



October 1, 2010

**Via Email & Mail**

Phil Angelides  
*Chairman*

Hon. Bill Thomas  
*Vice Chairman*

Brooksley Born  
*Commissioner*

Byron S. Georgiou  
*Commissioner*

Senator Bob Graham  
*Commissioner*

Keith Hennessey  
*Commissioner*

Douglas Holtz-Eakin  
*Commissioner*

Heather H. Murren, CFA  
*Commissioner*

John W. Thompson  
*Commissioner*

Peter J. Wallison  
*Commissioner*

The Honorable Ben S. Bernanke  
c/o Mr. Dave Caperton  
Special Counsel  
Board of Governors of the Federal Reserve System  
20th Street and Constitution Avenue, N.W.  
Washington, D.C. 20551  
[Dave.Caperton@frb.gov](mailto:Dave.Caperton@frb.gov)

Re: Financial Crisis Inquiry Commission Hearing on September 2, 2010

Dear Chairman Bernanke:

Thank you for testifying on September 2, 2010 in front of the Financial Crisis Inquiry Commission and agreeing to provide additional assistance. Toward that end, please provide written responses to the following additional questions and any additional information by October 15, 2010.<sup>1</sup>

1. Please provide information regarding Wachovia's use of Federal Reserve lending facilities during the run on the bank.
2. Please provide the Federal Reserve's solvency calculation for Wachovia on September 26, 2010.
3. Please provide any information about Lehman's financial condition or its collateral in the weeks leading up to the company's bankruptcy.

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<sup>1</sup> The answers you provide to the questions in this letter are a continuation of your testimony and under the same oath you took before testifying on September 2, 2010. Further, please be advised that according to section 1001 of Title 18 of the United States Code, "Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be fined under this title or imprisoned not more than five years, or both."

Wendy Edelberg  
*Executive Director*

1717 Pennsylvania Avenue, NW, Suite 800 • Washington, DC 20006-4614  
202.292.2799 • 202.632.1604 Fax

4. During your testimony, you stated the Federal Reserve Bank of New York conducted a collateral analysis of Lehman Brothers, upon which you relied to make your decision not to use the Federal Reserve's Section 13(3) authority. Please provide the collateral analysis, the name of the person who communicated the collateral analysis to you, and the time and location when you were informed of the collateral analysis. Please inform the Commission of the name or names of persons who conducted the collateral analysis for the Federal Reserve Bank of New York. In addition, please provide a list of persons with whom you or your staff consulted with regards to this matter in the White House or the Treasury and any related memoranda, documents, emails, etc.
5. Please report the dollar value of the shortfall of Lehman's collateral relative to the collateral necessary to issue a bridge loan or other secured assistance to Lehman on September 14, 2008.
6. Please provide a recommended reading list for the Commission.

The FCIC appreciates your cooperation in providing the information requested. Please do not hesitate to contact Sarah Knaus at (202) 292-1394 or [sknaus@fcic.gov](mailto:sknaus@fcic.gov) if you have any questions or concerns.

Sincerely,



Wendy Edelberg  
Executive Director, Financial Crisis Inquiry Commission

cc: Phil Angelides, Chairman, Financial Crisis Inquiry Commission  
Bill Thomas, Vice Chairman, Financial Crisis Inquiry Commission



BOARD OF GOVERNORS  
OF THE  
**FEDERAL RESERVE SYSTEM**  
WASHINGTON, D. C. 20561

November 4, 2010

BEN S. BERNANKE  
CHAIRMAN

Mr. Philip Angelides, Chairman  
Mr. William Thomas, Vice Chairman  
Financial Crisis Inquiry Commission  
1717 Pennsylvania Avenue, N.W., Suite 800  
Washington, D.C. 20006

Dear Chairman Angelides and Vice Chairman Thomas:

Thank you for inviting me to appear before the Financial Crisis Inquiry Commission on September 2, 2010, to discuss my thoughts on the causes of the financial crisis and respond to your questions. This letter responds to the supplemental questions you sent me on October 1, 2010 and provides additional information regarding the issues you raised in your letter inviting me to testify before the Commission. To most effectively and efficiently respond to the questions posed in your two letters, my responses are organized by topic.

### Supervision

You asked generally (1) how the Federal Reserve supervised large financial institutions prior to the financial crisis, (2) whether that method of supervision has changed since the crisis, and (3) about lessons learned from the crisis regarding the supervision of large financial institutions.

#### 1. Supervision Prior to the Financial Crisis

The Federal Reserve used and continues to use a risk-focused approach to supervision of the largest banking organizations (and other banking organizations), focusing on identifying the areas of greatest potential risk to a banking organization and assessing the ability of its management to identify, measure, monitor, and control these risks. Special attention in the examination process is focused on risk management systems and internal controls used by core clearing and settlement organizations and organizations with significant presence in key financial markets, in light of the potential for adverse impacts from these areas to transmit across the banking and financial system.

Federal Reserve staff develops an understanding of supervised institutions through regular monitoring of the activities of the firms and through examinations and other reviews designed to identify and become knowledgeable about specific business practices and assess these and their associated risk management and control practices against supervisory expectations. The largest firms are subject to continuous supervision

and each has a dedicated team onsite at the firm full time. For each institution, the Federal Reserve focuses on: understanding the key elements of the banking organization's strategy, primary sources of revenue, risk drivers, business lines, legal structure, governance and internal control framework, and presence in key financial markets; and assessing (i) the effectiveness of risk management systems and controls over the primary risks inherent in the organization's activities, (ii) the organization's financial condition, and (iii) the potential negative impact of nonbank operations on affiliated depository institutions.<sup>1</sup>

The Federal Reserve's Bank Holding Company Rating System (RFI) relies upon assessments of risk that are both static and forward looking and considers implications for both capital and liquidity when assessing overall safety and soundness. The RFI rating system serves as a useful vehicle for identifying problems, including increasing risks at BHCs, and evaluating overall safety and soundness trends. Under RFI, each BHC is assigned a composite rating (C) based on an overall evaluation as well as an assessment of future potential risks. The main components of the RFI rating system represent: Risk Management (R); Financial Condition (F); and Impact (I) of non-depository entities on subsidiary depository institutions. The F component further relies on four subcomponents reflecting assessments of the quality of capital; asset quality; earnings; and liquidity.

Regulators endeavor to ensure that supervisory attention is appropriately focused on potential financial and operational weaknesses or adverse trends. An important part of this is robust evaluation of an institution's capital planning process. An effective capital planning process<sup>2</sup> requires banking organizations to assess the risks to which they are exposed and to review their processes for managing and mitigating those risks.

All banks and bank holding companies (BHCs) regulated by the Federal Reserve are required to meet minimum regulatory capital requirements. However, institutions are generally expected to operate with capital levels well above regulatory minimums and in all cases to hold capital commensurate with the magnitude and nature of risks to which they are exposed.<sup>3</sup> Even in cases where an institution is deemed "well capitalized" or "adequately capitalized" under Prompt Corrective Action standards,<sup>4</sup> the federal banking agencies have the authority to require it to achieve and maintain ratios (e.g. tier 1 leverage and risk-based capital) in excess of those used to define capital categories.<sup>5</sup> The

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<sup>1</sup> For additional discussion of this topic, see S.R. 08-09, "*Consolidated Supervision of Bank Holding Companies and the Combined U.S. Operations of Foreign Banking Organizations*"

<sup>2</sup> See SR 09-04, Revised March 27, 2009 for further discussion of this topic

<sup>3</sup> See, e.g., 12 CFR parts 208 and 225, Appendix A

<sup>4</sup> Banking organizations that do not meet the minimum risk-based standard, or that are otherwise considered to be inadequately capitalized, are expected to develop and implement plans acceptable to the Federal Reserve for achieving adequate levels of capital within a reasonable period of time (12 CFR part 225, Appendix A)

<sup>5</sup> Under Board regulations, a state member bank is "adequately capitalized" if regulatory capital ratios meet the regulatory minimums, typically a four percent tier 1 leverage ratio, four percent tier 1 risk-based capital ratio, and eight percent total capital ratio (12 CFR 208.43(b)(2)). "Well capitalized" banks must have at least a five percent tier 1 leverage ratio, six percent tier 1 risk-based capital ratio, and ten percent total risk-

Bank Holding Company Act and the Board's Regulation Y also materially limit BHC engagement in certain risky activities, such as private equity and real estate investments.

While each BHC is responsible for assessing the level of capital appropriate for its specific risk profile, Federal Reserve guidance describes how supervisory staff evaluates large or complex banking organizations' internal capital management processes, judging whether they meaningfully tie the identification, monitoring, and evaluation of risk to the determination of the institution's capital and liquidity needs.<sup>6</sup> Regulators may require improvement if they determine that an institution's level of capital or liquidity does not fully support its risk profile.<sup>7</sup> Similarly, under the advanced approaches risk-based capital rule (Basel II), an assessment of overall capital adequacy is required. In making this assessment, regulatory agencies consider whether institutions have a rigorous process for assessing overall capital adequacy in relation to risk profiles. They also consider whether a comprehensive strategy for maintaining appropriate capital levels (internal capital adequacy assessment process— ICAAP) exists, and whether institutions maintain a satisfactory risk management and control structure.<sup>8</sup>

In conducting capital planning reviews, examiners are expected to determine whether the existing capital level is adequate for the BHC's risk profile, following consideration of the following items: the level and trend of adversely classified assets; the adequacy of the allowance for loan and lease losses; the volume of charged off loans and recoveries; the balance sheet structure and liquidity needs; the level and type of concentrations; compliance with state and federal capital requirements; and composition of elements of capital. Examiners are also expected to determine whether earnings enable the BHC to fund growth, remain competitive in the marketplace, and support its overall risk profile. And examiners are expected to determine the effect of current capital levels on the future viability of the BHC and its subsidiary depository institutions by assessing management's ability to reverse deteriorating trends and augment capital through earnings or by raising additional capital.

## 2. Changes to Supervision Methodologies since the Crisis

Within the context of continuous supervision and a risk-focused approach, the Federal Reserve has made a number of changes to the supervision of the largest BHCs, including with respect to the structure and oversight of Federal Reserve supervision as well as specific processes designed to enhance forward-looking risk identification and the execution of supervisory activities. Importantly, the Federal Reserve is making changes in the direction of supervision of large financial institutions designed to more consistently and fully draw from our broad range of expertise. The oversight and direction of Federal Reserve supervision of the largest firms is now more centralized and multidisciplinary. A newly-formed group of senior officials from the Board and the Reserve Banks -- bringing

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based capital ratio, unless subject to written agreement, order, capital directive or other prompt corrective action directive to meet and maintain specific capital levels (12 CFR 208.43(b)(1)).

<sup>6</sup> See Board SR letter 99-18 (July 1, 1999), available at <http://fedweb.frb.gov/fedweb/bsr/sr/lttrs/SR9918.htm>

<sup>7</sup> 12 U.S.C. §3907 (a) (2).

<sup>8</sup> 12 CFR Part 567

together the Federal Reserve's analytical expertise in macro-economics and finance, in the operation of money and capital markets, as well as in banking supervision and regulation -- is responsible for defining supervisory priorities and coordinating supervisory strategy and plans for large financial firms.

The Federal Reserve is also adopting a more macro-prudential perspective to complement the traditional focus on individual firm safety and soundness. This includes heightened focus on the evaluation of linkages across firms and markets and other mechanisms that have the potential to amplify both booms and busts, and is supported by an enhanced surveillance and analysis process for large BHCs, including the incorporation of information from a "quantitative surveillance" program, which uses statistical and economic analysis to evaluate the performance of institutions relative to their peers, to complement the work of our examiners in the field. The Federal Reserve's enhanced surveillance combines data from research on the macro-economy and financial markets with firm-specific supervisory information to provide a more comprehensive understanding of the financial conditions of firms and the risks they face, as well as the potential for broader impacts on the financial system.

Building off of the Supervisory Capital Assessment Program (SCAP), the Federal Reserve will conduct periodic supervisory stress tests and scenario analyses across the largest firms to identify the potential impact of possible adverse changes in the economy and financial markets. These efforts will be coordinated with and include participation of other federal banking regulatory agencies, where applicable, and will serve a number of purposes, including identifying firm-specific and financial system vulnerabilities and developing horizontal perspectives on key risk exposures and risk-management challenges across the industry that can be used to inform requirements for corrective actions where weaknesses exist.

### 3. Lessons Learned

The changes we have incorporated into the supervision process, described above, are largely based on lessons learned during the financial crisis. Some of the key lessons learned include the following:

We learned that the supervisory processes for identifying key risks and other areas of potential concern did not keep up with the rapid innovations taking place in financial markets and products. There was an inadequate understanding of the linkages between firms and the changing risk profiles of the largest firms stemming from the growth and evolution of the capital markets. For example, supervisors, as well as senior management and boards of directors at large financial institutions, did not adequately understand the risks stemming from the growing use of off-balance sheet entities, particularly the increased use of bank-sponsored or supported short-term money market vehicles to fund senior tranches of asset securitizations and re-securitizations. Risk exposures that were thought to have been widely dispersed across the financial system through the distribution of credit assets in fact were concentrated in the banking system, largely as a result of banks' direct, indirect, or implicit support for the underlying securities and

funding vehicles. The result was that financial institutions of all types were more vulnerable to rapid erosion in market liquidity than was recognized.

We learned that supervisors did not insist on sufficiently strong risk management practices and did not send forceful enough messages to financial institutions requiring firms to address known deficiencies in an expeditious manner. For example, there was too little attention paid by supervisors, managers, and boards of directors to rapidly correcting known weaknesses in some fundamental risk-management practices, including, but not limited to, those related to emerging and complex business activities. In an apparently benign environment, there was not a full appreciation of the growing vulnerabilities created by the increasing speed at which shocks could be transmitted across the financial system and supervisors, as well as bank managers and their boards of directors, did not see the urgency of addressing what appeared to be risk management weaknesses that could be adequately corrected over time.

We learned that, in a period of strong operating performance for financial institutions and apparently sound economic and financial market conditions, neither supervisors nor bank managers gave sufficient priority to the identification of low probability events with potentially highly adverse outcomes or to mitigating actions that could be taken before such events occurred.

And we learned that firms and risky practices migrated to gaps in the statutory framework for supervision and, at least for a period of time leading up to the crisis, market discipline did little to constrain excessive risk taking at financial institutions.

### Monetary Policy

You asked how the Federal Reserve views the role of monetary policy in identifying and managing asset bubbles.

The Federal Reserve conducts monetary policy to foster its statutory objectives of maximum employment and stable prices. Consistent with these objectives, the Federal Reserve adjusts the stance of policy over time based on the outlook for economic activity and inflation and the risks surrounding that outlook. The economic outlook, in turn, is importantly influenced by financial variables that affect private spending, such as interest rates and levels of asset prices. As a result, asset prices and financial market conditions more broadly are a critical element in monetary policy deliberations. In this framework, so-called asset bubbles, or other situations in which asset valuations may appear to be high relative to levels that would be suggested by economic fundamentals, do affect the stance of monetary policy through their effects on the economic outlook. For example, if a rapid and substantial rise in equity prices boosts household net worth and trims business capital costs, this would be expected to lead to a pickup in aggregate spending. The Federal Reserve might then choose to firm the stance of policy if the projected path of spending was seen as likely to result in a pickup in inflation pressures, given the anticipated productive capacity of the economy.

Whether the stance of monetary policy should respond to asset prices beyond the adjustment called for by their effect on the central bank's outlook for economic growth and inflation is a long-standing policy debate. Some have argued that a more aggressive approach -- "leaning against" asset bubbles -- would help to damp emerging imbalances in the financial system that could contribute to subsequent financial instability with adverse consequences for the real economy. Others have noted that identifying asset bubbles in real time is very difficult and, even if they could be identified, calibrating the appropriate monetary policy response is extraordinarily challenging given our limited understanding of the factors influencing bubbles. Moreover, monetary policy is a very blunt tool to apply in response to such problems. For example, tightening monetary policy in response to a period of easy finance and overbuilding in the commercial real estate sector in some regions of the country could result in higher national unemployment and weaker economic growth for the economy as a whole. In such cases, supervisory responses may provide a better-targeted response. For example, supervisors could take steps to ensure that lenders have appropriate systems in place to measure and manage the risks associated with such lending, and also that lenders have sufficient capital to handle the resulting exposures.

The Federal Reserve is putting in place enhanced processes to incorporate a macro-prudential approach in its supervisory activities—that is, an approach that takes account of risks to the financial system overall as well as at the level of the individual firm. The Financial Stability Oversight Council established by the Dodd-Frank Wall Street Reform and Consumer Protection Act will be a key institutional mechanism at the national level that, among other things, will focus on identifying potential systemic risks and developing appropriate policy responses. Although macro-prudential regulation should be the first line of defense against the buildup of bubbles or other financial imbalances, monetary policymakers should be cognizant of possible developing problems; toward that end, we have significantly stepped-up our efforts to ensure that the Federal Open Market committee, which sets monetary policy, is well-informed about current issues related to financial stability and potential systemic risks.

### Emergency Assistance

You asked about the Federal Reserve's authority to provide government assistance under section 13(3) of the Federal Reserve Act and the FDIC's authority to provide assistance under the systemic risk exception to the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) and specifically about the assistance provided in 2008 using section 13(3) authority. You also asked why the Federal Reserve recommended that the FDIC provide assistance to Wachovia under the systemic risk exception of FDICIA and whether the Federal Reserve encouraged the FDIC to accept Citigroup's assisted bid, rather than Wells Fargo's assisted bid.

#### 1. Emergency Assistance in General

Section 13(3) of the Federal Reserve Act, as in force during the financial crisis, authorized the Board to make secured loans to individuals, partnerships, and corporations



in "unusual and exigent circumstances" and when the borrower is "unable to secure adequate credit accommodations from other banking institutions." This authority was granted by Congress during the Great Depression, when a lack of credit availability severely undermined the economy and contributed to the very low output and very high unemployment witnessed at that time. This provision was enacted precisely to allow the Federal Reserve to provide liquidity to individuals and nonbanking entities to relieve financial pressures that might otherwise have severe adverse economic effects. This type of lending authority is shared by other central banks worldwide. Prior to the recent financial crisis, the Federal Reserve had not lent funds under section 13(3) since the 1930s and had only authorized the use of this authority during two brief periods during the late 1960s in connection with liquidity pressures at thrift institutions, which did not have access to discount window credit at that time.

Section 13(3) contains a number of important restrictions. In particular, section 13(3) requires that: (1) the Board find that unusual and exigent circumstances exist; (2) the loan be authorized by the affirmative vote of not less than five Board members (unless there are fewer than five Board members in office at the time, or in situations where a financial emergency requires immediate action before five Board members can be contacted); (3) the loan be secured to the satisfaction of the lending Reserve Bank; (4) the Reserve Bank obtain evidence that the borrower is unable to obtain adequate credit accommodations from other banking institutions; and (5) the rate of interest on the loan established by the Reserve Bank be reviewed and determined by the Board. The Dodd-Frank Act established a number of new limitations on section 13(3) lending. Perhaps most importantly, as a result of the amendments in the Dodd-Frank Act, this authority can only be used to provide liquidity in the form of a program or facility with broad-based eligibility; the provision of emergency credit to a single or specific company is no longer authorized under section 13(3). Moreover, any program or facility with broad-based eligibility that is established under this authority must be approved by the Secretary of the Treasury.

In general, the FDIC is required to resolve failing or failed insured depository institutions at least cost to the deposit insurance fund. The "least cost" test is focused on the direct costs to the FDIC of resolving a particular institution and does not consider spillover effects that a failure might have for other institutions or markets and the economy. The Federal Deposit Insurance Act provides an exception to the least cost requirement—a so-called systemic risk exception—if a least-cost resolution "would have serious adverse effects on economic conditions or financial stability" and if a non-least cost resolution method would "avoid or mitigate such adverse effects." Invoking the systemic risk exception requires written recommendations, by two-thirds votes, of the FDIC's Board of Directors and the Board of Governors of the Federal Reserve System, and a decision by the Secretary of the Treasury in consultation with the President. Under the provisions of the Dodd-Frank Act, the systemic risk exception has been further limited and now may only be invoked with respect to an insured depository institution for which the FDIC has been appointed receiver, thereby prohibiting any "open bank" assistance. The Dodd-Frank Act also restricts support provided under the systemic risk

exception to the winding up of an insured depository institution for which the FDIC has been appointed receiver.

In general, in providing credit under section 13(3) or in recommending the invocation of the systemic risk exception during 2008 before the enactment of the Dodd-Frank Act, the Federal Reserve considered the severity of the financial strains and the potential consequences for the U.S. financial system and economy if support was not provided. These judgments were based on an assessment of the size, activities, and interconnectedness of the affected firms and the importance of the financial markets that were under stress. In addition, the Federal Reserve considered the extent to which the provision of support to the affected firms or markets could ameliorate the adverse effects on the broader financial system and the economy that would otherwise occur.

During the financial crisis, the Federal Reserve provided two basic types of liquidity support under section 13(3)—broad-based credit programs aimed at addressing strains affecting groups of financial institutions or key financial markets, and credit directed to particular systemically-important institutions in order to avoid a disorderly failure of those institutions. In both cases the purpose of the credit was to mitigate possible adverse effects on the broader financial sector and the economy. Liquidity facilities of the first type included the Primary Dealer Credit Facility (PDCF), the Term Securities Lending Facility (TSLF), the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), the Commercial Paper Funding Facility (CPFF), the Money Market Investors Funding Facility (MMIFF), and the Term Asset-Backed Securities Loan Facility (TALF). Liquidity support provided to particular institutions to avert a disorderly failure included credit provided through Maiden Lane LLC to facilitate the acquisition of Bear Stearns by J.P. Morgan Chase, and credit provided to American International Group (AIG) through a revolving credit line and through Maiden Lane II LLC and Maiden Lane III LLC. The Federal Reserve, acting with the U.S. Treasury and FDIC, also agreed to provide loss protection and liquidity support to Citigroup and Bank of America on designated pools of assets utilizing authority provided under section 13(3), but ultimately did not extend any credit to either of these institutions.<sup>9</sup>

The fundamental rationale for implementing the range of broad-based credit facilities was to address the intense liquidity pressures faced by many institutions and the seizing up of key financial markets at the time, and so to mitigate the adverse effects that the strains on institutions and markets could have had on the broader economy. The PDCF and TSLF provided liquidity support to primary dealers that, in turn, were active participants and market-makers in a range of key financial markets. The AMLF, CPFF, and MMIFF were established to address pressures associated with the runs on money market mutual funds in the fall of 2008 and the associated strains in short-term funding markets, particularly the commercial paper market. The TALF was established to address a shut-down in securitization markets and the associated disruptions in credit flows to households and businesses. On the whole, these lending programs were designed to provide credit support to the operation of financial firms and markets during

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<sup>9</sup> The arrangements with Bank of America and Citigroup were never invoked and have since been cancelled.

a period of extraordinary stress, and thereby helped to foster improved credit conditions for businesses and households.

The rationale for providing credit support to particular institutions was to avert a disorderly failure of these institutions and so to limit the impact of the firms' difficulties on the functioning of financial markets and the broader economy. As we saw following the failure of Lehman Brothers, the collapse of a large, complex, and interconnected financial firm can have very substantial effects on other firms and on the functioning of financial markets.

In all of its actions based on section 13(3) lending authority, the Federal Reserve was focused on addressing the severe strains evident across a broad range of financial markets and the associated disruption in credit flows to households and businesses and on limiting the risks of a further deterioration in financial and economic conditions. A central feature of the financial crisis was the potential for adverse feedback loops in which the liquidity strains experienced by markets and institutions led to sharply constrained access to credit for households and businesses that, in turn, led to weaker economic activity and the amplification of the liquidity strains for markets and institutions. These adverse dynamics were a major source of systemic risk during the financial crisis. By providing liquidity support to key financial markets and institutions, the Federal Reserve's actions helped to short circuit these sorts of adverse dynamics and to avoid an even more intense financial crisis and economic downturn.

The Federal Reserve has long been committed to the principles of transparency and public accountability. Consistent with these principles, the Federal Reserve has provided a great deal of information to the public regarding its balance sheet and the actions it has taken based on its section 13(3) lending authority. The Federal Reserve publishes its balance sheet on a weekly basis in the Board's H.4.1 statistical release, which is also available on the Board's public website. In addition, the Federal Reserve developed a monthly report to the Congress that provides detailed information on all of its credit and liquidity programs. Under the Dodd-Frank legislation, the Federal Reserve will disclose by December of this year individual transaction data for the section 13(3) programs listed above as well as for the Term Auction Facility (authorized under section 10 of the Federal Reserve Act) and transactions completed before enactment of the Dodd-Frank Act under the agency MBS purchase program (authorized under section 14 of the Federal Reserve Act). Moreover, the Federal Reserve is currently working closely with the Government Accountability Office in its review of all of the Federal Reserve's section 13(3) lending programs.

## 2. Wachovia

In the fall of 2008, the Board believed that a full or partial default by Wachovia Corporation (Wachovia) and its subsidiaries on their debt would intensify liquidity pressures on other U.S. banking organizations. At the time, U.S. banking organizations were extremely vulnerable to a loss of confidence by wholesale and retail suppliers of funds. Markets were already under considerable strain at that time because of the weak

economy and the events involving Lehman Brothers, AIG, and Washington Mutual Bank (WAMU) earlier that month. Banking organizations were experiencing mounting losses on their residential mortgage portfolios and the broader public was becoming concerned about the outlook for a number of U.S. banking organizations, moving deposits, putting downward pressure on their stock prices and putting upward pressure on their credit default swap spreads.

Wachovia had been experiencing drains on its liquidity during the days leading up to September 26, 2008. On September 26, 2008, the day after the failure of WAMU, Wachovia experienced heavy demands for withdrawal of deposits, a key source of funds. Wachovia management and the supervisors were concerned that, if the loss of deposits continued, and losses on its mortgage portfolio continued to mount, Wachovia would become insolvent within a short period. Consequently, Wachovia and the supervisors sought a private sector solution for Wachovia.<sup>10</sup>

On Monday, September 29, 2008, the FDIC announced that it had facilitated the acquisition of Wachovia by Citigroup in a transaction in which Citigroup and the FDIC would share losses on a pool of \$312 billion (or nearly 50 percent) of Wachovia's assets. On the day before, when the Board considered whether the systemic risk exception should be invoked, only two firms were willing to consider assisting in the resolution of Wachovia—Citigroup and Wells Fargo—and both firms informed the FDIC they would bid for Wachovia only if the FDIC provided material loss protection. The FDIC could provide the loss protection sought by these firms only under the systemic risk exception.

The failure of Wachovia would have led the public to doubt the financial strength of other organizations that were seen as similarly situated. This could have made it less likely that they would be able to retain deposits, and raise capital and other funding. In addition, if a least-cost resolution did not support foreign depositors, the resolution would have endangered what was a significant source of funding for several other major U.S. financial institutions as well as Wachovia.

Creditors would also be concerned about direct exposures of other financial firms to Wachovia or Wachovia Bank, N.A. (Wachovia Bank) since these firms would face losses in the event of a default. In particular, losses on Wachovia and Wachovia Bank debt could lead more money market mutual funds to “break the buck,” accelerating runs on these and other money funds. The resulting liquidations of fund assets along with the further loss of confidence in financial institutions could lead short-term funding markets to virtually shut down; these markets were already under extreme pressure in the fall of 2008.

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<sup>10</sup> Wachovia borrowed \$5 billion from the Term Auction Facility (TAF) on September 25, 2008 (and had borrowed from the TAF on other occasions). The next day, it began discussions with Citigroup and Wells Fargo with the intent of effecting a merger and finding a permanent solution to its potential liquidity issues. Wachovia did not borrow from the discount window (other than the TAF borrowing just mentioned) until October 6, 2008, many days after the acquisition of Wachovia by Wells Fargo was announced.

The consequences of the insolvency and unwinding of Wachovia under the least-cost resolution test would also have disastrous effects for an already weakened economy. Business and household confidence would be undermined by the worsening financial market turmoil, and banking organizations would be less willing to lend due to their increased funding costs and decreased liquidity. These effects could contribute to materially weaker economic performance, higher unemployment, and reduced wealth.

For these reasons, the Board by unanimous vote determined that compliance by the FDIC with the least-cost requirement of the Federal Deposit Insurance Act (FDI Act) with respect to Wachovia Bank and its insured depository institution affiliates would have serious adverse effects on economic conditions and financial stability, and that action or assistance by the FDIC permitted under the systemic risk exception within the Act would avoid or mitigate these adverse effects by facilitating the sale and private support of Wachovia. Similar determinations were made by the board of directors of the FDIC and the Secretary of the Treasury, in consultation with the President, which allowed the FDIC to consider measures outside the least-cost resolution requirement to resolve Wachovia, including the provision of so-called “open bank” assistance. Ultimately, as you know, Wachovia was resolved without any FDIC assistance under the systemic risk exception.

The Board’s determination that a least cost resolution of Wachovia would have serious adverse effects on economic conditions and financial stability was based on the consequences of the insolvency and unwinding of that institution, and neutral as to whether the acquirer was Citigroup or Wells Fargo. While Citigroup was negotiating the final terms of its proposal to acquire Wachovia, Wells Fargo submitted a second bid to the FDIC that did not involve FDIC assistance. The FDIC immediately announced that it would consider and review the new Wells Fargo bid, at the same time reaffirming its support for the Citigroup bid already accepted by the FDIC. The Federal Reserve also promptly issued a statement noting that both this second proposal and the Citigroup proposal were under its review. After Citigroup announced that it was no longer seeking to enjoin Wells Fargo’s acquisition of Wachovia, the Board approved Wells Fargo’s acquisition of Wachovia under the Bank Holding Company Act.

#### Lehman Brothers Bankruptcy

Your supplemental questions ask about the financial condition of Lehman Brothers in the weeks leading up to its filing for bankruptcy and how that information was communicated to me.

The Federal Reserve did not regulate or supervise Lehman. Following the creation of the Primary Dealer Credit Facility (“PDCF”) Federal Reserve examiners did collect financial information from the primary dealers, and two examiners were assigned to Lehman. The examiners’ responsibility was limited; their purpose was to ensure that Federal Reserve lending to primary dealers under the PDCF facility would be secured to our satisfaction, and that the primary dealers continued to seek liquidity sources from the market.

The contention that the Federal Reserve believed it had viable options to rescue Lehman, but chose not to use them, is simply untrue. As I explained in my oral testimony, during Lehman Weekend, both the Board and the Federal Reserve Bank of New York were focused on finding a way to prevent the disorderly collapse of Lehman. With the support of the Treasury Department and the SEC, we assembled a number of private sector participants to seek a merger partner for Lehman and a private sector source of funding for Lehman's troubled assets in order to facilitate a merger. Over that weekend, when issues arose with Barclays' bid to acquire Lehman, we worked with Barclays and the UK FSA to try to resolve those issues. However, when Barclays ultimately indicated that it could not complete an acquisition of Lehman, no potential merger partner remained.

Without a merger partner, the Federal Reserve saw no viable options for avoiding a Lehman bankruptcy. Lehman was in immediate need of substantial capital and liquidity to fund its operations as counterparties pulled funding away or sought better lending terms and more collateral. Although we did not have precise information about their credit needs at the time, the balance sheet of Lehman readily illustrated that the credit relied on by Lehman to remain in operation was in the hundreds of billions of dollars and the lack of confidence that led counterparties to pull away from Lehman suggested that Lehman would need a credit backstop of all its obligations in order to prevent a debilitating run by its counterparties. Moreover, the value of a substantial portion of assets held by Lehman, especially its investments in RMBS, loans, and real estate, was falling significantly. Derivative positions were subject to continuing collateral calls that required amounts of Lehman funding that could not easily be quantified in advance. And clearing parties were demanding collateral as a condition for serving as an intermediary in transactions with Lehman. We saw no evidence that Lehman had sufficient collateral to support these types and amounts of taxpayer support from the Federal Reserve.

In addition, it did not appear that a loan from the Federal Reserve would be sufficient, by itself, to prevent the failure of Lehman. Rather, given the market's loss of confidence in Lehman, liquidity from the Federal Reserve would simply have allowed Lehman's counterparties to continue to demand and receive repayment from Lehman, reinforcing the advantage of running on Lehman and increasing exposure to the Federal Reserve had it lent. Moreover, without a potential buyer for Lehman, the Federal Reserve could not be certain how long it would be required to fund Lehman or what the ultimate source of repayment, if any, would have been.

This information was conveyed to me by phone that weekend by FRBNY officials. As you know, Lehman's primary dealer did have sufficient collateral to support a limited loan through the PDCF and other existing FRBNY liquidity facilities, and that credit was provided.

Lehman's own analysis at the time is consistent with this view. By Sunday of Lehman Weekend, Lehman's board of directors recognized that Lehman was either

already insolvent or would imminently be insolvent.<sup>11</sup> Moreover, our concerns appear to be borne out by the bankruptcy proceeding. After extensive analysis, the Lehman Bankruptcy Examiner, Mr. Anton Valukas, determined that there is sufficient evidence to show that Lehman Brothers Holding Inc. (“LBHI”) was insolvent as of September 8, 2008, and perhaps was insolvent as early as September 2, 2008.<sup>12</sup> Furthermore, the recent report of the managers of the Estate of LBHI strongly suggests that a decision by the Federal Reserve to fund Lehman in September 2008 would have resulted in substantial losses to the Federal Reserve and taxpayers. On September 22, 2010, Alvarez and Marsal, representing the LBHI Estate, estimated that the value of assets currently available to LBHI—which would have been the debtor in a hypothetical loan from the Federal Reserve—was approximately \$57.5 billion as of June 30, 2010.<sup>13</sup> Importantly, these assets are currently all that is available to fund what the Estate estimates to be approximately \$365 billion in likely allowed claims still pending against the Estate—that is, claims representing roughly 6 times the value of the assets available.<sup>14</sup> Alvarez and Marsal also estimate that most of these likely allowed claims—between \$250 and \$350 billion—represent unsecured claims outstanding against the estate—between 4 and 6 times the value of assets available.<sup>15</sup> Thus, even if the Federal Reserve had been able to fund Lehman to the extent of its available unencumbered assets, this volume of unsecured claims and total claims illustrate that Lehman’s collateral available to secure such a loan would likely have been insufficient and that Federal Reserve funding would likely not have been fully repaid.

These facts distinguish Lehman in a number of critical ways from the AIG. In contrast to Lehman, the core operations of AIG were viable and profitable insurance companies. AIG’s financial difficulties stemmed primarily from the loss of liquidity to fund collateral calls on its unhedged derivatives positions in one part of the company—its Financial Products Division. AIG’s problems appeared at the time to be more classical liquidity needs that were quantifiable in amounts and could be covered with borrowings secured by valuable available collateral—the shares of stock of profitable insurance companies and other businesses.

The Federal Reserve strongly encouraged Lehman to address its problems throughout the spring and summer of 2008. When market pressures threatened the collapse of Lehman, the Federal Reserve made strong efforts, and included a broad range of other agencies and financial firms, to find a solution that would prevent the failure of Lehman. At all times and using the limited statutory tools available to it, the Federal Reserve attempted to balance the costs to the economy with the principle of ensuring that

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<sup>11</sup> See Minutes of the Board of Directors of Lehman Brothers Holdings Inc., September 14, 2008.

<sup>12</sup> Report of Anton R. Valukas, Lehman Brothers Examiner, pp. 1573.

<sup>13</sup> See Alvarez and Marsal, p. 18 (September 22, 2010).

<sup>14</sup> The total amount of claims filed against the estate exceed \$1.2 trillion. The reduced amount of \$365 billion represents the result of negotiations and determinations by the bankruptcy estate and court that have reduced the total claims. The Federal Reserve would not be in the same position as a bankruptcy court or debtor-in-bankruptcy to negotiate or terminate claims in the event that the Federal Reserve had funded Lehman’s operations and no alternative solution could be found. See Alvarez and Marsal, p. 23 (September 22, 2010).

<sup>15</sup> See Alvarez and Marsal, p. 6 (September 22, 2010).

any credit extended by the Federal Reserve would be adequately secured and repaid. While all decisions are subject to further analysis in hindsight, in the case of Lehman, the facts conveyed to me by the FRBNY at the time and as they have been developed by the bankruptcy proceeding for Lehman confirm that the Federal Reserve chose the course of action consistent with its limited statutory authority and the interest of ensuring that any taxpayer funds lent would be repaid in full.

### Reading List

You asked that I provide you with a reading list. Allow me to suggest the following articles, speeches, and books:

- “The Panic of 1907: Lessons Learned from the Market’s Perfect Storm” by Robert F. Bruner and Sean D. Carr;
- “The Ascent of Money: A Financial History of the World” by Niall Ferguson;
- “Deciphering the Liquidity and Credit Crunch 2007–2008” by Markus K. Brunnermeier
- “CoVaR” by Tobias Adrian and Markus K. Brunnermeier, available at:  
<http://www.princeton.edu/~markus/research/papers/CoVaR.pdf>;
- “Lords of Finance” by Liaquat Ahamed;
- Gary B. Gorton (2008), "The Panic of 2007," paper presented at "Maintaining Stability in a Changing Financial System," a symposium sponsored by the Federal Reserve Bank of Kansas City, held in Jackson Hole, Wyo., August 21-23; the paper is available at [www.kansascityfed.org/publications/research/escp/escp-2008.cfm](http://www.kansascityfed.org/publications/research/escp/escp-2008.cfm);
- Markus Brunnermeier and Lasse Heje Pedersen (2009), "Market Liquidity and Funding Liquidity," *Review of Financial Studies*, vol. 27 (6), pp. 2201-38;
- Jane Dokko, Brian Doyle, Michael T. Kiley, Jinill Kim, Shane Sherlund, Jae Sim, and Skander Van den Heuvel (2009), "Monetary Policy and the Housing Bubble," Finance and Economics Discussion Series 2009-49 (Washington: Board of Governors of the Federal Reserve System, December), available at [www.federalreserve.gov/PUBS/FEDS/2009/200949](http://www.federalreserve.gov/PUBS/FEDS/2009/200949);
- Edward L. Glaeser, Stuart S. Rosenthal, and William C. Strange (2010) "Can Cheap Credit Explain the Housing Boom?" working paper (Cambridge, Mass.: Harvard University, July);
- Charles Bean, Matthias Paustian, Adrian Penalver, and Tim Taylor (2010), "Monetary Policy after the Fall," paper presented at a symposium sponsored by the Federal Reserve Bank of Kansas City, held in Jackson Hole, Wyo., August 28;
- Coval, Joshua, Jakub Jurek, and Erik Stafford. 2009a. "The Economics of Structured Finance." *Journal of Economic Perspectives*, 23(1): 3–25;
- Eichner, Matthew J., Donald L. Kohn, and Michael G. Palumbo (2010). “Financial Statistics for the United States and the Crisis: What Did They Get Right, What Did They Miss, and How Should They Change?” Finance and Economics Discussion Series 2010-20, Federal Reserve Board;
- Heitfield, Erik (2010). "Lessons from the Crisis in Mortgage-Backed Structured Securities: Where Did Credit Ratings Go Wrong?" in *Re-Thinking Risk Measurement and Reporting -- Uncertainty, Bayesian Analysis and Expert Judgment* (Ed. Klaus Böcker), Risk Waters: London. 2010;



- Joint Forum (2008). Credit Risk Transfer: Developments from 2005 to 2007. BIS: Basel. July 2008. (<http://www.bis.org/publ/joint21.pdf?noframes=1>);
- Daniel M. Covitz, Nellie Liang, and Gustavo A. Suarez, “The Evolution of a Financial Crisis: Panic in the Asset-Backed Commercial Paper Market,” Federal Reserve Board Finance and Economics Discussion Series 2009-36, (<http://www.federalreserve.gov/Pubs/Feds/2009/200936/200936pap.pdf>); and
- Paul Tucker, “Shadow Banking, Financing Markets and Financial Stability,” 21 January 2010 (<http://www.bankofengland.co.uk/publications/speeches/2010/speech420.pdf>).

Thank you for the opportunity to address these issues. I wish you every success as you work to complete your analysis and final report.

Sincerely,

A handwritten signature in black ink, appearing to be 'P. Tucker', written in a cursive style.

cc: Christopher Seefer, Assistant Director & Deputy General Counsel  
Wendy Edelberg, Executive Director