

NOTES

Unless otherwise specified, data come from the sources listed below.

Board of Governors of the Federal Reserve System, Flow of Funds Reports: Debt, international capital flows, and the size and activity of various financial sectors

Bureau of Economic Analysis: Economic output (GDP), spending, wages, and sector profit

Bureau of Labor Statistics: Labor market statistics

BlackBox Logic and Standard & Poor's: Data on loans underlying CMLTI 2006-NC2

CoreLogic: Home prices

Inside Mortgage Finance, 2009 Mortgage Market Statistical Annual: Data on origination of mortgages, issuance of mortgage-backed securities and values outstanding

Markit Group: ABX-HE index

Mortgage Bankers Association National Delinquency Survey: Mortgage delinquency and foreclosure rates

10-Ks, 10-Qs, and proxy statements filed with the Securities and Exchange Commission: Company-specific information

Many of the documents cited on the following pages, along with other materials, are available on www.fcic.gov.

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37. GAO, “Long-Term Capital Management: Regulators Need to Focus Greater Attention on Systemic Risk,” GAO/GGD-00-3 (Report to Congressional Requesters), October 1999, pp. 7, 18, 39–40. The notional amount of OTC derivatives contracts is a standard measure used in reporting the outstanding volume of such contracts. Its calculation is based on the value of the underlying instrument, commodity, index, or rate that the swap is based on. It therefore may be of limited use in measuring the potential exposure of the parties to the contracts. For example, an interest rate swap based on changes in interest rate on a \$100 million loan would likely involve only a small percentage of the \$100 million notional amount. On the other hand, price changes on an oil swap based on \$100 million worth of oil could be even more than the notional amount, depending on the volatility in oil prices. For credit default swaps, which are discussed in more detail later in this volume, the notional amount is usually a close measure of the potential financial exposure of the issuer or seller of the swap.

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40. “Over-the-Counter Derivatives Markets and the Commodity Exchange Act,” report of the President’s Working Group on Financial Markets, November 1999.

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45. Lawrence Summers, interview by FCIC, May 28, 2010.

46. Daniel K. Tarullo, *Banking on Basel: The Future of International Financial Regulation* (Washington, DC: Peterson Institute for International Economics, 2008), p. 58.

47. Final Rule—Amendment to Regulations H and Y,” *Federal Reserve Bulletin* 75, no. 3 (March 1989), 164–66.

48. Tarullo, *Banking on Basel*, pp. 61–64.

49. For more on derivatives, see FCIC, “Preliminary Staff Report: Overview on Derivatives,” June 29, 2010.

50. Warren Buffett, testimony before the FCIC, Hearing on the Credibility of Credit Ratings, the Investment Decisions Made Based on Those Ratings, and the Financial Crisis, session 2: Credit Ratings and the Financial Crisis, June 2, 2010, transcript, pp. 312, 326, 325.

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52. Data provided by AIG to the FCIC, CDS notional balances at year-end.

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54. Dinallo testified that the market in CDS in September 2008 was estimated to be \$62 trillion at a time when there was about \$16 trillion of private-sector debt (written testimony for the FDIC, July 1, 2010, p. 9).

55. “AIGFP also participates as a dealer in a wide variety of financial derivatives transactions” (AIG, 2007 Form 10-K, p. 83). AIG’s notional derivatives outstanding were \$2.1 trillion at the end of 2007, including \$1.2 trillion of interest rate swaps, \$0.6 trillion of credit derivatives, \$0.2 trillion of currency swaps, and \$0.2 trillion of other derivatives (p. 163).

56. FCIC staff calculations using data from Office of the Comptroller of the Currency; call reports.

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2. These were the largest banks as of 2007. See FCIC, “Preliminary Staff Report: Too-Big-to-Fail Financial Institutions,” August 31, 2010, p. 14.

3. Data from SNL Financial (www.snl.com/).

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9. Richard Spillenkothen, “Notes on the performance of prudential supervision in the years preceding the financial crisis by a former director of banking supervision and regulation at the Federal Reserve Board (1991 to 2006),” May 31, 2010, p. 28.

10. See U.S. Department of the Treasury, *Modernizing the Financial System* (February 1991), pp. XIX-5, XIX-6, 67–69: “the existence of fewer agencies would concentrate regulatory power in the remaining ones, raising the danger of arbitrary or inflexible behavior. . . . Agency pluralism, on the other hand, may be useful, since it can bring to bear on general bank supervision the different perspectives and experiences of each regulator, and it subjects each one, where consultation and coordination are required, to the checks and balances of the others’ opinion.”

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12. Securities Industry Association v. Board of Governors of the Federal Reserve System, 627 F.Supp. 695 (D.D.C. 1986); Kathleen Day, “Reinventing the Bank; With Depression-Era Law about to Be Rewritten, the Future Remains Unclear,” *Washington Post*, October 31, 1999.

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Chapter 6

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Chapter 7

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47. Matthew Eichner, email to James Giles et al., January 30, 2008.
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68. Alan Schwartz, interview by FCIC; Matthew Eichner, email to Erik Sirri, Robert Colby, and Michael Macchiaroli, March 13, 2008.
69. Upton, interview.
70. Minutes of Special Meeting of Bear Stearns Board of Directors, March 13, 2008 ("[Schwartz] said there had been seventeen billion dollars in cash with a two billion eight hundred million dollar backstop, unsecured line. The Board was told that twelve to fifteen billion dollars had gone out of TBSCI in the last two days and that TBSCI had received a billion dollars in margin calls").
71. Upton, interview; Goebel, Gaffney, and Lind, interview; Steven Meier, interview by FCIC, March 15, 2010; Michael Macchiaroli, interview by FCIC, April 13, 2010.
72. Christopher Cox, written testimony for the FCIC, Hearing on the Shadow Banking System, day 1, session 3: SEC Regulation of Investment Banks, May 5, 2010, p. 6.
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75. Alan Schwartz, testimony before the FCIC, Hearing on the Shadow Banking System, day 1, session 2: Investment Banks and the Shadow Banking System, May 5, 2010, transcript, p. 167; Schwartz, interview.
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82. Chrin, interview.

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84. Macchiaroli, interview.

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86. *Ibid.*

87. Timothy Geithner, president, Federal Reserve Bank of New York, “Actions by the New York Fed in Response to Liquidity Pressures in Financial Markets,” prepared testimony before the Senate Committee on Banking, Housing, and Urban Affairs, 110th Cong., 2nd sess., April 3, 2008, p. 10.

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Chapter 19

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7. Goldman Sachs International, Collateral Invoice (margin call) to AIG Financial Products Corp., July 27, 2007; data on collateral exposures and multisector CDOs supplied by AIG (see Timeline of Goldman Sachs/AIG collateral calls, pp. 50, 392, 404, available at the FCIC website at <http://fcic.gov/hearings/pdfs/2010-0701-AIG-Goldman-supporting-docs.pdf>); FRBNY, notes about AIG meeting.
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12. Michael Moriarty, testimony before the Congressional Oversight Panel, Hearing on American International Group, 111th Cong., 2nd sess., May 26, 2010, p. 4.
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57. C. K. Lee, interview by FCIC, April 28, 2010. See also Memorandum of Understanding between Scott M. Albinson, managing director, OTS, and Danièle Nouy, secrétaire général de la Commission Bancaire, April 11, 2005.
58. OTS, Memo to Commission Bancaire regarding its supervisory role, January 2005.
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60. Joseph Gonzalez, interview by FCIC, May 7, 2010.
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62. OTS, Targeted Review of AIG Financial Products Corp., July 13, 2007.
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Chapter 20

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2. Jamie Dimon, interview by FCIC, October 20, 2010.
3. Timothy Geithner, interview by FCIC, November 17, 2009.
4. Timothy Geithner, quoted by Robert Schmidt, "Geithner Slams Bonuses, Says Banks Would Have Failed (Update2)," *Bloomberg*, December 4, 2009.
5. Ben Bernanke, closed-door session with FCIC, November 17, 2009.
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Sections 105 and 365 of the Bankruptcy Code to Establish Procedures for the Settlement or Assumption and Assignment of Prepetition Derivatives Contracts, Lehman Brothers Holdings Inc., et al., No. 08-13555 (Bankr. S.D.N.Y. Nov. 13, 2008) [Docket No. 1498], p. 4; Debtors' Motion for an Order Approving Consensual Assumption and Assignment of Prepetition Derivatives Contracts, Lehman Brothers Holdings Inc., et al., No. 08-13555 (Bankr. S.D.N.Y. Jan. 16, 2009) [Docket No.2561], p. 3.

9. Money market fund holdings of all types of taxable commercial paper decreased from \$671 billion at the end of August 2008 to \$505 billion at the end of September (data provided by ICI/Crane to the FCIC). BNY Mellon, in its role as tri-party clearing bank, reported that Treasury-backed repos rose from \$195 billion (13%) to \$466 billion (27%) of its tri-party business between March 31 and December 31, 2008 (data provided by BNY Mellon to the FCIC).

10. Harvey Miller, interview by FCIC, August 5, 2010.

11. The Reserve Fund, Semi-annual report to shareholders, March 2006.

12. Complaint, SEC v. Reserve Management Company Inc., Resrv Partners Inc., Bruce Bent Sr., Bruce Bent II, and The Reserve Primary Fund (S.D.N.Y. May 5, 2009), p. 12 (para. 35); "Fidelity, BlackRock, Dreyfus, Reserve Make Big Gains Past 12 Months," Crane Data News Archives, September 12, 2008.

13. The Reserve Primary Fund management, interview by FCIC, March 25, 2010.

14. SEC Complaint against Reserve Management Company Inc., pp. 2, 18 (paras. 3, 59), p. 30 (para. 101); The Reserve, "The Primary Fund: Plan of Liquidation and Distribution of Assets," December 3, 2008, p. 2.

15. SEC Complaint, pp. 26–33 (paras. 88–113); The Reserve, "The Primary Fund: Plan of Liquidation," p. 2.

16. SEC Complaint, p. 35 (para. 121). The SEC notes that the Primary Fund likely broke the buck prior to 11:00 A.M. on September 16 because of the redemption requests and the valuation of Lehman's debt; moreover, RMCi announced on November 26, 2008, that owing to an administrative error, its NAV should have been calculated as \$0.99 between 11:00 A.M. and 4:00 P.M. on September 16 (pp. 34–33, paras. 119, 120).

17. Moody's Investors Service articles, "Sponsor Support Key to Money Market Funds," August 9, 2010, p. 4; "Moody's Proposes New Money Market Fund Rating Methodology and Symbols," September 7, 2010.

18. Patrick McCabe and Michael Palumbo, interview by FCIC, September 28, 2010.

19. *Ibid.*

20. Investment Company Institute, Historical Weekly Money Market Data. While nongovernment funds lost \$434 billion during the period between September 10 and October 1, 2008, government funds—investing in Treasuries and GSE debt—increased by \$357 billion during the same period.

21. McCabe and Palumbo, interview.

22. FCIC survey of money market mutual funds. Holdings for the five firms decreased from \$58 billion to \$29 billion from September 12, 2008, to September 19, 2008. See FCIC website for details.

23. Timothy Geithner, testimony before the FCIC, Hearing on the Shadow Banking System, day 2, session 2: Perspective on the Shadow Banking System, May 6, 2010, transcript, p. 135.

24. McCabe and Palumbo, interview.

25. "Treasury Announces Guaranty Program for Money Market Funds," Treasury Department press release, September 19, 2008. President George W. Bush approved the use of existing authorities by Secretary Henry M. Paulson Jr. to make available as necessary the assets of the Exchange Stabilization Fund (ESF) for up to \$50 billion to guarantee payments to support money market mutual funds. The original objective of the ESF, established by the Gold Reserve Act of 1934, was to stabilize the value of the dollar in the depths of the Depression. It authorized the treasury secretary, with the approval of the president, to "deal in gold, foreign exchange, and other instruments of credit and securities" to promote international financial stability.

26. The program was called the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF).

27. Neel Kashkari, interview by FCIC, November 2, 2010.

28. John Mack, interview by FCIC, November 2, 2010.

29. New York Federal Reserve, internal email, October 22, 2008, p. 2.

30. David Wong, email to Fed and SEC officials, September 15, 2008.

31. Jonathan Stewart, FRBNY, internal email, September 17, 2008.
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35. IFSL Research, “Hedge Funds 2009,” April 2009.
36. David Wong, treasurer of Morgan Stanley, interview by FCIC, October 15, 2010.
37. Mack, interview.
38. Wong, interview.
39. Patrice Maher (Morgan Stanley), email to William Brodows (Federal Reserve BNY) et al., September 28, 2008, with data in an attachment. Hedge fund values are the Prime Brokerage Outflows (NY+International).
40. Wong, interview.
41. Matthew Eichner, internal email, September 16, 2008.
42. Angela Miknius, email to NY Bank Sup, September 18, 2008.
43. Amy G. White, internal NYFRB email, September 19, 2008.
44. Morgan Stanley, “Liquidity and Financing Activity: 08/28/08,” “Liquidity and Financing Activity: 09/18/08,” “Liquidity and Financing Activity: 10/03/08,” reports to the New York Federal Reserve.
45. Morgan Stanley Corporate Treasury, “Meeting with Federal Reserve: September 20, 2008,” attachment to Morgan Stanley email to NYFRB, September 20, 2008, including “Forward Forecast.”
46. Morgan Stanley Corporate Treasury, “Liquidity Landscape: 09/12–09/18/2008,” in attachment to Morgan Stanley email to NYFRB, September 20, 2008; Amy White, internal NYFRB emails, September 16 and 19, 2008.
47. Lloyd Blankfein, testimony before the FCIC, First Public Hearing of the FCIC, day 1, panel 1: Financial Institution Representatives, January 13, 2010, transcript, pp. 34–35.
48. Bernanke, closed-door session.
49. Thomas Baxter, interview by FCIC, April 30, 2010.
50. The switch to bank holding company status required a simple charter change. Both Morgan and Goldman already owned banks that they had chartered as industrial loan companies, a type of bank that is allowed to accept FDIC-insured deposits without having any Fed supervision over the bank’s parent or other affiliated companies.
51. Federal Reserve, “Discount Window Payment System Risk: Getting Started,” last updated November 17, 2009.
52. Mack, interview.
53. Mack, interview.
54. Wong, interview.
55. Amy G. White, internal FRBNY email, September 19, 2008.
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57. Michael Masters, testimony before the FCIC, Hearing on the Role of Derivatives in the Financial Crisis, day 1, session 1: Overview of Derivatives, June 30, 2010, transcript, p. 26.
58. Depository Trust and Clearing Corporation data provided to the FCIC.
59. “The Global OTC Derivatives Market at End-June 1998,” Bank of International Settlements press release, December 13, 1998; “OTC derivatives market activity in the second half of 2008,” Bank of International Settlements press release, May 9, 2009, p. 7.

60. "Triennial and Regular OTC Derivatives Market Statistics," Bank of International Settlements press release, November 16, 2010, p. 7.
61. Moody's, "Moody's downgrades WaMu Ratings; outlook negative," September 11, 2008.
62. "OTS Fact Sheet on Washington Mutual Bank," OTS 08-046A, September 25, 2008, p. 3.
63. Jamie Dimon, interview by FCIC, October 20, 2010.
64. Sheila Bair, testimony before the FCIC, Hearing on Too Big to Fail: Expectations and Impact of Extraordinary Government Intervention and the Role of Systemic Risk in the Financial Crisis, day 2: session 2: Federal Deposit Insurance Corporation, September 2, 2010, exchange between Bair and Commissioner Douglas Holtz-Eakin, pp. 134, 149.
65. Scott Alvarez, testimony before the FCIC, Hearing on Too Big to Fail: Expectations and Impact of Extraordinary Government Intervention and the Role of Systemic Risk in the Financial Crisis, day 1, Session 1: Wachovia Corporation, September 1, 2010, transcript, p. 84.
66. Kashkari, interview.
67. Greg Feldberg, "Wachovia Case Study," presentation at LBO Supervision Conference, November 12-13, 2008, Atlanta, Georgia, p. 15. These rules, embodied in section 23A of the Federal Reserve Act, limit the support that a depository institution can provide to related companies in the same corporate structure; they are aimed at protecting FDIC-insured depositors from activities that occur outside of the bank itself. Exemptions have the effect of funding affiliate, nonbank assets within the federal safety net of insured deposits; they create liquidity for the parent company and/or key affiliates (and reduce bank liquidity) during times of market stress.
68. Robert Steel, interview by FCIC, August 18, 2010.
69. Scott Alvarez, written testimony for the FDIC, September 1, 2010, p. 4.
70. Robert Steel, written testimony before the FCIC, Hearing on Too Big to Fail: Expectations and Impact of Extraordinary Government Intervention and the Role of Systemic Risk in the Financial Crisis, day 1, session 1: Wachovia Corporation, September 1, 2010, p. 2.
71. David Wilson, interview by FCIC, August 4, 2010.
72. Sheila Bair, interview by FCIC, August 18, 2010.
73. Richard Westerkamp, Federal Reserve Bank of Richmond, interview by FCIC, August 13, 2010.
74. Wachovia was unable to roll \$1.1 billion of asset-backed commercial paper that Friday; James Wigand and Herbert Held, memo to the FDIC Board of Directors, September 29, 2008, p. 2. On brokered certificates of deposit, see Westerkamp, interview.
75. John Corston, acting deputy director, Division of Supervision and Consumer Protection, FDIC, written testimony before the FCIC, Hearing on Too Big to Fail: Expectations and Impact of Extraordinary Government Intervention and the Role of Systemic Risk in the Financial Crisis, day 1, Session 1: Wachovia Corporation, September 1, 2010, p. 4.
76. Wilson, interview.
77. Rich Westerkamp, email to FCIC, November 2, 2010. Westerkamp said that the estimate of early redemption requests was based on a phone conversation with officials in Wachovia's treasury department, describing their conversations with investors; the figures were never verified.
78. Bair, interview.
79. Robert Steel, interview by FCIC, August 18, 2010.
80. Bair, interview; Steel, interview; FDIC staff, interview by FCIC re Wachovia, July 16, 2010.
81. Alvarez, written testimony for the FCIC, September 1, 2010, p. 5.
82. Steel, interview.
83. Ibid.
84. Wigand and Held, memo to the FDIC board, September 29, 2008, pp. 2, 4-5.
85. Federal Reserve staff, memo to the Board of Governors, subject: "Considerations Regarding Invoking the Systemic Risk Exception for Wachovia Bank, NA," September 28, 2008, p. 7.
86. John A. Beebe, Market Risk Team Leader, Federal Reserve Bank of Richmond, memo to Jennifer Burns, VP-LCBO, "Wachovia Large Funds Providers," September 27, 2008, pp. 1-2.
87. Federal Reserve staff, memo to the Board of Governors, subject: "Considerations Regarding Invoking the Systemic Risk Exception for Wachovia Bank, NA," September 28, 2008, p. 7.
88. Bair, interview; minutes of the telephonic meeting of Federal Deposit Insurance Corporation Board of Directors, September 29, 2008, p. 8.

89. Bair, interview.

90. FDIC memo to the FDIC Board of Directors, p. 8; Corston, written testimony for the FDIC, September 1, 2010, p. 10.

91. Specifically, under Wachovia's proposal, the FDIC would provide credit protection on \$200 billion of loans, while Wachovia would absorb the first \$25 billion in losses and the FDIC would potentially incur losses on the balance of the \$200 billion. To offset that risk, Wachovia proposed that the FDIC receive \$10 billion in preferred stock and warrants on common shares (FDIC memo to the FDIC Board of Directors, p. 8).

92. The FDIC board has five members: the comptroller of the currency, the director of OTS, and three other members appointed by the president. In *Too Big to Fail: The Inside Story of How Wall Street and Washington Fought to Save the Financial System from Crisis—and Themselves* (New York: Viking, 2009), Andrew Ross Sorkin (p. 497) wrote that before the September 29, 2008, FDIC board meeting, New York Federal Reserve Governor Geithner and other officials had a conference call with Bair (Paulson recused himself) during which Geithner urged Bair to help Citigroup acquire Wachovia by guaranteeing some of its potential losses. Geithner argued that allowing the FDIC to take over Wachovia would have the effect of wiping out shareholders and bond holders, which, he was convinced, would only spook the markets. He was still furious with Bair for the way she had abruptly taken over Washington Mutual, which had had a deleterious effect on investor confidence.

93. Federal Deposit Insurance Corporation Board of Directors meeting, September 29, 2008, transcript, pp. 21–22.

94. Minutes of telephonic meeting of the FDIC board, September 29, 2008, p. 8.

95. *Ibid.*; the \$34.6 billion figure is as of September 30, 2008 (FDIC staff, memo to the Board of Directors, subject: "Third Quarter 2008 CFO Report to the Board," November 21, 2008, p. 1).

96. Minutes of telephonic meeting of the FDIC board, September 29, 2008, p. 8.

97. Bair, interview.

98. Steel, written testimony for the FCIC, September 1, 2010, p. 4. On the board's vote and the agreement in principle, see Steel, interview; see also Affidavit of Robert K. Steel, dated October 5, 2008, filed in *Wachovia Corp. v. Citigroup, Inc.*, Case No. 08-cv-085093-SAS (S.D.N.Y.), pp. 3–4 and exhibit A.

99. Fed Chairman Ben Bernanke, letter to FCIC Chairman Phil Angelides, December 21, 2010.

100. Wachtell, Lipton, Rosen & Katz, on behalf of Wells, letter to Division of Corporation Finance, SEC, November 17, 2008, p. 3.

101. Richard Kovacevich, interview by FCIC, August 24, 2010.

102. Bair, interview.

103. Steel, interview.

104. Bair, interview. In his interview, Treasury's Kashkari told the FCIC that he disagreed. He felt that the highest priority was to transfer the risk of banks' troubled assets from the financial system to the government. Citigroup's FDIC-assisted acquisition would have removed potential losses on \$270 billion of assets from the financial system by transferring those potential losses to the FDIC.

105. "Wells Fargo, Wachovia Agree to Merge: Creating Premier Coast-To-Coast Financial Services Franchise without Government Assistance," Wells Fargo press release, October 3, 2008.

106. Rich Delmar, Treasury Office of the Inspector General, interview by FCIC, August 25, 2010; Rich Delmar, memorandum for Inspector General Eric M. Thorson, "Inquiry Regarding IRS Notice 2008-83," September 3, 2009, pp. 3, 5, 11–12.

107. Richard Levy, interview by FCIC, August 19, 2010.

108. "Statement by Secretary Henry M. Paulson, Jr. on Comprehensive Approach to Market Developments," Treasury Department press release, September 19, 2008.

109. Senators Christopher J. Dodd and Richard C. Shelby, remarks before the Senate Committee on Banking, Housing, and Urban Affairs, *Turmoil in U.S. Credit Markets: Recent Actions Regarding Government-Sponsored Entities, Investment Banks, and Other Financial Institutions*, 110th Cong., 2nd sess., September 23, 2008, transcript, pp. 3, 6.

110. Secretary Henry Paulson, testimony before the Senate Banking Committee, *Turmoil in the U.S. Credit Markets*, transcript, p. 37.

111. Fed Chairman Ben Bernanke, "Economic Outlook," testimony before the Joint Economic Committee, 110th Cong., 2nd sess., September 24, 2008, transcript.

112. Fed Chairman Ben Bernanke, testimony before the House Financial Services Committee, *The Future of Financial Services: Exploring Solutions for the Market Crisis*, September 24, 2008, transcript, p. 48.

113. Mel Martinez, interview by FCIC, September 28, 2010.

114. The TARP legislation, drafted as the Emergency Economic Stabilization Act of 2008, was coupled in Public Law 110-343 with several other vote-attracting acts, including the Energy Improvement and Extension Act of 2008, the Tax Extenders and Alternative Minimum Tax Relief Act of 2008, the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008, and the Heartland and Hurricane Ike Disaster Relief Act of 2008. Congress originally said that the deposit insurance cap would revert to \$100,000 at the beginning of 2010, but later extended the deadline through the end of 2013.

115. The quotation is part of the formal title of Public Law 110-343, of which the TARP legislation—officially named the Emergency Economic Stabilization Act of 2008—is a part.

116. “Board Announces Creation of the Commercial Paper Funding Facility (CPFF) to Help Provide Liquidity to Term Funding Markets,” Federal Reserve Board press release, October 7, 2008. The CPFF complemented the Fed’s other commercial paper program, the AMLF, which was created shortly after the Reserve Primary Fund broke the buck. While the AMLF targeted money market mutual funds, the CPFF aimed to create liquidity for qualified commercial paper issuers.

117. Federal Reserve Board, “Commercial Paper Funding Facility (CPFF).”

118. Ken Lewis from Bank of America, Robert Kelly from BNY Mellon, Vikram Pandit from Citigroup, Lloyd Blankfein from Goldman, Jamie Dimon from JP Morgan, John Thain from Merrill, John Mack from Morgan Stanley, Ronald Logue from State Street, and Richard Kovacevich from Wells.

119. Paulson, testimony before the FCIC, May 6, 2010, transcript, p. 70. Former assistant treasury secretary Phillip Swagel argued, “There is no authority in the United States to force a private institution to accept government capital” (“The Financial Crisis: An Inside View,” Brookings Papers on Economic Activity, conference draft, Spring 2009, pp. 33–34).

120. Henry Paulson, *On The Brink: Inside the Race to Stop the Collapse of the Global Financial System* (New York: Business Plus, 2010), p. 365.

121. Dimon, interview.

122. The Temporary Liquidity Guarantee Program consisted of two programs, the Temporary Debt Guarantee Program (TDGP) and the Transaction Account Guarantee Program (TAGP). The TDGP at its highest point in May 2009 guaranteed \$346 billion in outstanding senior debt; see “FDIC Announces Plan to Free Up Bank Liquidity,” FDIC press release, October 14, 2008. The TAGP guaranteed \$834 billion in deposits at the end of 2009.

123. “Factsheet on Capital Purchase Program,” FinancialStability.gov, updated October 3, 2010.

124. “Remarks by Secretary Henry M. Paulson, Jr. on Financial Rescue Package and Economic Update,” Treasury Department press release, November 12, 2008.

125. Paulson, testimony before the FCIC, May 6, 2010, transcript, p. 70.

126. U.S. Treasury Department Office of Financial Stability, “Troubled Asset Relief Program”; Transactions Report for Period Ending December 31, 2008: Capital Purchase Program; “Factsheet on Capital Purchase Program.”

127. U.S. Treasury Department Office of Financial Stability, “Troubled Asset Relief Program: Transactions Report for Period Ending October 15, 2010: Capital Purchase Program.”

128. Office of the Special Inspector General for the Troubled Asset Relief Program, “Initial Report to the Congress,” February 6, 2009, p. 6.

129. Congressional Oversight Panel, “September Oversight Report: Assessing the TARP on the Eve of Its Expiration,” September 16, 2010, p. 27.

130. Office of Financial Stability, “Troubled Asset Relief Program: Two Year Retrospective,” October 2010, pp. 15, 51; AIG, “What AIG Owes the U.S. Government,” updated September 30, 2010.

131. Congressional Oversight Panel, “September Oversight Report,” p. 27; Office of Financial Stability, “Troubled Asset Relief Program: Two Year Retrospective,” p. 18; “Taxpayers Receive \$10.5 Billion in Proceeds Today from Final Sale of Treasury Department Citigroup Common Stock,” Treasury Department press release, December 10, 2010.

132. Office of the Special Inspector General for the Troubled Asset Relief Program, “Quarterly Report to Congress,” October 26, 2010, table 2.1, p. 46 (obligation figures as of October 3, 2010, and expenditure figures as of September 30, 2010).

133. The money market funding is through the Asset-backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF); FCIC staff calculations.

134. Board of Governors of the Federal Reserve System, “Regulatory Reform: Agency Mortgage-backed Securities (MBS) Purchase Program.”

135. The Fed had created the first Maiden Lane vehicle in March to take \$29 billion in assets off the balance sheet of Bear Stearns, as described in chapter 15. See “AIG RMBS LLC Facility: Terms and Conditions,” December 16, 2008; “AIG Discloses Counterparties to CDS, GIA and Securities Lending Transactions,” AIG press release, March 15, 2009, Attachment D: Payments to AIG Securities Lending Counterparties.

136. Federal Reserve Bank of New York, “Maiden Lane III: Transaction Overview”; Federal Reserve and Treasury Department press release, November 10, 2008; “AIG CDO LLC Facility: Terms and Conditions,” Federal Reserve Bank of New York press release, December 3, 2008; FRBNY, “Maiden Lane Transactions.” \$27.1 billion was paid to 16 counterparties and \$2.5 billion was paid to AIGFP as an adjustment to reflect overcollateralization.

137. Office of the Special Inspector General for the Troubled Asset Relief Program, “Factors Affecting Efforts to Limit Payments to AIG Counterparties,” SIGTARP-10-003, November 17, 2009, pp. 19–20.

138. Blankfein, testimony before the FCIC, January 13, 2010, transcript, pp. 90–93.

139. Data provided to Goldman Sachs to the FCIC.

140. David Viniar, testimony before the FCIC, Hearing on the Role of Derivatives in the Financial Crisis, day 2, session 1: American International Group, Inc. and Goldman Sachs Group, Inc., July 1, 2010, transcript, p. 148.

141. Goldman Sachs, email to FCIC, July 15, 2010.

142. *Ibid.*; and data provided by Goldman Sachs to the FCIC.

143. SIGTARP, “Factors Affecting Efforts to Limit Payments to AIG Counterparties,” pp. 15–16, 18. The report said counterparties insisted on 100% coverage because (1) concessions “would mean giving away value and voluntarily taking a loss, in contravention of their fiduciary duty to their shareholders”; (2) they had a “reasonable expectation” that AIG would not default on further obligations, given the government assistance; (3) costs already incurred to protect against a possible AIG default “would be exacerbated if they were paid less than par value”; and (4) they were “contractually entitled” to receive the par value of the credit default swap contracts.

144. “In other words, the decision to acquire a controlling interest in one of the world’s most complex and most troubled corporations was done with almost no independent consideration of the terms of the transaction or the impact that those terms might have on the future of AIG” (*ibid.*, p. 28).

145. *Ibid.*, summary, p. 1.

146. Congressional Oversight Panel, “June Oversight Report: The AIG Rescue, Its Impact on Markets, and the Government’s Exit Strategy,” June 10, 2010, pp. 10, 8.

147. Suzanne Kapner, “US Congressional Panel Attacks AIG Rescue,” *Financial Times*, June 10, 2010.

148. Baxter, interview.

149. Sarah Dahlgren, interview by FCIC, April 30, 2008.

150. SIGTARP, “Factors Affecting Efforts to Limit Payments to AIG Counterparties,” p. 29.

151. Timothy Geithner, quoted in Jody Shenn, Bob Ivry, and Alan Katz, “AIG 100-Cents Fed Deal Driven by France Belied by French Banks,” *Bloomberg Businessweek*, January 20, 2010.

152. E.g., Baxter, interview; Jim Mahoney, Federal Reserve Bank of New York, interview by FCIC, April 30, 2010; Michael Alix, Federal Reserve Bank of New York, interview by FCIC, April 30, 2010.

153. Dahlgren, interview.

154. Baxter, interview.

155. GAO, “Federal Financial Assistance: Preliminary Observations on Assistance Provided AIG,” GAO-09-4907 (Testimony: Before the Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, House Committee on Financial Services), March 18, 2009, p. 2; Federal Reserve press release, September 16, 2008.

156. AIG, “What AIG Owes the US Government,” updated September 30, 2010.

157. Edward J. Kelly III, interview by FCIC, March 3, 2010.
158. Roger Cole, interview by FCIC, August 2, 2010.
159. Kelly, interview.
160. James R. Wigand and Herbert J. Held, memorandum to the FDIC Board of Directors, regarding recommendation for systemic risk determination for Citigroup, November 23, 2008, p. 5.
161. Kelly, interview.
162. Mark D. Richardson, email to John H. Corston, Jason C. Cave, et al., subject: "RE: CONFIDENTIAL—Citigroup—Deterioration of Stock Price and CDS Spreads," November 20, 2008; Mark D. Richardson, email, to John H. Corston, Jason C. Cave, et al., subject: "11-21-08 Citi Liquidity call notes," November 21, 2008.
163. Wigand and Held, November memo to the FDIC board regarding Citigroup, p. 5.
164. Bernanke, closed-door session.
165. Arthur J. Murton, email to John V. Thomas, Michael H. Krimminger, et al., subject: "RE: Proposed Conduit," November 22, 2008; Michael H. Krimminger, email to Arthur J. Murton, John V. Thomas, et al., subject: "RE: Proposed Conduit," November 22, 2008.
166. Vikram Pandit, testimony before the Congressional Oversight Panel, *Citigroup and the Troubled Asset Relief Program*, 111th Cong., 2nd sess., March 4, 2010, transcript, p. 79.
167. Kelly, interview.
168. GAO, "Federal Deposit Insurance Act: Regulators' Use of Systemic Risk Exception Raises Moral Hazard Concerns and Opportunities Exist to Clarify the Provision," GAO-10-100 (Report to Congressional Committees), April 2010, p. 2.
169. Wigand and Held, memo to the FDIC board regarding Citigroup, pp. 9, 10.
170. Department of the Treasury response to Congressional Oversight Panel, Questions for the Record, p. 3, *Citigroup and the Troubled Asset Relief Program*, March 4, 2010, p. 44.
"Joint Statement by Treasury, Federal Reserve, and the FDIC on Citigroup," joint press release, November 23, 2008.
171. "Joint Statement on Citigroup."
172. In total, Citigroup received almost \$40 billion in capital benefits from the November 2008 government assistance. Half of the capital benefits were from Treasury's \$20 billion TARP investment in Citigroup preferred stock; \$16 billion of the capital benefits were derived from a change in the risk weighting of the ring-fenced assets. In addition, Citigroup issued Treasury and the FDIC \$7 billion in preferred stock as payment for the guarantee on the ring fence; the result, after accounting for the insurance feature of the arrangement, was a \$3.5 billion increase in capital for Citigroup.
173. Kelly, interview.
174. The warrants gave the government the right to buy 254 million shares at \$10.61 a share; at the time, the stock was trading at \$3.76 (Congressional Oversight Panel, "November Oversight Report: Guarantees and Contingent Payments in TARP and Related Programs," November 6, 2009, pp. 18–19).
175. FDIC Board of Directors meeting, closed session, November 23, 2008, transcript, p. 14.
176. *Ibid.*, pp. 27–28.
177. Office of Financial Stability, "Troubled Asset Relief Program: Two Year Retrospective," October 2010, p. 30; "Taxpayers receive \$10.5 billion in proceeds today from final sale of Treasury Department Citigroup common stock," Treasury Department press release, December 10, 2010.
178. "Merrill Lynch Reports Third Quarter 2008 Net Loss from Continuing Operations of \$5.1 Billion," Merrill Lynch press release, October 16, 2008, p. 4; Merrill Lynch, 3Q 2008 Earnings Call transcript, October 16, 2008, p. 2.
179. Federal Reserve System, "Order Approving Bank of America Corporation Acquisition of a Savings Association and an Industrial Loan Company," November 26, 2008, pp. 7, 9. To approve such a proposal, the Bank Holding Company Act requires the Fed to determine that a transaction "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition." 12 U.S.C. 1843(j)(2)(A).
180. Timothy J. Mayopoulous, former general counsel of Bank of America, written testimony before the House Oversight Committee, *Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part IV*, 111th Cong., 1st sess., November 17, 2009.

181. Ken Lewis, deposition *In Re: Executive Compensation Investigation: Bank of America–Merrill Lynch*, February 26, 2009, p. 9, available from House Committee on Oversight and Government Reform and the Subcommittee on Domestic Policy, *Bank of America and Merrill Lynch: How Did A Private Deal Turn into a Federal Bailout?* 111th Cong., 1st sess., June 11, 2009.

182. Bank of America, 4Q 2008 Earnings Call transcript, January 16, 2009, p. 16.

183. *Ibid.*, pp. 3, 10, 16.

184. John Thain, interview by FCIC, September 17, 2009.

185. Complaint, SEC v. Bank of America (S.D.N.Y. Jan. 12, 2010); Final Consent Judgment As to Defendant Bank of America (S.D.N.Y. Feb. 4, 2010).

186. Ken Lewis, interview by FCIC, October 22, 2010.

187. Lewis, deposition *In Re: Executive Compensation Investigation: Bank of America—Merrill Lynch*, pp. 34, 38; Henry Paulson, written testimony before the House Committee on Oversight and Government Reform and the Subcommittee on Domestic Policy, *Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part III*, 111th Cong., 1st sess., July 16, 2009, p. 22.

188. Paulson, written testimony before the House Oversight Committee, July 16, 2009, p. 23 (quotation); Ben Bernanke, written testimony before the House Committee on Oversight and Government Reform and the Subcommittee on Domestic Policy, *Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part II*, 111th Cong., 1st sess., June 25, 2009, p. 18.

189. Lewis, interview.

190. Thain, interview

191. Paulson, written testimony before the House Oversight Committee, July 16, 2009, pp. 19, 25.

192. Chairman Ben Bernanke, email to General Counsel Scott Alvarez, “Re: Fw: BAC,” December 23, 2008, available from House Oversight Committee, *Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part II*, June 25, 2009, p. 73; Representative Edolphus Towns, in *ibid.*, p. 2.

193. Lewis, interview.

194. Minutes of a Special Meeting of Board of Directors of Bank of America Corporation, December 22, 2008, available in House Committee on Oversight and Government Reform, June 11, 2009, p. 183.

195. Minutes of a Special Meeting of the Bank of America board, December 30, 2008, available in *ibid.*, p. 188.

196. Lewis, interview.

197. See Department of the Treasury, Office of Financial Stability, “Troubled Assets Relief Program: Transactions Report, for Period Ending November 16, 2010,” November 18, 2010. In addition to drawing on these funds, it was also a “substantial user” of the Fed’s various liquidity programs. The holding company and its subsidiaries had already borrowed \$55 billion through the Term Auction Facility. It had also borrowed \$15 billion under the Fed’s Commercial Paper Funding Facility and \$20 billion under the FDIC’s debt guarantee program. And newly acquired Merrill Lynch had borrowed another \$21 billion from the Fed’s two Bear Stearns–era repo-support programs. Yet despite Bank of America’s recourse to these programs, the regulators worried that it would experience liquidity problems if the fourth-quarter earnings were weak.

198. The amount of FDIC-guaranteed debt that can be issued by each eligible entity, or its cap, is based on the amount of senior unsecured debt outstanding as of September 30, 2008.

199. FRB and OCC staff, memorandum to Rick Cox, FDIC, subject: “Bank of America Corporation (BAC) Funding Vulnerabilities and Implications for Other Financial Market Participants,” January 10, 2009, p. 2.

200. Sheila C. Bair, FDIC Chairman, written testimony before the House Committee on Oversight and Government Reform and the Subcommittee on Domestic Policy, *Bank of America and Merrill Lynch: How Did a Private Deal Turn into a Federal Bailout? Part V*, 110th Cong., 1st sess., December 11, 2009, p. 2.

201. FRB and OCC staff memo to Rick Cox, “Bank of America Corporation (BAC) Funding Vulnerabilities,” pp. 2, 4; Mitchell Glassman, Sandra Thompson, Arthur Murton, and John Thomas, memorandum to the FDIC Board of Directors, subject: Bank of America, etc., January 15, 2009, pp. 8, 9.

202. Bair, written testimony before the House Oversight Committee, December 11, 2009, p. 3.

203. Glassman et al., memo to the FDIC board, January 15, 2009, p. 3. They agreed to this 25/75 split because 25% of the assets for the ring fence were from depository institutions and 75% were not. See closed meeting of the FDIC Board of Directors, January 15, 2009, transcript, p. 18.

204. Closed meeting of the FDIC board, January 15, 2009, transcript, p. 24. According to the FDIC staff, “Liquidity pressure may increase to critical levels following the announcement of fourth quarter 2008 operating results that are significantly worse than market expectations. Market reaction to BAC’s operating results may have systemic consequences given the size of the institution and the volume of counterparty transactions involved. Without a systemic risk determination . . . significant market disruption may ensue as counterparties lose confidence in BAC’s ability to fund ongoing operations. . . . [Economic developments] point to a clear relationship between the financial market turmoil of recent months and impaired economic performance that could be expected to worsen further if BAC and its insured subsidiaries were allowed to failed. Such an event would significantly undermine business and consumer confidence.” Glassman et al., memo to the FDIC board, January 15, 2009, pp. 13–14.

Chapter 21

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2. Clarence Williams, written testimony for the FCIC, Hearing on the Impact of the Financial Crisis—Sacramento, session 4: Impact of the Financial Crisis on Sacramento Neighborhoods and Families, September 23, 2010, p. 8; and testimony before the FCIC, transcript, pp. 259–60.
3. Ed Lazear, interview by FCIC, November 10, 2010.
4. Jeannie McDermott, testimony before the FCIC, Hearing on the Impact of the Financial Crisis—Greater Bakersfield, session 6: Forum for Public Comment, September 7, 2010, transcript, pp. 211–13.
5. Marie Vasile, testimony before the FCIC, in *ibid.*, transcript, pp. 244–51.
6. “National Delinquency Survey,” Mortgage Bankers Association, Fourth Quarter 2007, March 2008, p. 4; Third Quarter 2010, November 2010, p. 4.
7. CoreLogic, “U.S. Housing and Mortgage Trends: August 2010,” November 2010, p. 5.
8. Jeremy Aguero, principal analyst, Applied Analysis, written testimony for the FCIC, Hearing on the Impact of the Financial Crisis—State of Nevada, session 1: Economic Analysis of the Impact of the Financial Crisis on Nevada, September 8, 2010, p. 3.
9. Mauricio Soto, “How Is the Financial Crisis Affecting Retirement Savings?” Urban Institute, December 10, 2008, available at www.urban.org/url.cfm?ID=901206.
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11. Charles S. Johnson, “Montana Pension Funds Growing but Haven’t Made Up Losses,” *The Billings Gazette*, May 18, 2009.
12. The Conference Board news release, May 27, 2008.
13. The Conference Board news release, December 28, 2010.
14. Gregory D. Bynum, testimony before the FCIC, Hearing on the Impact of the Financial Crisis—Greater Bakersfield, session 3: Residential and Community Real Estate, September 7, 2010, transcript, p. 102.
15. Board of Governors of the Federal Reserve System, October 2010 Senior Loan Officer Opinion Survey on Bank Lending Practices, Net Percentage of Domestic Respondents Tightening Standards on Consumer Loans, Credit Cards, November 8, 2010.
16. American Bankruptcy Institute, “Annual Business and Non-business Filings by Year (1980–2009).”
17. Jeff Agosta, conference call with FCIC, February 25, 2010.
18. American Bankruptcy Institute, “Annual Business and Non-Business Filings by Year (1980–2009).”
19. Board of Governors of the Federal Reserve System, July 2007 Senior Loan Officer Opinion Survey on Bank Lending Practices, August 13, 2007, p. 13.
20. Liz Moyer, “Revolver at the Heads,” *Forbes*, October 7, 2008. Gannett Corporation withdrew \$1.2 billion, FairPoint Communications withdrew \$200 million, and Duke Energy withdrew \$1 billion.
21. Murillo Campello, John R. Graham, and Campbell R. Harvey, “The Real Effects of Financial Constraints: Evidence from a Financial Crisis,” *Journal of Financial Economics* 97 (2010): 476.

22. Board of Governors of the Federal Reserve System, January 2009 Senior Loan Officer Opinion Survey, fourth-quarter 2008, p. 8.
23. Elizabeth Duke, governor, Federal Reserve Board, "Small Business Lending," testimony before the House Committee on Financial Services and Committee on Small Business, February 26, 2010, p. 1.
24. National Federation of Independent Businesses, "NFIB Small Business Economic Trends," December 2010, p. 12.
25. Ben Bernanke, "Restoring the Flow of Credit to Small Business," speaking at the Federal Reserve Meeting Series: "Addressing the Financing Needs of Small Businesses," Washington, DC, July 12, 2010.
26. C. R. "Rusty" Cloutier, past chairman, Independent Community Bankers of America, testimony before the FCIC, First Public Hearing of the FCIC, day 1, panel 3: Financial Crisis Impacts on the Economy, January 13, 2010, transcript, p. 194.
27. Federal Reserve Statistical Release, E.2 Survey of Terms of Business Lending, E.2 Chart Data: "Commercial and Industrial Loan Rates Spreads over Intended Federal Funds Rate, by Loan Size," spread for all sizes.
28. William J. Dennis Jr., "Small Business Credit in a Deep Recession," National Federation of Independent Businesses, February 2010, p. 18.
29. Jerry Jost, interview by FCIC, August 20, 2010.
30. Board of Governors of the Federal Reserve System, Senior Loan Officer Opinion Survey on Bank Lending Practices, April 2010.
31. Board of Governors of the Federal Reserve System, Senior Loan Officer Opinion Survey on Bank Lending Practices, July 2010.
32. Emily Maltby, "Small Biz Loan Failure Rate Hits 12%," CNN Money, February 25, 2009; "SBA Losses Climb 154% in 2008," Coleman Report (www.colemanpublishing.com/public/343.cfm).
33. Michael A. Neal, chairman and CEO, GE Capital, testimony before the FCIC, Hearing on the Shadow Banking System, day 2, session 3: Institutions Participating in the Shadow Banking System, May 6, 2010, transcript, p. 242.
34. GE, 2008 Annual Report, p. 38.
35. Mark S. Barber, testimony before the FCIC, Hearing on the Shadow Banking System, day 2, session 3: Institutions Participating in the Shadow Banking System, May 6, 2010, transcript, p. 263.
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