard.[28]

[26] As a receiver, the FDIC succeeds to the rights, powers, and privileges of the failed bank and its stockholders, officers, and directors. It may collect all obligations and money due to the institution, preserve and liquidate the institution's assets and property, and perform any other function of the institution consistent with its appointment as receiver. It has the power to sell a failed bank to another insured bank, and to transfer the failed bank's assets and liabilities without the consent or approval of any other agency, court, or party with contractual rights. The FDIC may also, as permitted by statute, repudiate contracts such as leases that are burdensome to the receivership and may rid the receivership of burdensome obligations. The FDIC operates its receiverships independently of the court or bankruptcy system, although certain of the FDIC's actions are subject to judicial review.

[27] A failed systemically important financial institution is deemed a covered financial company for purposes of Title II of the Dodd-Frank Act once a systemic determination has been made by the Secretary of the Treasury pursuant to section 203(b) thereof, 12 U.S.C. § 5383(b). *See* "—Appointment," *infra.*

[28] *See* sections 204(a)(1) and 210(a)(9)(E) of the Dodd-Frank Act, 12 U.S.C. §§ 5384(a)(1) and 5390(a)(9)(E).

Copyright © 2012 Association of Corporate Counsel

This section discusses the key provisions of Title II and highlights the differences between the resolution of a systemically important financial institution under Title II of the Dodd-Frank Act and a proceeding under the Bankruptcy Code.[29] What follows is a brief summary of the appointment process and five of the most important elements of the authority available to the FDIC as receiver of a covered financial company. Those five elements are: (i) the ability to conduct advance resolution planning for systemically important financial institutions through a variety of mechanisms similar to those used for problem banks (these mechanisms will be enhanced by the supervisory authority and the resolution plans, or living wills, required under section 165(d) of Title I of the Dodd-Frank Act); (ii) an immediate source of liquidity for an orderly liquidation, which allows continuation of essential functions and maintains asset values; (iii) the ability to make advance dividends and prompt distributions to creditors based upon expected recoveries; (iv) the ability to continue key, systemically important operations, including through the formation of one or more bridge financial companies; and (v) the ability to transfer all qualified financial contracts[30] with a given counterparty to another entity (such as a bridge financial company) and avoid their immediate termination and liquidation to preserve value and promote stability.[31]

Appointment

Under section 203 of the Dodd-Frank Act, at the Secretary of the Treasury's (Secretary) request, or of their own initiative, the Board of Governors of the Federal Reserve System (Federal Reserve) and the FDIC are to make a written recommendation requesting that the Secretary appoint the FDIC as receiver for a systemically important financial institution that is in default or danger of default.[32] The recommendation to place a broker or dealer, or a financial company in which the largest domestic subsidiary is a broker or dealer, into receivership is made by the Federal Reserve and the Securities and Exchange Commission (SEC), in consultation with the FDIC. Similarly, the recommendation to place an insurance company or a financial company in which the largest domestic subsidiary is an insurance company, is made by the Federal Reserve and Director of the newly established Federal Insurance Office, in consultation with the FDIC.

The Secretary is responsible for making a determination as to whether the financial company should be placed into receivership, and that determination is based on, among other things, the Secretary's finding that the financial company is in default or in danger of default; that the failure of the company and its resolution under otherwise applicable State or Federal law would have serious adverse consequences on the financial stability of the United States; and that no viable private sector alternative is available to prevent the default of the financial company.[33]

The Dodd-Frank Act provides an expedited judicial review process of the Secretary's determination. Should the board of directors of the covered financial company object to the appointment of the FDIC as receiver, a hearing is held in federal district court, and the court must make a decision on the matter within 24 hours. Upon a successful petition (or should the court fail to act within the time provided), the Secretary is to appoint the FDIC receiver of the covered financial company.[34]

Special Powers under Title II

Ability to Preserve Systemic Operations of the Covered Financial Company. The Dodd-Frank Act provides an efficient mechanism—the bridge financial company—to quickly preserve the going-concern value of the firm's assets and business lines. There are no specific

[29] 11 U.S.C. § 101 *et seq.*

[30] Generally, qualified financial contracts are financial instruments such as securities contracts, commodities contracts, forwards contracts, swaps, repurchase agreements, and any similar agreements. *See* section 210(c)(8)(D)(i) of the Dodd-Frank Act, 12 U.S.C. § 5390(c)(8)(D)(i).

[31] *See generally* section 165 of Title I of the Dodd-Frank Act, 12 U.S.C. § 5365 and "The Orderly Resolution of Covered Financial Companies—Special Powers under Title II—Oversight and Advanced Planning," *infra.*

[32] Upon a 2/3 vote by the boards of both the FDIC and the Federal Reserve, a written recommendation is delivered to the Secretary. The recommendation includes: an evaluation of whether the financial company is in default or is in danger of default; a description of the effect the failure of the financial company would have on U.S. financial stability; an evaluation of why a case under the Bankruptcy Code is not appropriate; an evaluation of the effect on creditors, counterparties, and shareholders of the financial company and other market participants, and certain other evaluations required by statute. *See* section 203(a)(2) of the Dodd-Frank Act, 12 U.S.C. § 5383(a)(2).

[33] *See* section 203(b) of the Dodd-Frank Act, 12 U.S.C. § 5383(b).

[34] *See* section 202(a)(1)(A) of the Dodd-Frank Act, 12 U.S.C. § 5382(a)(1)(A).

Copyright © 2012 Association of Corporate Counsel

parallel provisions in the Bankruptcy Code,[35] and therefore it is more difficult for a debtor company operating under Chapter 11 of the Bankruptcy Code to achieve the same result as expeditiously, particularly where circumstances compel the debtor company to seek bankruptcy protection before a wind-down plan can be negotiated and implemented. Where maximizing or preserving value depends upon a quick separation of good assets from bad assets, implementation delays could adversely impact a reorganization or liquidation proceeding.

The Dodd-Frank Act authorizes the FDIC, as receiver of a covered financial company, to establish a bridge financial company to which assets and liabilities of the covered financial company may be transferred.[36] Fundamental to an orderly liquidation of a covered financial company is the ability to continue key operations, services, and transactions that will maximize the value of the firm's assets and operations and avoid a disorderly collapse in the marketplace. To facilitate this continuity of operations, the receivership can utilize one or more bridge financial companies. The bridge financial company is a newly established, federally chartered entity that is owned by the FDIC and includes those assets, liabilities, and operations of the covered financial company as necessary to achieve the maximum value of the firm. Shareholders, debt holders, and other creditors whose claims were not transferred to the bridge financial company will remain in the receivership and will receive payments on their claims based upon the priority of payments set forth in section 210(b) of the Dodd-Frank Act. Like the bridge banks used in the resolution of large insured depository institutions,[37] the bridge financial company authority permits the FDIC to stabilize the key operations of the covered financial company by continuing valuable, systemically important operations.

[35] Similar to the FDIC's repudiation powers provided by section 210(c)(1) of the Dodd-Frank Act, 12 U.S.C. § 5390(c)(1), a bankruptcy trustee is authorized to reject certain contracts (which may be related to certain problem assets) of the debtor.

[36] *See* section 210(h) of the Dodd-Frank Act, 12 U.S.C. § 5390(h). There are statutorily imposed limitations upon the transfer of assets and liabilities from the receiver to the bridge financial company, including a prohibition against a bridge financial company assuming any liability that is regulatory capital of the covered financial company. *See* section 210(h)(1)(B)(i) of the Dodd-Frank Act, 12 U.S.C. § 5390(h)(1)(B)(i). Additionally, the liabilities transferred from a covered financial company to a bridge financial company are not permitted to exceed the assets so transferred. *See* section 210(h)(5)(F) of the Dodd-Frank Act, 12 U.S.C. § 5390(h)(5)(F).

[37] *See* 12 U.S.C. § 1821(n).

While the covered financial company's board of directors and the most senior management responsible for its failure will be replaced, as required by section 204(a)(2) of the Dodd-Frank Act,[38] operations may be continued by the covered financial company's employees under the strategic direction of the FDIC, as receiver, and contractors employed by the FDIC to help oversee those operations. These contractors would typically include firms with expertise in the sector of the covered financial company. In addition, former executives, managers and other individuals with experience and expertise in running companies similar to the covered financial company would be retained to oversee those operations.

A bridge financial company also provides the receiver with flexibility in preserving the value of the assets of the covered financial company and in effecting an orderly liquidation. The receiver can retain certain assets and liabilities of the covered financial company in the receivership and transfer other assets and liabilities, as well as the viable operations of the covered financial company, to the bridge financial company. The receiver may also transfer certain qualified financial contracts to the bridge financial company, as discussed below. The bridge financial company can operate until the receiver is able to stabilize the systemic functions of the covered financial company, conduct marketing for its assets and find one or more appropriate buyers.[39]

Transfer of Qualified Financial Contracts. Under the Bankruptcy Code, counterparties to qualified financial contracts with the debtor company are permitted to terminate the contract and liquidate and net out their position. The debtor company or trustee has no authority to continue these contracts or to transfer the contracts to a third party, absent the consent of the

[38] This may be contrasted with a typical Chapter 11 resolution, in which the management of the pre-insolvency institution will continue to manage the operations of the debtor institution.

[39] In 2008, the FDIC implemented a successful resolution of IndyMac Bank through a transaction involving a "pass-through conservatorship," which is similar to the utilization of a bridge financial company. The transfer of assets to a *de novo* institution, named IndyMac Federal Bank, and its subsequent sale to a private investor in 2009 enabled the FDIC to sell the core business intact. This was more efficient and less costly than a liquidation and retained the value of the institution's assets. As of January 31, 2009, IndyMac Federal Bank had total assets of $23.5 billion and total deposits of $6.4 billion. The assuming institution agreed to purchase all deposits and approximately $20.7 billion in assets at a discount of $4.7 billion. The FDIC retained the remaining assets for future disposition. *See* Press Release, FDIC, *FDIC Closes Sale of IndyMac Federal Bank*, Pasadena, California (March 20, 2009), *available at* http://www.fdic.gov/news/news/press/2009/pr09042.html.

Copyright © 2012 Association of Corporate Counsel

counterparty, after the debtor company's insolvency. A complex, systemic financial company can hold very large positions in qualified financial contracts, often involving numerous counterparties and back-to-back trades, some of which may be opaque and incompletely documented. A disorderly unwinding of such contracts triggered by an event of insolvency, as each counterparty races to unwind and cover unhedged positions, can cause a tremendous loss of value, especially if lightly traded collateral covering a trade is sold into an artificially depressed, unstable market. Such disorderly unwinding can have severe negative consequences for the financial company, its creditors, its counterparties, and the financial stability of the United States.

In contrast, the Dodd-Frank Act expressly permits the FDIC to transfer qualified financial contracts to a solvent financial institution (an acquiring investor) or to a bridge financial company.[40] In such a case, counterparties are prohibited from terminating their contracts and liquidating and netting out their positions on the grounds of an event of insolvency.[41] The receiver's ability to transfer qualified financial contracts to a third party in order for the contracts to continue according to their terms—notwithstanding the debtor company's insolvency—provides market certainty and stability and preserves the value represented by the contracts.[42]

By the time of the failure of the troubled financial company, most if not all of its qualified financial contracts would be fully collateralized as counterparties sought to protect themselves from its growing credit risk. As a result, it is likely that a transfer of qualified financial contracts to a third party would involve the transfer of fully collateralized transactions and not expose the receiver to risk of loss.[43] To the extent the derivatives portfolio included qualified financial contracts which were under-collateralized or unsecured, the FDIC, as receiver of the covered financial company, would determine whether to repudiate or to transfer those qualified financial contracts to a third party based upon the FDIC's obligation to maximize value and minimize losses in the disposition of assets of the entire receivership.

Funding. A vital element in preserving continuity of systemically important operations is the availability of funding for those operations. A Chapter 11 debtor operating under the Bankruptcy Code will typically require funds in order to operate its business—referred to as debtor-in-possession financing (DIP financing). Although the Bankruptcy Code provides for a debtor company to obtain DIP financing with court approval, there are no assurances that the court will approve the DIP financing or that a debtor company will be able to obtain sufficient—or any—funding or obtain funding on acceptable terms, or what the timing of such funding might be. For a systemically important financial institution, the market may be destabilized by any delay associated with negotiating DIP financing or uncertainty as to whether the bankruptcy court will approve DIP financing. Further, the terms of the DIP financing may limit the debtor's options for reorganizing or liquidating and may diminish the franchise value of the company, particularly when the DIP financing is secured with previously unencumbered assets or when the terms of the DIP financing grant the lender oversight approval over the use of the DIP financing.

The Dodd-Frank Act provides that the FDIC may borrow funds from the Department of the Treasury, among other things, to make loans to, or guarantee obligations of, a covered financial company or a bridge financial company to provide liquidity for the operations of the receivership and the bridge financial company. Section 204(d) of the Dodd-Frank Act provides that the FDIC may make available to the receivership funds for the orderly liquidation of the

[40] *See* section 210(c)(9) of the Dodd-Frank Act, 12 U.S.C. § 5390(c)(9).

[41] The exemption from the automatic stay under the Bankruptcy Code in the case of qualified financial contracts generally works well in most cases. However, for systemically important financial institutions, in which the sudden termination and netting of a derivatives portfolio could have an adverse impact on U.S. financial stability, the nullification of the *ipso facto* clause is needed. By removing a right of termination based solely upon the failure of the counterparty, the bridge financial company structure provides the flexibility to incentivize qualified financial contract counterparties to either maintain their positions in such contracts, or exit their positions in a manner which does not jeopardize U.S. financial stability.

[42] There are implications under the Dodd-Frank Act to transferring all of a covered financial company's qualified financial contracts to a bridge financial company in order to avoid such contracts' termination by their counterparties. As such contracts continue, following such transfer, to be valid and binding obligations of the bridge financial company (before being eventually wound down), the bridge financial company is required to perform the obligations thereunder, including in respect of meeting collateral requirements, hedging, and being liable for gains and losses on the contracts.

[43] Title VII of the Dodd-Frank Act, 15 U.S.C. § 8301 *et seq.*, contemplates requirements for increased initial and variation margin.

Copyright © 2012 Association of Corporate Counsel

covered financial company.[44] Funds provided by the FDIC under section 204(d) of the Dodd-Frank Act are to be given a priority as administrative expenses of the receiver or as amounts owed to the United States when used for the orderly resolution of the covered financial company, including, *inter alia*, to: (i) make loans to or purchase debt of the covered financial company or a covered subsidiary; (ii) purchase (or guarantee) the assets of the covered financial company or a covered subsidiary; (iii) assume or guarantee the obligations of a covered financial company or a covered subsidiary; and (iv) make additional payments or pay additional amounts to certain creditors. In the unlikely event that recoveries from the disposition of assets are insufficient to repay amounts owed to the United States, there will be a subsequent assessment on the industry to repay those amounts. By law, no taxpayer losses from the liquidation process are allowed.

Once the new bridge financial company's operations have stabilized as the market recognizes that it has adequate funding and will continue key operations, the FDIC would move as expeditiously as possible to sell operations and assets back into the private sector. Under certain circumstances the establishment of a bridge financial company may not be necessary, particularly when the FDIC has the ability to pre-plan for the sale of a substantial portion of the firm's assets and liabilities to a third party purchaser at the time of failure.

The rapid response, preservation of systemically important operations and immediate funding availability under the Dodd-Frank Act may be expected to provide certainty to the market, employees, and potential buyers. This promotes both financial stability and maximization of value in the sale of the assets of the covered financial company.

Advance Dividends and Prompt Distributions. The FDIC, as receiver for a covered financial company, satisfies unsecured creditor claims in accordance with the relevant order of priorities set forth in section 210(b) of the Dodd-Frank Act. To provide creditors with partial satisfaction of their claims as expediently as practicable, the FDIC, as receiver, is able—though not required—to make advance dividends to unsecured general creditors based upon expected recoveries. The FDIC may use funds available to the receivership, including amounts borrowed as discussed above under "—Funding," to make these advance dividends in partial satisfaction of unsecured creditor claims.[45] These advance dividends would be made at an amount less than the estimated value of the receivership assets so as not to leave the receivership with a deficit in the event the realized value is less than the expected value of the liquidation.

The FDIC, as receiver, also makes periodic distributions to unsecured creditors from the sale of assets. Accordingly, an unsecured creditor will not be required to wait until all claims are valued, or until all assets are disposed of, before receiving one or more substantial payments on his claim. The ability promptly to provide creditors with partial satisfaction of claims following the failure of a covered financial company serves the Title II mandate of mitigating systemic impact, particularly in the case of key counterparties. The FDIC has successfully provided advance dividends to unsecured creditors (including uninsured depositors) and distributions from the sale of assets to unsecured creditors in the resolution of insured depository institutions under the FDI Act to quickly move funds to claimants and to help to stabilize local markets.

In large, complex bankruptcy cases such as Lehman, a creditor may not receive any payment on his claim for a considerable period of time following the commencement of the bankruptcy case. One reason for this is that it often takes a great deal of time to establish both the size of the pool of assets available for general unsecured creditors and the legitimate amounts of the claims held by such creditors. Litigation is typically needed to establish both of these numbers, which can require years of discovery followed by trial, then more years of appeals and remands.

If sufficient certainty can be attained regarding a portion of the claims, the Chapter 7 trustee will peti-

[44] The FDIC may issue or incur obligations pursuant to an approved orderly liquidation plan (up to 10 percent of the total consolidated assets of the covered financial company) and pursuant to an approved mandatory repayment plan (up to 90 percent of the fair value of the total consolidated assets of the covered financial company that are available for repayment). *See* section 210(n)(6) and (9) of the Dodd-Frank Act, 12 U.S.C. § 5390(n)(6) and (9). To the extent that the assets in the receivership are insufficient to repay Treasury for any borrowed funds, any creditor who received an additional payment in excess of what other similarly situated creditors received, which additional payment was not essential to the implementation of the receivership or the bridge financial company, may have the additional payment clawed back. See section 210(o)(1)(D)(i) of the Dodd-Frank Act, 12 U.S.C. § 5390(o)(1)(D)(i). This provision is consistent with Title II's directive to minimize moral hazard. To the extent that the clawbacks of additional payments are insufficient to repay Treasury for any borrowed funds, the FDIC is required to assess the industry. *See* section 210(o)(1)(B) of the Dodd-Frank Act, 12 U.S.C. § 5390(o)(1)(B).

[45] Amounts which may be borrowed from the Department of the Treasury are based upon the assets, or assets available for repayment, of the covered financial company. *See* footnote 44, *supra*.

Copyright © 2012 Association of Corporate Counsel

tion the court for permission to make an interim distribution, or the Chapter11 trustee or debtor-in-possession will provide in the plan of reorganization or plan of liquidation for interim distributions as various stages of the restructuring are reached.[46] However, except in the case of "prepackaged" plans of reorganization, even an interim distribution can take months or years to materialize. In the case of LBHI, there has been no distribution to general unsecured creditors more than two years after LBHI's initial bankruptcy filing.

Oversight and Advanced Planning. An essential prerequisite for any effective resolution is advance planning, a well-developed resolution plan, and access to the supporting information needed to undertake such planning.

Bankruptcy proceedings are typically challenging in the case of systemically important financial institutions in part because the participants have little notice or opportunity for advance preparation or coordination. The bankruptcy court, which must approve actions by the debtor outside of the ordinary course of business, may have little or no knowledge about the systemically important financial institution, and would have to rely upon the management of such institution for requisite information.

Title I of the Dodd-Frank Act significantly enhances regulators' ability to conduct advance resolution planning in respect of systemically important financial institutions through a variety of mechanisms, including heightened supervisory authority and the resolution plans, or living wills, required under section 165(d) of Title I of the Dodd-Frank Act.[47] The examination authority provided by Title I of the Dodd-Frank Act will provide the FDIC with on-site access to systemically important financial institutions, including the ability to access real-time data.[48] This will enable the FDIC, working in tandem with the Federal Reserve and other regulators, to collect and analyze information for resolution planning purposes in advance of the impending failure of the institution.

An essential part of such plans will be to describe how this process can be accomplished without posing systemic risk to the public and the financial system. If the company does not submit a credible resolution plan, the statute permits increasingly stringent requirements to be imposed that, ultimately, can lead to divestiture of assets or operations identified by the FDIC and the Federal Reserve to facilitate an orderly resolution. The Dodd-Frank Act requires each designated financial company to produce a resolution plan, or living will, that maps its business lines to legal entities and provides integrated analyses of its corporate structure; credit and other exposures; funding, capital, and cash flows; domestic and foreign jurisdictions in which it operates; its supporting information systems and other essential services; and other key components of its business operations, all as part of the plan for its rapid and orderly resolution. The credit exposure reports required by the statute will also provide important information critical to the FDIC's planning processes by identifying the company's significant credit exposures, its component exposures, and other key information across the entity and its affiliates. The elements contained in a resolution plan will not only help the FDIC and other domestic regulators to better understand a firm's business and how that entity may be resolved, but the plans will also enhance the FDIC's ability to coordinate with foreign

[46] In recent years a common practice has developed in bankruptcy cases of allowing payments shortly after the filing of a Chapter 11 petition to certain priority creditors (wage claimants (up to $11,725), employee benefits claimants (up to $11,725), taxing authorities and several less frequently used groups) if sufficient assets are at hand, on the theory that such creditors will be paid first anyway at the time final distributions are made (thus, no creditor's rights will be impaired so long as the equity in available assets clearly exceeds the total priority claims). Permission to make such payments is generally sought as part of the debtor-in-possession's "first day motions," and such creditors generally receive payment within three to five days of the date of filing of the petition. A secondary consideration for paying prepetition wages is the desire on the part of management to retain an experienced work force at a time of turmoil. A second practice has developed in large Chapter 11 bankruptcy cases of paying "critical vendors" after obtaining a "first day order" shortly after the petition is filed. While such vendors have the status of general unsecured creditors, an argument is typically made to the Bankruptcy Court that certain trade creditors are considered key suppliers to the debtor-in-possession, and may refuse to do business with the Chapter 11 debtor unless they receive immediate payment on their prepetition claim, thus causing the entire reorganization effort to fail through loss of the going concern. This practice is more controversial than that of paying priority claimants, since (except in "prepackaged" bankruptcy cases) it is often very difficult to predict at the outset of the case what the percentage payout to general unsecured creditors will be at the end of the case. The practice has also come under criticism in recent years and has been cut back. One reason for the cutback is that there is little formal support in the Bankruptcy Code for the practice. *See In re Kmart Corp.*, 359 F. 3d 866 (7th Cir. 2004) and discussion in Turner, Travis N., "Kmart and Beyond: A 'Critical' Look at Critical Vendor Orders and the Doctrine of Necessity," 63 Wash. & Lee L.Rev. 431 (2006).

[47] *See generally* section 165 of Title I of the Dodd-Frank Act, 12 U.S.C. § 5365.

[48] *See* "Orderly Resolution of Lehman under the Dodd-Frank Act—March–July, Due Diligence and Structuring the Resolution—Planning in the Crisis Environment," infra.

Copyright © 2012 Association of Corporate Counsel

regulators in an effort to develop a comprehensive and coordinated resolution strategy for a cross-border firm.[49]

Structure and Bidding

Once the structure is developed, the FDIC would seek bids from qualified, interested bidders for the business lines or units that have going-concern value. The FDIC would analyze the bids received and choose the bid or bids that would provide the highest recovery to the receivership. The winning bidder would be informed and would take control of the business lines or units concurrent with the closing of the institution. Losses would be borne by equity holders, unsecured debt holders, and other unsecured creditors that remain in the receivership. These creditors would receive payment on their claims in accordance with the priority of payment rules set forth in the Dodd-Frank Act.[50] The FDIC could make advance dividend payments to creditors based upon an upfront conservative valuation of total recoveries. As recoveries are realized, the FDIC could also pay out distributions to creditors as it has done successfully with failed insured banks. See "—Special Powers under Title II—Advance Dividends and Prompt Distributions," above.

Orderly Resolution of Lehman under the Dodd-Frank Act

March–July, Due Diligence and Structuring the Resolution

Planning in the Crisis Environment: As the financial crisis enveloped Bear Stearns, the FDIC would have worked closely with the Federal Reserve and other appropriate regulators to gather information about the systemically important firms that may fall under the FDIC's resolution authority. At a minimum, the firms' resolution plans would have been reviewed jointly by the FDIC and the Federal Reserve to make sure that the plans were credible and up-to-date. The information supporting these plans and any additional information that the FDIC and Federal Reserve would have received through on-site discussions with the firms during their review of the resolution plans would have provided the FDIC with valuable information necessary for effective resolution planning, information not available to the FDIC prior to the passage of the Dodd-Frank Act. In this regard the FDIC's presence would not be indicative that a resolution is imminent, but rather that in a crisis the FDIC seeks to assure that all firms' resolution plans are sufficiently robust to allow an orderly liquidation of any particular firm that might fail.

For Lehman, if senior management had not found an early private sector solution, the FDIC would have needed to establish an on-site presence to begin due diligence and to plan for a potential Title II resolution. Lehman was not the only firm in possible trouble and the FDIC would likely have had a heightened presence in other subject firms at the time. Thus, the market would not necessarily have taken the FDIC's heightened presence as a signal that a failure was imminent as the market already was aware of Lehman's problems. While it is possible in this situation or in other situations that the FDIC's on site presence could create signaling concerns, this argues for the FDIC having a continuous on-site presence for resolution planning during good times.

Discussions with Lehman: In the various accounts of the failure of Lehman it is noteworthy that senior management discounted the possibility of failure until the very last moment.[51] There was apparently a belief, following the government's actions in respect of Bear Stearns, that the government, despite statements to the contrary, would step in and provide financial assistance and Lehman would be rescued. If Title II of the Dodd-Frank Act had been in effect, the outcome would have been considerably different. Lehman's senior management would have understood clearly that the government would not and could not extend financial assistance outside of a resolution because of the clear requirements in the Dodd-Frank Act that losses are to be borne by equity holders and unsecured creditors, and

[49] Domestic and foreign regulators are currently actively involved through the Financial Stability Board's Cross-Border Crisis Management Group to develop essential elements of recovery and resolution plans that will aid authorities in understanding subject firms' global operations and planning for the orderly resolution of a firm across borders. A number of jurisdictions are currently working to develop legislative and regulatory requirements for recovery and resolution plans, and domestic U.S. authorities are working to align regulatory initiatives in order to have a comprehensive and coordinated approach to resolution planning. For example, in January 2010, the FDIC and the Bank of England entered into a Memorandum of Understanding concerning the consultation, cooperation, and exchange of information related to the resolution of insured depository institutions with cross-border operations in the United States and the United Kingdom.

[50] *See* section 210(b)(1) of the Dodd-Frank Act, 12 U.S.C. § 5390(b)(1).

[51] According to the Examiner's Report, following the near collapse of Bear Stearns in March 2008, "Lehman knew that its survival was in question." Lehman's management believed, however, that government assistance would be forthcoming to prevent a failure. *See* Examiner's Report at 609, 618.

Copyright © 2012 Association of Corporate Counsel

management and directors responsible for the condition of the failed financial company are not to be retained.

To convey this point to Lehman and its Board of Directors, the FDIC could have participated in a meeting in the spring of 2008, together with Lehman's Board of Directors, the Federal Reserve, and the SEC, to outline the circumstances that would lead to the appointment of the FDIC as receiver for one or more Lehman entities, and what that resolution would entail. The regulators would have emphasized that any open-company assistance or "too big to fail" transaction would be unavailable,[52] and that the alternative to a sale of the company or a substantial capital raising would be a bankruptcy under the Bankruptcy Code or a resolution under Title II with no expectation of any return to shareholders.

The regulators could have set a deadline of July to sell the company or raise capital. This would have clearly focused Lehman's Board of Directors on the urgency of the matter and encouraged the Board to accept the best non-government offer it received notwithstanding its dilutive nature; virtually any private sale would yield a better return for shareholders than the likely negligible proceeds shareholders would receive in an FDIC receivership, as equity holders have the lowest priority claims in a receivership.

Lehman's senior management and Board of Directors may have been more willing to recommend offers that were below the then-current market price if they knew with certainty that there would be no extraordinary government assistance made available to the company and that Lehman would be put into receivership. Such avenues may have been available. For instance, KDB is reported to have suggested paying $6.40 per share when Lehman's stock was trading at $17.50 on August 31—just 15 days prior to Lehman's bankruptcy filing.

Forcing Lehman to more earnestly market itself to a potential acquirer or strategic investor well in advance of Lehman's failure would serve several other goals, even if such private sector transaction were unsuccessful. The FDIC would be able to use this marketing information to identify appropriate bidders who would be invited to join in the FDIC-led due diligence and bidding process as described in "—Due Diligence" and "—Structuring the Transaction," below.

The preferred outcome under the Dodd-Frank Act is for a troubled financial company to find a strategic investor or to recapitalize without direct government involvement or the FDIC being appointed receiver. To that end, the recommendation and determination prescribed by section 203(a)(2)(E) and (b)(3) of the Dodd-Frank Act, respectively, concern the availability of a viable private sector alternative. Requiring a troubled financial company to aggressively market itself pre-failure helps to ensure that exercise of the orderly resolution authority in Title II is a last resort. In this matter, the FDIC's experience with troubled banks is instructive. The commencement of the FDIC's due diligence process has frequently provided the motivation senior management has needed to pursue sale or recapitalization more aggressively. Between 1995 and the end of 2007, the FDIC prepared to resolve 150 institutions. Of this number, only 56—that is, 37 percent—eventually failed. Of course, many fewer problem banks have been able to find merger partners or recapitalize since the crisis began. However, from 2008 to 2010, of the 432 banks where the FDIC began the resolution process, 110—25 percent—avoided failure, either by finding an acquirer or recapitalizing.

Due Diligence: Just as when an insured depository institution is a likely candidate for an FDI Act receivership, the FDIC will need to gather as much information as possible about a systemically important financial institution in advance of any Title II resolution. In the case of LBHI, the SEC and the Federal Reserve Bank of New York began on-site daily monitoring in March 2008, following the collapse and sale of Bear Stearns, at which point the FDIC would already have been on-site at Lehman to facilitate the FDIC's Title I resolution planning and monitoring activities.[53] The FDIC would have determined, jointly with other supervisors, the condition of the company for the purposes of ordering corrective actions to avoid failure, and it otherwise would have prepared for a Title II orderly resolution.

The FDIC would continue assembling information about the condition and value of Lehman's assets and various lines of business. In preparing for a Title II resolution of a company subject to heightened prudential standards under Title I, the FDIC will have access to the information included in such company's resolu-

[52] The Preamble to the Dodd-Frank Act notes that it was enacted, *inter alia*, "to end 'too big to fail' [and] to protect the American taxpayer by ending bailouts."

[53] *See* "Orderly Resolution of Lehman under the Dodd-Frank Act—March–July, Due Diligence and Structuring the Resolution—Planning in the Crisis Environment," *supra.*

Copyright © 2012 Association of Corporate Counsel

tion plan, or living will.[54] Though that resolution plan is designed to provide for the resolution of the systemically important financial institution under the Bankruptcy Code, it would provide regulators with invaluable information about the institution's structure, organization, and key operations that could form the basis for an orderly liquidation under Title II. It is the FDIC's experience that management of a troubled institution often has an overly optimistic view of the value of its franchise and the firm's prospect for recovery. Thus, while the resolution plan would provide key financial and other data about the consolidated entity, an independent examination of the troubled firm may have been necessary. The FDIC will also have access to real-time data from on-site monitoring conducted by the FDIC and other prudential regulators.

The FDIC's participation in gathering information and in exercising its examination authority would be done in coordination with the on-site monitoring activities of the SEC and the Federal Reserve Bank of New York. The development of additional information to facilitate a potential resolution would be done in a manner that would not disrupt the business operations or indicate an imminent failure of the financial company. As regulated entities under the Dodd-Frank Act, heightened supervision by the FDIC, the Federal Reserve, and other prudential regulators will be normal. As a result, these information-gathering activities should neither signal increased distress nor precipitate market reaction.

While conducting due diligence, the FDIC would have begun developing the transaction and bid framework by analyzing the legal structure of the firm, its operations, and its financial data. In this case, LBHI was a large holding company with major overseas operations.[55] As with any large, complex financial company, there were many interrelations among the major affiliates of the group. LBHI was the guarantor of all obligations of LBI and the source of funding for a number of other Lehman entities. LBI was the employer of record for much of the company, including various foreign subsidiaries. LBI was also the owner and operator of key IT systems used throughout the company and provided custody and trade execution services for clients of foreign Lehman entities, primarily for trades conducted by LBIE in the United States. Likewise, LBIE provided custody and trade execution services for clients of LBI conducting trades outside of the United States. The interconnected nature of Lehman's operations would have argued for maintaining maximum franchise value by developing a deal structure that would have maintained the continuing uninterrupted operation of the major business lines of the firm by transferring those assets and operations to an acquirer immediately upon the failure of the parent holding company.[56]

During the FDIC's investigation of the Lehman group, it would have identified subsidiaries which would be likely to fail in the event of a failure of LBHI but would likely not be systemic and would provide little or no value to the consolidated franchise. The FDIC would not have recommended a resolution under Title II for those subsidiaries, and they would likely have been resolved under the Bankruptcy Code or other applicable insolvency regime.[57] The assets of these subsidiaries would not have been part of a Title II receivership, other than the receiver's equity claim; the FDIC would have had no expected return on the equity for any such non-systemic subsidiary placed into bankruptcy. The FDIC also would have identified any subsidiary that would be likely to fail in the event of a failure of LBHI, and whose failure likely would be systemic. The FDIC would have made an evaluation as to whether the reso-

[54] Had the Dodd-Frank Act been enacted sufficiently far in advance of Lehman's failure, undoubtedly much more supervisory information would have been available in March 2008. The Federal Reserve and the FDIC would have had the detailed information presented in Lehman's statutorily required resolution plan under Title I of the Dodd-Frank Act. *See* section 165(d) of Title I of the Dodd-Frank Act, 12 U.S.C. § 5365(d).

[55] The principal operating entities in the holding company were LBI, the U.S. broker-dealer, and LBIE, the U.K.-based broker-dealer. Lehman also had a smaller Asian trading operation headquartered in Japan, and various smaller subsidiaries in other countries.

[56] By completing a sale at the time of failure of the parent holding company, the acquirer would have been able to "step into the shoes" of LBHI and provide liquidity, guarantees, or other credit support to the newly acquired subsidiaries. Were the FDIC unable to promptly complete such a transaction, it could provide any necessary liquidity to certain key subsidiaries, such as LBIE, pending a sale of those assets. *See* footnote 58, *infra.*

[57] *See* section 202(c)(1) of the Dodd-Frank Act, 12 U.S.C. § 5382(c)(1).

Copyright © 2012 Association of Corporate Counsel

lution of any such subsidiary under Title II would have aided in the orderly resolution of the parent company.[58]

As is the case with insured depository institutions that have foreign operations, the FDIC would have begun contacting key foreign financial authorities on a discrete basis to discuss what legal or financial issues might arise out of an FDIC receivership, or out of foreign resolution regimes in the case of Lehman entities operating outside of the United States, and how those resolutions could be coordinated. In addition, foreign financial authorities would have been consulted when foreign financial companies and investors expressed interest in investing in or purchasing Lehman. These discussions would have addressed, at a minimum, the financial strength of the acquirer, types of approvals that would be required to consummate a transaction, and any identified impediments to the transaction. Regular, ongoing contact would be particularly important after the transaction structure was determined and qualified bidders had been contacted and had expressed interest.

Valuation and Identification of Problem Assets: On a consolidated basis, LBHI and its subsidiaries had total assets of $639 billion, with $26.3 billion in book equity and total unsecured long-term and short-term borrowings of $162.8 billion as of May 31, 2008. The parent company, LBHI, had $231 billion in assets, with $26.3 billion in book equity and $114.6 billion in unsecured long-term and short-term borrowings. On September 14 (just prior to bankruptcy), LBHI (unconsolidated) was slightly smaller with $209 billion in assets, $20.3 billion in book equity, and $99.5 billion in long-term and short-term unsecured debt, including $15 billion in subordinated debt. In addition, LBHI's short-term unsecured debt included $2.3 billion in commercial paper—almost 40 percent of the approximately $5.7 billion in commercial paper outstanding enterprise wide.

By March 2008, Lehman had recognized that its commercial real estate related holdings were a major impediment to finding a merger partner. Its SpinCo proposal identified $31.7 billion in significantly underperforming commercial real estate related assets. During the week leading up to Lehman's bankruptcy filing, Bank of America identified an additional $38.3 billion in suspect residential real estate related assets and private equity assets that it would not purchase in an acquisition. Barclay's identified $20.3 billion of similar potentially additional problem assets in its due diligence. In the FDIC's resolution process, the FDIC's structuring team as well as prospective bidders would have had sufficient time to perform due diligence and identify problem asset pools. While Lehman was seeking an investor pre-failure, the FDIC would have identified and valued these problem asset pools in order to set a defined bid structure for Lehman. The bid structure would have allowed prospective acquirers to bid upon options to purchase all of Lehman's assets in a whole financial company P&A with loss sharing on defined pools of problem assets, or a purchase which excludes those problem asset pools. In the latter bid option, the receivership estate would have purchased the problem assets out of Lehman's subsidiaries at their fair market value prior to consummating the purchase agreement with the acquirer. These problem assets, in addition to those directly owned by the holding company, could have been retained in the receivership or placed into a bridge financial company prior to future disposition. Either bid would have allowed a further option for the prospective acquirer to pay to assume the commercial paper and other critical short-term securities of Lehman. The bidding structure is discussed more fully in "—August, Begin Marketing Lehman," below.

Both bid structures are intended to provide comfort to not only the potential acquirer, but also to its regulators, concerning the potential down-side exposure to problem assets. In excluding pools of identified problem assets from a bid, an acquirer is protected directly by effectively capping its exposure to such assets—which are left with the receivership—at zero. This risk minimization comes at the cost of lost potential upside from returns on servicing the troubled assets, higher administrative costs of the receiver, and a less attractive bid. In the loss-sharing structure, a potential acquirer receives tail-risk protection: the acquirer is able to cap its exposure to an identified pool of problem assets at set levels. This comfort is particularly important where

[58] Upon a parent entering a Title II receivership, the FDIC may appoint itself receiver over one or more domestic covered subsidiaries of a covered financial company in receivership in accordance with the self-appointment process set forth in section 210(a)(1)(E) of the Dodd-Frank Act, 12 U.S.C. § 5390(a)(1)(E). This appointment process requires a joint determination by the FDIC and the Secretary of the Treasury that the covered subsidiary is in default or danger of default, that putting it into receivership would avoid or mitigate serious adverse effects on U.S. financial stability, and that such action would facilitate the orderly liquidation of the covered financial company parent. Once in receivership, the covered subsidiary would be treated in a similar manner to any other covered financial company: its shareholders and unsecured creditors would bear the losses of the company, and management and directors responsible for the company's failure would not be retained. The receiver, to aid in the orderly liquidation of the company, could extend liquidity to it in accordance with section 204(d) of the Dodd-Frank Act, 12 U.S.C. § 5384(d).

Copyright © 2012 Association of Corporate Counsel

a potential acquirer is unable to undertake in-depth due diligence on such assets, or must do so on an abbreviated time table. This down-side protection will also be important to regulators, as it mitigates the risk of an acquirer experiencing financial distress due to the problem assets of an acquiree.[59]

Structuring the Resolution: During due diligence, the FDIC would have identified certain pools of assets of Lehman—including certain commercial real estate, residential real estate, and private equity assets—that would make a whole financial company P&A transaction difficult. See "—Valuation and Identification of Problem Assets," above. These troubled assets were estimated to be between $50 and $70 billion in book value.

The FDIC would have set up a data room to enable potential acquirers to conduct due diligence, and would have begun developing a marketing structure for Lehman and its assets. The FDIC would have identified potential acquirers of Lehman. Criteria would have included maximization of value on the sale, the stability of the potential acquirer, and the ability of the acquirer expediently to consummate an acquisition.[60] Having identified the potential acquirers, the FDIC would have explained the bid structure and invited the firms to conduct (or continue) due diligence of Lehman.

During this time, the FDIC would have continued to monitor Lehman's progress in marketing itself. This would have encouraged Lehman to consummate a non-government transaction, which remained the best outcome for all parties. It would also have provided the FDIC with key information concerning interested acquirers and potential issues and concerns of such acquirers in completing a transaction.

Also during this time, as is the case with insured depository institutions that have foreign operations, the FDIC would have continued a dialogue with key foreign financial authorities to discuss what legal or financial issues might arise out of an FDIC receivership, or out of foreign resolution regimes in the case of Lehman entities operating outside of the United States, and how those resolutions could be coordinated.[61] Specifically, the FDIC would address issues of ring-fencing of assets, particularly of Lehman's U.K.-based broker-dealer. See "—Due Diligence," above.

August, Begin Marketing Lehman

Assuming Lehman were unable to sell itself, the FDIC would have commenced with marketing Lehman.[62] The FDIC would have set a defined bidding structure. Prospective acquirers previously identified (as discussed in "—March–July, Due Diligence and Structuring the Resolution—Structuring the Transaction," above) would have been invited to bid based on the following options:

> *Option A:* Whole financial company purchase and assumption with partial loss share (loss-sharing P&A). Under this option, the assets and operations of Lehman are transferred to the acquirer with no government control and no ongoing servicing of Lehman assets by the government. Due to the problem assets discussed above, however, it may be necessary for the receivership estate to offer a potential acquirer protection from loss in respect of that identified pool of problem assets. In this type of transaction, the acquirer purchases the assets at their gross book value, and assumes, at a minimum, the secured liabilities. Depending on the bid, other liability classes may be assumed as well. Since the book value of assets must always exceed the amount of liabilities assumed in this structure, the acquirer, after factoring its discount bid for the assets, must also provide a combination of cash and a note payable to the receivership estate to balance out the transaction.[63] The receivership estate's share of loss

[59] Both Barclays and its U.K. regulators were concerned with exposure to problem assets of Lehman following a potential acquisition by Barclays. *See* footnote 68, *infra.*

[60] We also note the impact of section 622 of the Dodd-Frank Act, 12 U.S.C. § 1852, which could prohibit a large financial company from entering into a transaction to acquire another financial company if the *pro forma* liabilities would exceed certain statutory levels.

[61] For example, in the case of East West Bank's acquisition of United Commercial Bank, San Francisco, California, the FDIC engaged with the China Banking Regulatory Commission and the Hong Kong Monetary Authority in advance of the resolution to discuss potential acquirers, regulatory approvals and options for resolving or selling the assets and liabilities of United Commercial Bank's wholly owned subsidiary in China and its foreign branch in Hong Kong.

[62] Any agreement reached in respect of Lehman would be contingent upon its failure, a systemic determination under sections 203(b) or 210(a)(1)(E) of the Dodd-Frank Act, 12 U.S.C. §§ 5383(b) or 5390(a)(1)(E), as applicable, and the appointment of the FDIC as receiver under section 202 of the Dodd-Frank Act, 12 U.S.C. § 5382. In the case of Lehman, and for purposes of our analysis, had there been a viable acquirer or strategic investor pre-failure, no Title II resolution would be required. As discussed in "The Events Leading to the Lehman Bankruptcy," *supra,* and in footnote 68, *infra,* no such private sector alternative was available.

[63] A simple formula to reflect the amount of the acquirer's note payable is: Book value of assets purchased less the sum of (book value of liabilities assumed plus discount bid plus cash payment) is equal to note payable.

Copyright © 2012 Association of Corporate Counsel

payments are made through reductions in the outstanding balance of the note payable as loss claims occur over time.

Transactions offering an option for a sharing of potential future losses between the acquirer and the FDIC have been frequently used to resolve failed banks. Loss-share transactions allow the FDIC to obtain better bids from potential assuming institutions by sharing a portion of the risk on a pool of assets. This has been particularly important during periods of uncertainty about the value of assets. The FDIC's experience has been that these transactions result in both better bid prices and improved recoveries for the receivership and receivership creditors.

Another benefit of loss sharing is that the FDIC is able to transfer administration of the failed financial company's problem assets to the assuming institution and receive a premium for the failed company's franchise value, thereby maximizing value. By having the assuming company absorb a portion of the loss, the FDIC induces rational and responsible credit management behavior from the assuming institution to minimize credit losses. Compared to the alternative of retaining problem assets in receivership, the loss-share structure tends to be more efficient, as it limits losses and administrative costs of the receivership.

The FDIC would therefore permit bidders to bid on a structure based on a sale of the whole financial company, with partial but substantial coverage of losses on those identified problem assets.[64] The loss-share structure encourages bidders to maximize their bids by offering downside credit risk protection from loss on an identified pool of problem assets. This can produce a more efficient outcome as it incentivizes the acquirer to maximize recoveries while reducing administrative costs of the receivership. See "The Resolution and Receivership Process for Failed Banks—Loss Share," above.

Option B: Modified purchase and assumption without loss share, which excludes certain identified problem assets (modified P&A, similar to a good bank–bad bank resolution strategy). Under this option, the majority of the assets and operations of Lehman are transferred to the acquirer. Identified pools of problem assets would not be included in the transaction, but retained for disposition at a later date.[65]

Liabilities: While the FDIC would transfer the assets of Lehman to the acquirer in accordance with Option A or Option B described above, most unsecured creditor claims would remain with the receivership, including shareholder claims and claims of holders of unsecured, long-term indebtedness. Fully secured claims would be transferred, along with the collateral, to the acquirer. The bid participants would have the opportunity to bid on acquiring certain short-term indebtedness of Lehman, particularly Lehman's outstanding commercial paper. In order for this bid structure to be successful, bidders would need to bid an amount sufficient to cover the loss that the commercial paper and other short-term creditors would have otherwise incurred had the creditors remained in the receivership.

In comparing bids under Option A and Option B, the receivership estate's cost of managing and disposing of the identified problem assets would be taken into consideration. Depending on the bid, the acquirer would purchase the acquired assets through a combination of one or more of cash, notes, and assumed liabilities.

It should be noted that the proposed bid structure represented by Option A and Option B represents one set of options for disposing of the assets and operations of a covered financial company in an efficient manner. The FDIC would have the flexibility to restructure these bids as the facts and circumstances of a particular covered financial company warrant in order to satisfy the FDIC's statutory mandates of promoting financial stability, maximizing recoveries, and minimizing losses.

Early September, Closing

Following due diligence, interested parties would have submitted closed, or sealed, bids. The FDIC would have evaluated the bids based upon the requirement under the Dodd-Frank Act to maximize value upon any disposition of assets.[66] Bids would have been evaluated

[64] To the extent problem assets were held directly by LBHI, or LBHI experienced significant intercompany exposures to losses in subsidiaries and affiliates, loss sharing would be more likely to be a preferred bid structure.

[65] As discussed under "—March–July, Due Diligence and Structuring the Resolution—Due Diligence," *supra*, subsidiaries holding such assets would generally be resolved under the Bankruptcy Code. To the extent any subsidiary was deemed systemic, it could be put into a separate receivership under Title II, its assets liquidated and its claims resolved in accordance with the Dodd-Frank Act.

[66] *See* section 210(a)(9)(E) of the Dodd-Frank Act, 12 U.S.C. § 5390(a)(9)(E).

Copyright © 2012 Association of Corporate Counsel

on a present-value basis. The FDIC would have selected the winning bid, and the acquirer and the FDIC, as the receiver for LBHI, would enter into a conditional P&A agreement based upon the agreed upon bid structure.[67]

We have assumed, for the limited purpose of this discussion, that Barclays would have provided a winning bid to complete an acquisition of Lehman.[68]

We have further assumed that, as LBHI reached a point at which it was in default or in danger of default, a systemic determination would have been made by the Secretary of the Treasury and the FDIC would have been appointed receiver of LBHI.[69]

At the time a determination was made that Lehman should be put into receivership and the FDIC named receiver, the assets and select liabilities of Lehman would have been transferred to Barclays as the acquiring institution based upon the structure of the winning bid.[70] Barclays would have maintained the key operations of Lehman in a seamless manner, integrating those operations over time. Disruptions to the market likely would have been minimal. Barclays would have continued to make scheduled payments on liabilities transferred to it, including secured indebtedness and, to the extent assumed by Barclays, commercial paper.[71] To the extent Barclays' winning bid had been based upon a whole financial company with loss share, it would have been responsible for servicing problem assets in accordance with the terms of the loss-sharing P&A agreement.

Lehman's derivatives trading was conducted almost exclusively in its broker-dealer, LBI, and in LBI's subsidiaries.[72] As a result, Barclays' acquisition of the broker-dealer group would have transferred the derivatives operations, together with the related collateral, to Barclays in its entirety as an ongoing operation. At the moment of failure, Barclays would have assumed any parent guarantee by Lehman outstanding in respect of the subsidiaries' qualified financial contracts. This action should have substantially eliminated any commercial basis for the subsidiaries' counterparties to engage in termination and close-out netting of qualified financial contracts based upon the insolvency of the parent guarantor. This would have removed any financial incentive to do so as well, as a financially secure acquirer would have assumed the obligations and provided guarantees to the same extent as its predecessor, in part to preserve the significant franchise value of the derivatives portfolio (including the underlying collateral).[73] The more limited derivatives operations conducted by LBHI would have been subjected to haircuts to the extent that any net amount due to a counterparty was not collateralized or hedged. Particularly in the future, it is expected that the vast majority of the derivatives transactions of a covered financial company will be fully collateralized.

Barclays would have purchased the acquired assets through a combination of one or more of the following: cash, notes, and the assumption of liabilities. The

[67] *See* footnote 62, *supra*.

[68] We note that this analysis is purely hypothetical in nature, and a bid conducted by the FDIC could have produced strong bids by a number of potential acquirers. Barclays, however, was close to completing a transaction with Lehman in September 2008. It was unable to proceed based upon the risk of financial loss due to problem assets it identified in its due diligence and the inability to gain an exemption from U.K. regulators from the requirement to hold a shareholder vote prior to approving a transaction with Lehman based upon the proposed structure. The FDIC believes it would have been able to alleviate Barclays' concerns—and facilitate requisite regulatory approvals—by structuring the transaction as a loss-sharing P&A or as a modified P&A. For the purpose of this discussion, therefore, a winning bid from Barclays would be one reasonable outcome from the bidding process outlined in "—August, Begin Marketing Lehman," *supra*.

[69] For a detailed discussion of the recommendation, determination, and appointment process under sections 203 and 202 of the Dodd-Frank Act, 12 U.S.C. §§ 5383 and 5382, *see* "The Orderly Liquidation of Covered Financial Companies—Appointment," *supra*.

[70] There is a danger of value dissipation—in proportion to the size and complexity of the covered financial company—the longer such covered financial company stays in receivership prior to a sale being consummated. Accordingly, the FDIC would generally prefer, where possible, to time a sale of the assets and operations of the covered financial company at or near the date of failure. The FDIC may also transfer key operations to a bridge financial company, as described under "The Orderly Resolution of Covered Financial Companies—Special Powers under Title II—Ability to Preserve Systemic Operations of the Covered Financial Company," *supra*. These same challenges are faced in the resolution of larger insured depository institutions under the FDI Act.

[71] Despite paying a premium to assume the commercial paper obligations, an acquirer may have been incentivized to bid on such business due to the incremental franchise value of the business line and to preserve customer goodwill.

[72] LBHI conducted its derivatives activities primarily in subsidiaries of LBI (the broker-dealer), including Lehman Brothers Special Financing Inc., Lehman Brothers Derivatives Products, Inc., and Lehman Brothers Financial Products, Inc.

[73] Under the International Swaps and Derivatives Association master agreements (and trades placed thereunder), parties may choose whether to be governed by New York or English law. To the extent that parties to a particular qualified financial contract are validly governed by English law (and a court recognizes and applies such choice of law), such contract may not be subject to the Dodd-Frank Act in terms of nullification of its *ipso facto* clause.

Copyright © 2012 Association of Corporate Counsel

FDIC, as receiver for Lehman, would have disposed of any problem assets left behind in the receivership or managed the loss-share agreement with Barclays in respect of those assets, and would have settled creditor claims in accordance with the priority for repayment set forth in the Dodd-Frank Act.[74]

The Likely Treatment of Creditors

As mentioned earlier, by September of 2008, LBHI's book equity was down to $20 billion and it had $15 billion of subordinated debt, $85 billion in other outstanding short- and long-term debt, and $90 billion of other liabilities, most of which represented intra-company funding. The equity and subordinated debt represented a buffer of $35 billion to absorb losses before other creditors took losses. Of the $210 billion in assets, potential acquirers had identified $50 to $70 billion as impaired or of questionable value. If losses on those assets had been $40 billion (which would represent a loss rate in the range of 60 to 80 percent), then the entire $35 billion buffer of equity and subordinated debt would have been eliminated and losses of $5 billion would have remained. The distribution of these losses would depend on the extent of collateralization and other features of the debt instruments.

If losses had been distributed equally among all of Lehman's remaining general unsecured creditors, the $5 billion in losses would have resulted in a recovery rate of approximately $0.97 for every claim of $1.00, assuming that no affiliate guarantee claims would be triggered. This is significantly more than what these creditors are expected to receive under the Lehman bankruptcy. This benefit to creditors derives primarily from the ability to plan, arrange due diligence, and conduct a well structured competitive bidding process.

The Dodd-Frank Act provides a further potential benefit to creditors: earlier access to liquidity. As described above, the acquirer would have provided a combination of cash and a note to the receiver. Under the Dodd-Frank Act, the FDIC could have promptly distributed the cash proceeds from the sale of assets to claimants in partial satisfaction of unsecured creditor claims.[75] The FDIC would also have been able to borrow up to 90 percent of the fair value of the note available for repayment—together with the fair value of any assets left in the receivership available for repayment—from the orderly liquidation fund and advance those funds to the receivership.[76] These borrowed funds could have been made available to creditors immediately in the form of advance dividends to satisfy a portion of creditor claims based upon the total expected recovery in the resolution. This is in contrast to the actual circumstances of the LBHI bankruptcy, in which there has been no confirmed plan of reorganization or cash distribution to unsecured creditors of LBHI more than two years after the failure of Lehman.

Conclusion

Title II of the Dodd-Frank Act provides "the necessary authority to liquidate failing financial companies that pose a systemic risk to the financial stability of the United States in a manner that mitigates such risk and minimizes moral hazard."[77] These powers and authorities are analogous to those the FDIC uses to resolve failed insured depository institutions under the FDI Act. In the case of Lehman, following appointment by the Secretary of the Treasury, the FDIC could have used its power as receiver and the ability to facilitate a sale under Title II of the Dodd-Frank Act to preserve the institution's franchise value and transfer Lehman's assets and operations to an acquirer. The FDIC would have imposed losses on equity holders and unsecured creditors, terminated senior management responsible for the failure of the covered financial company, maintained Lehman's liquidity, and, most importantly, attempted to mitigate and prevent disruption to the U.S. financial system, including the commercial paper and derivatives markets. The very availability of a comprehensive resolution system that sets forth in advance the rules under which the government will act following the appointment of a receiver could have helped to prevent a "run on the bank" and the resulting financial instability. By maintaining franchise value and mitigating severe disruption in the financial markets, it is more likely that debt holders and other general creditors will receive greater recoveries on their claims under the Dodd-Frank Act than they would have otherwise received in a Chapter 7 liquidation or a Chapter 11 reorganization.

The key to an orderly resolution and liquidation of a systemically important financial institution is the ability to plan for its resolution and liquidation, provide liquid-

[74] *See* section 210(b)(1) of the Dodd-Frank Act, 12 U.S.C. § 5390(b)(1).

[75] *See* "The Orderly Resolution of Covered Financial Companies—Special Powers under Title II—Advance Dividends and Prompt Distributions," *supra*, for a discussion of the ability to make both prompt distributions and advance dividends in a Title II receivership.

[76] *See* footnote 44 and accompanying discussion, *supra*.

[77] Section 204(a) of the Dodd-Frank Act, 12 U.S.C. § 5384(a).

Copyright © 2012 Association of Corporate Counsel

ity to maintain key assets and operations, and preserve financial stability. During the planning phase, the FDIC, working in tandem with the Federal Reserve and the SEC, would have been able to identify problem assets; require management to raise capital or find an acquirer; gather information about the institution's structure, organization, and key operations; prepare the resolution transaction structure and bids; and seek potential acquirers. During this phase, the FDIC would have contacted the relevant foreign and domestic regulatory authorities and governments to coordinate the resolution. Through this process, the FDIC would have minimized losses and maximized recoveries in the event the systemically important financial institution failed and was put into receivership.

Perhaps most importantly, the Dodd-Frank Act provides the means to preserve systemically important operations and reduce systemic consequences while limiting moral hazard by imposing losses on the stockholders and unsecured creditors of the failed systemically important financial institution rather than on the U.S. taxpayer. In so doing, the FDIC is able to fulfill its statutory mandate to preserve financial stability and serve the public interest.

Afterword

This paper has focused on how the government could have structured a resolution of Lehman under Title II of the Dodd-Frank Act following the failure of such firm. In so doing, we have made a number of assumptions and caveats to provide a framework for the analysis and to maintain consistency with the historical record. That is, while we have assumed that the Dodd-Frank Act had been enacted pre-failure, and that the FDIC would have been able to avail itself of the pre-planning powers available under Title I, including having access to key data of subject institutions through resolution plans and on-site monitoring, we have not assumed-away the failure of Lehman.

The orderly liquidation authority of Title II would be a remedy of last resort, to be used only after the remedies available under Title I—including the increased informational and supervisory powers—are unable to stave off a failure. In particular, it is expected that the mere knowledge of the consequences of a Title II resolution, including the understanding that financial assistance is no longer an option, would encourage a troubled institution to find an acquirer or strategic partner on its own well in advance of failure. Likewise, on-site monitoring and access to real-time data provided under Title I is expected to provide an early-warning system to the FDIC and other regulators well in advance of a subject institution's imminent failure.

We have also stuck closely to the facts in identifying the most likely acquirer of Lehman as Barclays, while also discussing the potential role played by Bank of America and KDB. Lehman, while a complex firm, had value primarily as an investment bank. Thus, its resolution was focused on keeping the investment bank's operations intact in order to preserve its going-concern value. In other cases, a large financial firm with many pieces such as a large commercial bank, an insurance company, and a broker-dealer, might represent a financial firm that is no longer too big to fail, but may be too big to continue to exist as one entity.[78] Over the longer term, the development of resolution plans will enable the FDIC to prepare to split up such a firm in order to facilitate a Title II liquidation. The FDIC could pursue a number of alternatives instead of a whole financial company purchase-and-assumption transaction, including a spin-off of assets, an initial public offering, a debt-to-equity conversion, or some other transaction that would satisfy regulatory concerns about concentration while minimizing losses to the failed company's creditors.

[78] *See*, e.g., Simon Johnson & James Kwak, 13 Bankers: *The Wall Street Takeover and the Next Financial Meltdown* (2010); Michael McKee and Scott Lanman, "Greenspan Says U.S. Should Consider Breaking Up Large Banks," Bloomberg, Oct. 15, 2009, *available at* http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aJ8HPmNUfchg; Lita Epstein, "Breaking up 'too big to fail' banks: Britain leads, will U.S. follow," DailyFinance, Nov. 2, 2009, available at http://www.dailyfinance.com/story/ investing/ breaking-up-banks-too-big-to-fail-britian-leads-but-will-u-s/19220380/. The Dodd-Frank Act includes provisions intended to prevent the creation of ever-larger financial companies, including section 622 thereof, 12 U.S.C. § 1852. *See* footnote 60, *supra.*

Copyright © 2012 Association of Corporate Counsel