The Fed and Lehman Brothers

The bankruptcy of the investment bank Lehman Brothers was the pivotal event of the 2008 financial crisis and the Great Recession that followed. Ever since the bankruptcy, there has been heated debate about why the Federal Reserve did not rescue Lehman in the same way it rescued other financial institutions, such as Bear Stearns and AIG. The Fed's leaders from that time, especially former Chairman Ben Bernanke, have strongly asserted that they lacked the legal authority to save Lehman because it did not have adequate collateral for the loan it needed to survive. Based on a meticulous four-year study of the Lehman case, *The Fed and Lehman Brothers* debunks the official narrative of the crisis. Ball argues that in reality, the Fed could have rescued Lehman but officials chose not to because of political pressures and because they underestimated the damage that the bankruptcy would do to the economy. The compelling story of the Lehman collapse will interest anyone who cares about what caused the financial crisis, whether the leaders of the Federal Reserve have given accurate accounts of their actions, and how the Fed can prevent future financial disasters.

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The Fed and Lehman Brothers

Setting the Record Straight on a Financial Disaster

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Preface

On September 10, 2008, economists at the Federal Reserve prepared one of their regular analyses of the US economy for the senior policymakers setting interest rates. Falling real estate prices and rising defaults on home mortgages had caused stresses in financial markets and the economy, and the unemployment rate had drifted up from 5.0 percent at the end of 2007 to 6.1 percent in August 2008. The Fed's economists believed, however, that these problems would be contained. They forecasted that the unemployment rate would average 6.2 percent over the last three months of 2008, remain at that level in 2009, and then start falling.[1]

Five days after these forecasts were made, the US financial system was hit with a disaster: the bankruptcy of Lehman Brothers. Founded in 1850, Lehman was the country's fourth largest investment bank and a pillar of Wall Street. In 2007, it had ranked number one on *Fortune* magazine's list of "Most Admired Securities Firms." With $600 billion in assets, it was by far the largest US corporation in any industry to file a bankruptcy petition (the previous record holder, the communications giant WorldCom, had only about $100 billion of assets when it failed in 2002).

The bankruptcy ushered in a six-month period that many have called a "financial tsunami."[2] With Lehman destroyed, confidence in the remaining Wall Street firms quickly collapsed, and many of them, from Citigroup to Goldman Sachs to Morgan Stanley, had trouble raising the funds they needed to make investments and provide credit to other companies. Across the country, banks cut back sharply on lending and corporations had to pay pathologically high interest rates to issue bonds. The Dow Jones stock index, which had been near 13,000 at the start of 2008, fell to about 6,500 in March 2009.

The crisis in the financial system quickly spread to the rest of the economy. As wealth was destroyed and flows of credit broke down, consumers and firms cut their spending sharply, producing the Great Recession of 2008–2009. Total US employment fell by almost 500,000 in October 2008, and then by 700,000–800,000 in each of the following six months. In April 2009, the unemployment rate was 9 percent and rising rapidly. Princeton economist Alan Blinder summarizes these events with a vivid metaphor: the economy was hit by a truck, and "the license plate of that truck read: *L-E-H-M-A-N*."[3]

At the height of the crisis, many people feared that the financial system and economy would collapse as profoundly as they did in the 1930s. In January 2009, Nobel Prize winner Paul Krugman said, "This looks an awful lot like the beginnings of a second Great Depression." Henry Paulson, the Secretary of the Treasury in 2008, later wrote, "The economic damage . . . could easily have equaled or even exceeded that of the Great Depression, with 25 percent unemployment, or worse."[4]

A catastrophe of that magnitude did not come to pass. In the Spring of 2009, stability began to return to Wall Street and stock prices began to recover. The financial crisis was arrested in large part because of extraordinary actions by economic policymakers, including more than a trillion dollars of loans from the Federal Reserve to financial institutions. These loans saved a number of firms from near-certain failure, including the investment bank Bear Stearns and the insurance company AIG. Other policy actions included purchases of the stock of financial institutions by the US Treasury under the Troubled Asset Relief Program, and the new Obama administration's fiscal stimulus program.

Yet the financial crisis was contained only after the economy had sustained severe damage. The Great Recession was not as bad as the 1930s Depression, but it was the worst downturn since then and it was followed by a painfully slow recovery. Employment fell through the end of 2009, and the unemployment rate reached 10 percent. Employment started to recover in 2010, but it took until

September 2015, seven years after Lehman's bankruptcy, for the unemployment rate to fall back to 5 percent, roughly what economists consider a normal level for the long term.

Behind these unemployment statistics, there is terrible damage to people's lives. Social scientists have found that a period of unemployment leaves long-term scars by reducing a worker's earnings for decades. People with the bad luck to finish school during a recession have trouble starting a career, thus hurting their lifetime prospects. The experience of unemployment increases the risk of depression, substance abuse, suicide, and death from heart disease. For children, having an unemployed parent increases the risk of repeating a year in school and the risk of health problems such as obesity.[5]

The Lehman Brothers bankruptcy was a shocking event in part because it was unique. Many Wall Street firms reached the brink of failure during 2008, but Lehman was the only one that was *not* rescued by a loan from the Federal Reserve, and had to file for bankruptcy. Why didn't the Fed rescue Lehman? That question has been hotly debated from the firm's bankruptcy filing until today, and it is the primary subject of this book.

The question has been asked of Federal Reserve officials on many, many occasions, and they have given a consistent answer: they did not rescue Lehman because they lacked the legal authority to do so. The Fed couldn't lend to Lehman because the firm could not post enough collateral to secure the loan that it needed, as required by Section 13(3) of the Federal Reserve Act. As Fed Chair Ben Bernanke said in 2010, "The only way we could have saved Lehman would have been by breaking the law."[6]

Lehman executives have bitterly disputed the Fed's position, saying their firm could have survived if the Fed had treated it the same way it treated other firms both before and after the bankruptcy. Among disinterested students of the financial crisis, some have supported the Fed's position and others have not. In 2013, William Cline and Joseph Gagnon of the Peterson Institute for International

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Economics said that, because of Lehman's inadequate collateral, "saving Lehman would have required an outright deception on the part of the Fed that was not required for other loans." But in 2014, Ryan Avent of the *Economist* magazine said, "There was no reason Lehman had to fail" and "the decision to let Lehman fail was political."[7]

As this controversy developed, I, like many people, wondered which side was right. In the summer of 2012, I started to look for evidence about Lehman's finances and the feasibility and legality of a Fed rescue of the firm. I soon discovered something that is not widely appreciated: there is a huge amount of hard evidence on these topics that is easily available to anyone. The sources of this evidence include Federal Reserve records, the financial statements that Lehman filed with the Securities and Exchange Commission, research by journalists, and, most important, investigations performed by the Examiner for the Lehman bankruptcy court and by the Congressionally appointed Financial Crisis Inquiry Commission.

I spent four years analyzing these records and found that they support some firm conclusions about the Lehman episode. The central conclusions in this book concern the claim of Fed officials that they did not rescue Lehman because the firm lacked the collateral needed to make a loan legal. This claim is wrong: the evidence shows clearly that issues of collateral and legality were *not* important factors in the decisions of Fed officials. In addition, Lehman actually *did* have ample collateral for a loan that would have averted its sudden bankruptcy.

Why, then, didn't the Fed rescue Lehman? The available evidence supports the view that policymakers were deterred by the strong political and public opposition to a rescue. The evidence also shows that Fed officials underestimated the damage that the Lehman failure would do to the economy.

Economists have long understood that banks can experience runs, or liquidity crises, that can damage or destroy otherwise healthy institutions. Fears that a bank may fail, whether warranted or not, can lead to a cutoff of funding that causes the failure to occur. The traditional version of a run is one in which people rush to a bank to withdraw their money and the bank runs out of cash. An example, fictional but realistic, is the run on Jimmy Stewart's bank in the 1946 classic *It's a Wonderful Life*.

The 2008 crises on Wall Street were twenty-first century versions of bank runs. They originated with bad investments in real estate, but losses from these investments were not the direct cause of Lehman's sudden collapse or of the near-collapses of the institutions that the Fed chose to rescue. Instead, the fatal development was a loss of confidence by other financial institutions, which led them to suddenly refuse to renew short-term loans that Lehman and the other distressed firms needed to operate. Without the cash from such loans, Lehman could not pay the debts it had coming due on September 15.

A run need not doom a financial institution to a bankruptcy like Lehman's. An economy's central bank can save an institution from a run by serving as the "lender of last resort," a concept introduced by British businessman and journalist Walter Bagehot in his 1873 book *Lombard Street*. Bagehot's basic idea was that a central bank can lend to a bank when a run has disrupted its usual sources of cash, thereby enabling the bank to stay in business. Bagehot emphasized that such a loan must be made "against good collateral" to ensure that the central bank is eventually repaid – essentially the same condition that US law imposed on Fed loans in 2008. In the late nineteenth and early twentieth centuries, Bagehot's principles were used to quell financial panics in the United Kingdom, France, and Canada.[8]

In the United States, the Federal Reserve was created in 1914 to serve as a lender of last resort. The greatest mistake in the Fed's history was its failure to fulfill that role in the 1930s. Its failure to lend as panic-induced runs destroyed banks across the country ushered in the Great Depression. After World War II, a consensus grew that the Fed should avoid repeating its mistake if another crisis struck. This view was advocated by Milton Friedman and Anna Schwartz in their 1963 *Monetary History of the United States,* and the position was strengthened in the 1980s by research on the Depression by a young academic named Ben Bernanke.[9]

As Fed Chairman, Bernanke explicitly invoked Bagehot's principles to explain the 2008 rescues of financial institutions such as AIG.[10] These principles would also have justified a loan to rescue Lehman, because Lehman faced a run and it had the collateral required by Bagehot and by the law governing the Fed. But Fed policymakers chose not to rescue Lehman. In making this decision, as in the 1930s, the Fed failed to perform its role as lender of last resort.

We can hope that the Fed does not make a similar mistake in the next financial crisis, but there is reason for pessimism: bank regulation since the 2008 crisis has taken a wrong turn. In response to widespread condemnation of "bailouts," Congress included stringent new restrictions on Fed lending in the Dodd-Frank Wall Street Reform Act of 2010. The details are complex, but the effect is that some of the Fed's 2008 rescues of financial institutions – and the Lehman rescue that *could* have occurred – might truly be illegal during the next crisis. As I emphasize in the conclusion of this book, it is vital to the future safety of the financial system that Congress correct its 2010 mistake.

Many excellent books discuss the 2008 financial crisis. Authors such as Alan Blinder, David Wessel of the Brookings Institution, and Martin Wolf of the *Financial Times*, to name just a few, provide insights into the many causes and effects of the crisis, the deeper flaws in the economy and financial regulation that the crisis reflected, and the pros and cons of the policies pursued by the Fed and the Treasury department.[11]

What distinguishes this book from all the others on the financial crisis is the level of detail in which it examines the crisis's pivotal event, the Lehman Brothers failure, and the amount of evidence it analyzes to get to the bottom of what happened and why. This evidence allows me to cut through the competing claims of previous authors and set the record straight on why the Fed did not rescue Lehman. My research establishes that Fed officials' claims about their actions are not credible, no matter how often and how strongly these claims are repeated.

Acknowledgments

In July 2016 I completed a monograph on the Federal Reserve's role in the Lehman Brothers bankruptcy, which I have presented to audiences of academics and central bankers. Through discussions of my work, I came to believe that a wider audience might want to understand the Lehman episode, and as a result I have written this book. I have maintained the rigor of my academic piece but have sought to make my analysis more accessible by adding background on some topics and, wherever possible, using plainer English to supplement more technical language.

I am deeply grateful to the people who have helped with this project. Michael Bordo of Rutgers University offered to include my work in the series on monetary history that he edits for Cambridge University Press, and editors Stephen Accera and Karen Maloney of Cambridge University Press have expertly overseen the process of planning and publishing the book.

Most important, development editor Jane Tufts guided me in expositing my research for a broad audience. Jane is widely known as the best development editor working in the field of economics, and her writing talent and her dedication to this book have truly been extraordinary. I was able to hire Jane thanks to generous financial support from the Smith Richardson Foundation.

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- Edmund Crawley provided outstanding research assistance.
- Half a dozen people with first-hand knowledge of the Lehman episode spoke to me off the record and gave me deeper insight into what happened in 2008.

Not everyone who commented on my work agrees with my conclusions. All opinions expressed in this book are strictly my own.

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A Chronology of the Lehman Disaster

[*All dates are in 2008*]*

THE GROWING CRISIS

February 29	After increases in risky investments, Lehman's total assets peak at $786 billion.
March 11	The Fed creates the Term Securities Lending Facility (TSLF).
March 14	The Fed lends Bear Stearns $13 billion to meet its obligations that day.
March 16	The Fed creates Maiden Lane LLC to purchase $30 billion of real estate assets from Bear Stearns, facilitating the acquisition of Bear by JPMorgan Chase.
March 16	The Fed creates the Primary Dealer Credit Facility (PDCF).
March 18	Lehman reports better-than-expected earnings for 2008 Q1.
March	Lehman begins efforts to sell illiquid assets and to find a strategic partner.
March–April	In the wake of Bear Stearns's near-failure, bond rating agencies announce negative changes in their outlooks for Lehman.
May 21	In a prominent speech, hedge fund manager David Einhorn argues that Lehman's real estate assets are overvalued.

* This chronology draws on previous chronologies of the Lehman episode from the Bankruptcy Examiner, the Financial Crisis Inquiry Commission, and the UK Financial Services Authority, along with other sources cited in this book.

May–June	The NY Fed performs liquidity stress tests for Lehman.
June 9	Lehman reports a $2.8 billion loss for 2008 Q2, its first ever quarterly loss.
June 9	Lehman raises $6 billion by issuing new stock.
June 12	Lehman replaces its President and Chief Financial Officer.
June	JPMorgan Chase begins to demand collateral to clear Lehman's tri-party repos.
June–July	Rating agencies downgrade Lehman's bonds. Media suggest that Lehman is endangered.
June–August	Lehman has difficulty issuing unsecured debt and loses some repo financing.
July 11	NY Fed staff prepare a plan for replacing the repo funding of a broker-dealer, focusing on Lehman.
July 15	The NY Fed's William Dudley circulates a plan for a "Maiden Lane type vehicle" to buy illiquid assets from Lehman.
August 31	The Korean Development Bank proposes a $6 billion investment in Lehman.
September 7	The Treasury department places Fannie Mae and Freddie Mac into conservatorship.

LEHMAN'S FINAL WEEK

Tuesday, September 9

The Korean Development Bank ends negotiations about a Lehman investment.

The Investment Bank of Dubai says it needs a "time out" in negotiations about an investment.

S&P and Fitch place Lehman's bond rating on a negative watch.

JPMorgan Chase demands an additional $5 billion of collateral from Lehman.

Bank of America begins due diligence for a possible acquisition of Lehman.

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Lehman's stock price falls from $14 to $8.

Lehman's liquidity pool (by author's calculations) stands at $23 billion, down from $48 billion on May 31.

Wednesday, September 10

Lehman announces a $3.9 billion loss for 2008 Q3. It also announces plans to create REI Global and to sell a majority stake in its Investment Management Division.

Moody's puts Lehman's bond rating on a negative watch, threatening a two-notch downgrade if the firm does not find a strategic partner by September 15.

NY Fed President Geithner leads a conference call on options for aiding Lehman, including "a Fed take out of tri-party lenders" and "a Fed-assisted BoA acquisition."

A "liquidity consortium gameplan" for rescuing Lehman circulates within the Federal Reserve.

Wednesday–Friday, September 10–12

Lehman experiences an acute liquidity crisis. Cash drains include losses of repos, collateral calls from derivatives counterparties, and withdrawals from prime brokerage accounts.

Thursday, September 11

JPMorgan Chase and Citi threaten to stop clearing transactions for Lehman if it is not acquired by another firm by September 15.

In a conference call with Geithner and Fed Chairman Bernanke, Treasury Secretary Paulson says "there would be no public assistance for a Lehman bailout."

Friday, September 12, morning and afternoon

Paulson has breakfast with Bernanke in Washington, DC and then travels to New York.

Barclays begins due diligence for a possible acquisition of Lehman.

Bank of America loses interest in acquiring Lehman.

Fed Vice Chair Kohn reports that Fed and Treasury oppose "involvement [with Lehman] beyond liquidity provision."

Emails among Fed staff discuss options if Lehman loses repo funding on September 15.

Lehman's liquidity pool is $1.4 billion at the close of business.

LEHMAN'S FINAL WEEKEND*

Friday, September 12, evening

7:00 PM	Paulson convenes a meeting about Lehman with Wall Street CEOs at the New York Fed. He says "there would be no public money to support Lehman."

Saturday–Sunday, September 13–14

Analyses by Lehman and its advisors determine that the firm will quickly run out of cash if it opens for business on Monday, the 15th.

Saturday, September 13

Fed staff continue to discuss options if Lehman loses repo funding.

7:00 AM	Paulson arrives at the NY Fed to try to broker an acquisition of Lehman.
Morning	Bernanke receives "discouraging reports" on Lehman from Geithner.
Morning	Lehman executives meet at the NY Fed to discuss a wind-down plan for the firm, but then officials tell them to concentrate on a Barclays transaction.
Afternoon	A tentative deal is reached: Barclays will purchase all of Lehman except for $40 billion of assets that will be financed by a consortium of Wall Street firms.
Afternoon	NY Fed tells Barclays that, to receive Fed approval of the deal, Barclays must immediately guarantee all of Lehman's obligations.

* Many of the times listed here are approximate.

7:00 PM	Bernanke receives a briefing on Lehman in a conference call with other Fed officials.
9:00 PM	Paulson leaves the NY Fed, feeling "optimistic about the prospects for a deal."

Sunday, September 14

8:00 AM	Callum McCarthy, head of the United Kingdom's Financial Services Authority, calls Geithner and says the FSA will not allow Barclays to immediately guarantee Lehman's obligations.
9:00 AM	Paulson's chief of staff reports on a call to the White House: "government is united behind no money" for Lehman.
10:00 AM	SEC Chair Christopher Cox calls McCarthy but cannot resolve the impasse over the guarantee issue.
10:00 AM	Paulson calls President Bush's chief of staff, who says Paulson does not have Presidential approval to "commit Federal resources" to a Lehman rescue.
11:00 AM	Paulson calls Alistair Darling, the UK's Chancellor of the Exchequer, but is unable to rescue the Barclays deal.
Midday	Paulson and Geithner tell the Wall Street CEOs that the Barclays deal is dead and Lehman will file for bankruptcy.
Midday	Geithner calls Bernanke to report the failure of the Barclays deal and the plan for Lehman's bankruptcy.
1:00 PM	At a meeting with Lehman executives, NY Fed General Counsel Baxter directs the firm to file for bankruptcy. He says that the PDCF will assist Lehman's New York broker-dealer, LBI, to keep it in operation, but the PDCF will only lend against

	collateral that was on LBI's balance sheet on Friday, September 12.
1:22 PM	The Fed announces expansion of the acceptable collateral for the PDCF and TSLF. There is confusion about whether the expansion applies to Lehman.
2:00 PM	The NY Fed hosts a special session of derivatives trading, allowing some financial institutions to reduce their exposure to Lehman.
2:55 PM	Bernanke emails Fed Governor Kevin Warsh, who is at the NY Fed, to ask for news.
3:03 PM	Vice Chair Kohn emails Bernanke to report news from Warsh: an announcement of Lehman's bankruptcy is planned for 4:30.
4:12 PM	Lehman prepares a plan for LBI to borrow from the PDCF on behalf of other parts of Lehman.
4:16 PM	Bernanke again emails Warsh to ask for news.
Midafternoon	Paulson tells Geithner and Cox, "Lehman's got to file immediately."
Midafternoon	The Fed tells Lehman that the PDCF is not open to Lehman's London broker-dealer, LBIE.
Midafternoon	Lehman CEO Richard Fuld appeals unsuccessfully for help from Morgan Stanley CEO John Mack.
Midafternoon	George Walker, a Lehman executive who is a second cousin of President Bush, calls the White House but does not reach the President.
Midafternoon	Lehman executives begin work on an "orderly liquidation plan" for the firm, but abandon the effort when they learn that the government insists on an immediate bankruptcy.
Midafternoon	Bank of America agrees to acquire Merrill Lynch.
5:00 PM	Lehman's board of directors meets and learns that LBIE, the firm's London broker-dealer, is out of cash

	and will file for administration in the United Kingdom.
5:00 PM	In a conference call, Paulson, Bernanke, and others "review the day's dreadful events."
6:55 PM	Lehman's board convenes again.
8:00 PM	At Paulson's insistence, Cox calls Lehman's board and tells them to "make a decision quickly."
Late evening	Lehman's board votes to declare bankruptcy.

Monday, September 15, early morning

1:45 AM	Lehman's law firm, Weil Gotshal, files a bankruptcy petition for Lehman.
2:24 AM	Lehman receives a letter from the NY Fed saying the firm is eligible for the PDCF collateral expansion.

AFTER LEHMAN'S BANKRUPTCY

September 15–17	The PDCF makes overnight loans to LBI.
September 16	The Federal Open Market Committee meets and votes to keep its interest rate target unchanged, citing a balance between "downside risks to growth" and "upside risks to inflation."
	The Fed establishes an $85 billion line of credit for AIG.
	The Reserve Primary Fund "breaks the buck" due to losses on Lehman's commercial paper.
September 17–18	Money market mutual funds experience a run.
September 19	Barclays purchases part of LBI from the Lehman bankruptcy estate.
	The rest of LBI enters liquidation under the Securities Investors Protection Act.
	The Treasury temporarily guarantees shares in money market funds.

	The Fed creates a facility to finance banks' purchases of commercial paper from money market funds.
September 21	Goldman Sachs and Morgan Stanley become bank holding companies.
	The Fed opens the PDCF to the London broker-dealers of Goldman Sachs, Morgan Stanley, and Merrill Lynch.
September 23	In Congressional testimony, Bernanke says that the Fed "declined to assist Lehman" because markets were prepared for its failure.
	Goldman Sachs raises $5 billion of capital from Berkshire Hathaway.
September 29	Morgan Stanley's total borrowing from Fed facilities reaches $107 billion.
	Morgan Stanley raises $9 billion of capital from Mitsubishi UFJ.
October 3	President Bush signs legislation creating the Troubled Asset Relief Program.
October 6	The Fed grants AIG an additional credit line of $38 billion.
October 7	Bernanke says for the first time that rescuing Lehman would have been illegal because the firm lacked adequate collateral.
	The Fed establishes the Commercial Paper Funding Facility.
November 10	The Fed creates Maiden Lane II and Maiden Lane III to assist AIG.
December 31	Goldman Sachs's total borrowing from Fed facilities reaches $69 billion.