Pepperdine Policy Review

Volume 3 Article 5

1-1-2010

The Policy Debate Over the Bailout Plan

Kevin Simons Asian Pacific American Dispute Resolution Center

Follow this and additional works at: http://digitalcommons.pepperdine.edu/ppr Part of the Public Affairs, Public Policy and Public Administration Commons

Recommended Citation

Simons, Kevin (2010) "The Policy Debate Over the Bailout Plan," Pepperdine Policy Review: Vol. 3, Article 5. Available at: http://digitalcommons.pepperdine.edu/ppr/vol3/iss1/5

This Alumni Feature is brought to you for free and open access by the School of Public Policy at Pepperdine Digital Commons. It has been accepted for inclusion in Pepperdine Policy Review by an authorized administrator of Pepperdine Digital Commons. For more information, please contact Kevin.Miller3@pepperdine.edu.

The Policy Debate Over the Bailout Plan

Kevin Simons*

ABSTRACT

This paper analyzes the policy debate over the Federal Government's bailout of the financial industry in 2008.

I. Introduction

The Emergency Economic Stabilization Act of 2008 (EESA), generally known as the "bailout plan," allocates \$700 billion of public money to keep financial institutions solvent. The Act, passed by Congress on October 3, 2008, has given birth to many programs designed to stabilize the economy. The Troubled Assets Relief Program (TARP) was the first of the new programs to disburse government funds and remains the biggest and most controversial program to date. The Treasury Department's authority to administer funds through TARP was extended through October 2010.1 As of January 6, 2010, some \$374 billion in public funds have been spent through TARP, of which \$165 billion have been repaid.² Although many details of the plan have changed since October 2008, the thrust remains the same: the federal government is disbursing Treasury funds to secure financial markets, enable lending, and keep some of the nation's largest banks in business.³ Many supporters of the plan argue that some banks have such influence on national and global economics that they cannot be allowed to fail. Conversely, critics charge that policy based on this "too big to fail" premise is unfair, inefficient, and risky.⁵ The purpose of this paper is to analyze the debate between opponents and proponents of federal government's intervention in financial markets.

The crux of the debate is whether government intervention encourages irresponsible risk-taking and invites other industries to seek federal handouts. This is known as moral hazard. Both proponents and opponents of intervention alike have claimed the highest possible stakes. Proponents have argued that without government intervention in our financial markets a chain reaction of institutional failures would have followed, bringing about a worldwide depression. Opponents counter that government bailouts help

^{*} Kevin Simons (M.P.P. 2009/M.D.R. 2010) is a conflict resolution specialist with the Asian Pacific American Dispute Resolution Center in Los Angeles. He lives in Venice, California.

only to establish a precedent that reduces public welfare and damages public trust.⁷

II. ROOTS OF THE CRISIS

The current financial crisis stems from the debt market, which has grown rapidly in the past decade to include exotic, poorly understood investment instruments. Sub-prime mortgages, home loans that banks made to borrowers with bad credit, support a crumbling tower of debt. Years of low interest rates made borrowing nearly free for banks, but low rates also brought low returns on safe investments like government treasury bills. Banks therefore sought greater returns by issuing home loans at high rates to high-risk borrowers. Mortgage lenders, newly freed from the responsibility of collecting mortgage payments, then sold pools of loans to investors who used the mortgage payment streams to securitize new instruments, which were in turn sold to other investors. The result is a derivative, "a risk transfer agreement, the value of which is derived from the value of an underlying asset." This specific type of derivative is known generically as a collateralized debt obligation (CDO).

Derivatives are not subject to the same regulation as common stocks. They are not, for example, traded on a market exchange as normal stocks and bonds are, but are bought and sold privately "over the counter," beyond the glare of public and regulatory scrutiny. Consequently, it is difficult to estimate derivatives' true value. Nevertheless, the global derivatives market was estimated at \$596 trillion as of the end of 2007. By comparison, global GDP for 2008 was \$61 trillion. The result is a complex and lightly regulated market with outstanding obligations approximately ten times the value of all goods and services produced worldwide. Because of the large derivatives market, suspect mortgages have become the engine of a lucrative and explosive sector of high finance. This is the genesis of the current crisis. Because of the current crisis.

Compounding the payoff for investment banks and hedge funds are credit default swaps (CDSs), a risk transfer contract meant to secure debt instruments like CDOs. ¹⁵ CDSs are essentially a type of private insurance. The idea is fairly simple: Party A takes out insurance against the potential default of a credit issue, like a bond, mortgage, or CDO, and in exchange for providing that insurance, Party B receives a revenue stream in the form of premium payments from Party A. In the event of a credit default, Party B is liable to pay Party A some multiple of the premium. ¹⁶ The market for CDSs grew from roughly \$1 trillion in 2001 to \$62 trillion in 2007. ¹⁷ Unlike conventional insurance, however, CDSs are unregulated. ¹⁸ A more damaging consequence is that many CDSs are "guaranteed" by parties lacking the capital to do so; in financial parlance they are

"undercapitalized." Indeed, the market for all financial derivatives has put vastly more money at risk than there is underlying value to secure it. Therefore, commentators often refer to the "notional value" of derivatives.

Investors, mainly investment banks and hedge funds, profited from this system well into 2006, as the U.S. housing market continued to soar²⁰. As long as borrowers were able to sell their homes at a profit or refinance their loans there was little risk of default. Eventually, however, the housing market cooled and heavily leveraged hedge funds, often running investment to capital ratios of 100 to 1, incurred heavy losses.²¹ This problem was exacerbated by the fact that some insurers of CDSs were charging only 1% premiums.²² The brokerage firm Bear Stearns (Bear) announced the collapse of two of its hedge funds in July of 2007.²³ Bear's fortunes deteriorated over the coming months until the investment bank JPMorgan Chase bought the distressed firm with a Federal Reserve Bank loan in March 2008.²⁴ Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation), two quasi-governmental mortgage-lending agencies, also suffered heavy losses in the sub-prime market.²⁵ Faced with the prospect of seeing the two agencies default on their obligations, and thus calling the credit-worthiness of the federal government into question, the Federal Reserve (Fed) and the Office of Federal Housing Enterprise Oversight placed Freddie and Fannie into conservatorship on September 7, 2008.²⁶

Merrill Lynch also suffered heavy losses and was sold, with assistance from the Fed, to Bank of America on September 14, 2008.²⁷ Lehman Brothers was unable to secure government intervention and filed for bankruptcy on the September 15, 2008.²⁸ The Lehman filing is the largest bankruptcy in U.S. history at over \$600 billion in liabilities,²⁹ and stock market indexes suffered heavy losses as a result of the news of Lehman's bankruptcy.³⁰ Consequently, the Fed's failure to intervene has been widely criticized³¹. In the immediate wake of Lehman's filing for bankruptcy, the Fed announced it would provide \$85 billion in loans to the insurance giant American International Group (AIG). Bear Stearns, Merrill Lynch, and AIG had been deemed too big to fail, and a broader bailout plan was in the offing. Speculation, leverage, and lax regulation had endowed sub-prime mortgages with the power to topple a network of financial giants.

III. LITERATURE REVIEW: CURRENT SITUATION

The seismic events of the past couple of years have renewed the debate on the moral hazards of government intervention in a market economy. The main architect of the bailout is Henry J. Paulson, former Secretary of the Treasury of the United States.³² Another key policymaker is Federal Reserve Chairman Ben Bernanke, whose agency opened its discount window to commercial banks for the first time when it lent Morgan Stanley \$28.8 billion in March 2008 to buy Bear Stearns.³³ In addition to making new sources of "emergency money" available to Wall Street, Mr. Bernanke also moved to alleviate the crisis by lowering interest rates to encourage lending.³⁴

Originally, the Treasury's stated policy was to use some of the money, as much as \$250 billion, to buy the worst mortgage-backed assets that banks held.³⁵ However, the Treasury reversed course and decided instead to purchase preferred stock from ailing banks as a way to provide capital, encourage lending, and ease the credit crunch. This also gave the government a firmer idea of its potential return on investment. The government acted quickly, purchasing some \$115 billion worth of preferred stock from eight of the largest banks within three weeks of EESA's passing.³⁶ That figure has risen to \$205 billion in the past year, exclusive of AIG, which the U.S. government now effectively owns.³⁷ These "equity injections" come at a cost of graduated interest rates to the banks, and more than half of the \$205 billion has been repaid.³⁸ With the extension of TARP's authority until October 2010, the Treasury will likely spend additional funds as needed throughout 2010, although it is unlikely that Treasury will spend the full \$700 billion.³⁹ Additional plans for loan workouts and buying preferred stock on matching terms with private investment have since begun, although on a smaller scale and with less fanfare. 40

IV. PROS OF THE PLAN

Proponents claim government intervention was necessary because of the extreme circumstances. Some arguments in favor of the bailout plan are that the entire economy is at stake, and that government action will fix institutional flaws.

A. Pragmatism: The Entire Economy Is At Stake

Secretary Paulson's first and most important point when he testified before the Senate Banking Committee on September 23, 2008 was that the bailout was needed because the entire economy is at stake. He told the Committee that, "We must [enact this plan] in order to avoid a continuing series of financial institution failures and frozen credit markets that threaten American families' financial well-being, the viability of businesses both small and large, and the very health of our economy." The Secretary was careful to frame the economic stability argument in terms of Main Street's

benefit.⁴² With credit markets frozen, business grinds to a halt. General Electric (GE), an icon of American capitalism, struggled to make payroll at the height of the September 2008 panic.⁴³ Had another bank gone bankrupt, GE might well have gone under with it; the wider impact that GE's failure could have had on other businesses great and small is incalculable. Without credit, manufacturers can no longer borrow to finance production, retailers cannot borrow to purchase goods for sale, consumers lose purchasing power, employers default on payroll, and student loans dry up. This argument tries to divert the attention from Wall Street greed to the potentially severe impact that a financial markets crisis could inflict on those who would otherwise expect to be unaffected by the world of high finance.

Charles Wyplosz, Professor of International Economics at the Graduate Institute of International and Development Studies, Geneva, drives this argument home by writing: "all financial institutions will have no choice but to formally acknowledge their losses. Either they recapitalise quickly, which dilutes existing shares, or they will file for bankruptcy, which is even worse for the shareholders."⁴⁴ Again the proponents make the claim that this bailout is not just for the benefit of the banks and corporations who brought this problem to bear on the rest of the world, but is in fact the best option for shareholders. Wyplosz, like Paulson, attempts to connect the poorly understood world of CDOs and CDSs to the average consumer. Without the bailout, retirement savings could be wiped out. 45 The Dow Jones one-day plunge on September 29, 2008, for example, resulted in \$1.2 trillion in losses. 46 The interests of the broader economy are at stake, not just the bonuses of Wall Street's executives. It is a populist argument that was embraced by U.S. Senator John McCain and then-U.S. Senator Barack Obama, both of whom voted for the plan.⁴⁷

B. Government Action Will Fix Institutional Flaws

Secretary Paulson addressed the notion that government action will help to fix institutional flaws directly in his November 12, 2008 statement on the crisis and the evolving plan. He stated that "it is already clear that we must address a number of significant issues, such as improving risk management practices, compensation practices, oversight of mortgage origination and the securitization process, credit rating agencies, OTC derivative market infrastructure and regulatory policies, practices and regimes in our respective countries." Indeed, in Europe regulatory reform is seen as an essential component of righting their markets. Executive compensation tied to profit encourages excessive risk-taking; lax regulations that allow 100 to 1 leveraging invite disaster. Hedge funds are not subject to

the same capital reserve requirements that apply to banks, thus their exposure, or potential to gain or lose money, is greatly magnified. This leveraging power is exacerbated when credit rating agencies like Moody's and Standard and Poors assign "safe" ratings to bad debt, as many allege has happened in recent years. The current plan does not, however, impose new mortgage lending rules on America's banks, nor have new rules been promulgated to enforce capital ratios on hedge funds.

V. SHORTCOMINGS OF THE PLAN

Some arguments against the current bailout plan are that it creates moral hazard and that the plan is badly flawed.

A. Moral Hazard

Many opponents of the EESA argue against any government intervention. ⁵³ In their view, companies that have made risky investments should be allowed to fail. Such critics abhor moral hazard. A responsible government cannot, they argue, come to the aid of the irresponsible because it provides a safety net for excessive risk-taking. Others are opposed to the structural details of the plan. ⁵⁴ The core of this argument is simple: bailing out a misbehaving institution is just plain wrong. It sends the wrong message to society, it encourages reckless behavior, and it invites the Samaritan's dilemma. Critics point to 1984, when the Federal Deposit Insurance Corporation (FDIC) injected \$4.5 billion into an ailing Continental Illinois to save it from bankruptcy, as the start of modern federal meddling. ⁵⁵ Five years later the federal government stepped in again to save the Savings and Loan industry and to protect U.S. banks against defaults from foreign governments. ⁵⁶ Each of these interventions cost upwards of \$90 billion in 1989 dollars. ⁵⁷

Among the most vocal in opposing such governmental intervention is Jeffrey Miron, senior lecturer in economics at Harvard. He writes: "Government purchase of bank stock, therefore, is a transfer from taxpayers to people who took huge risks and lost. . . . [This] will generate even greater problems down the line. It is time for the government to do the one thing it does well: nothing at all." Underlying this criticism is a faith in financial markets to devise solutions to prevent further crashes. Providing excessive risk-takers with a safety net, opponents of the bailout argue, only encourages riskier behavior, and future abuses are sure to result. As David I. Levin, professor of economics at U.C. Berkeley commented to Bloomberg News, "The structure is designed for the Treasury to be the first line of defense. A whole lot of people made money supposedly by putting their capital at

risk, and those are supposed to be the first line of defense, that's how capitalism works."60

B. The Plan Is Badly Flawed

The objections that the plan is badly flawed are structural more than philosophical. Indeed, some initially opposed the plan because of its secrecy, and some opposed it later for a perceived lack of direction. 61 Nobel laureate and Columbia University professor of economics Joseph Stiglitz has opposed the plan for its failure to address underlying causes. During the hectic aftermath to Lehman's collapse, he commented: "There is a kind of suggestion in the Paulson proposal that if only we provide enough money to financial markets, this problem will disappear. . . . But that does nothing to address the fundamental problem of bleeding foreclosures and the holes in the balance sheets of banks."62 [Once again I am baffled. He is being quoted, and he is not quoting anyone else.] These opponents of the plan acknowledge the pragmatism of coming to the aid of our banks, but they object to the lack of practicality with which policymakers are executing their plan. Opponents also argue that even if the government buys an equity stake in companies instead of just absorbing "toxic debt," the public will suffer. 63 Banking decisions will be politically influenced and inefficient, and the federal government's vast holdings will distort financial markets. Still others contend that the current plan will waste money in a trickle-down attack on the sub-prime problem.⁶⁴ It would be better, some say, to buy the toxic loans and work out mortgages to reduce defaults, thus securing the banks' health from the bottom up. While this approach has merit, even its proponents acknowledge the enormous difficulty of administering such a plan.65

Underlying many such practical concerns is the question: does the government have any way of knowing what it is actually buying? Many economists, journalists, and politicians worry that it does not. The financial instruments at the root of the current crisis are not well understood even by the men and women who traded them for a living; how, then, will government agents be able to properly value them?⁶⁶ The opponents of Paulson's plan argue that this is a bad deal for the taxpayer whether the government buys "toxic debt" or even if it gets equity for its money. Are they right?

VI. DEBATE ANALYSIS

Proponents of the current plan worry about the leverage that our banking institutions have on the economy at large. Charles Wyplosz writes, "The Lehman Brothers story has shown two things—banks cannot be simply allowed to go bankrupt and a piecemeal approach will not bring banking systems back into minimal functioning condition. The lesson is that there [has] to be a bailout."67 Again, the approach is pragmatic; the potential for severe economic consequences is so great that something must be done. As Ben Bernanke said recently, "You want to put the fire out first and then worry about the fire code." According to the proponents of the bailout plan, the country no longer has the luxury of worrying about moral hazard. Critics of the plan, conversely, populate two camps. One camp opposes the plan based on the philosophical grounds that government intervention causes moral hazard and prevents free market solutions.⁶⁹ The other camp acknowledges a need for government intervention, but objects to the particulars of the bailout.⁷⁰

Public opinion on the bailout plan appears divided. Various polls show either strong support or strong aversion to EESA, and the results seem largely determined by how the question is framed. Respondents enthusiastically support the plan when they are asked if they favor government intervention to ensure stable markets and a healthy economy. The results are much different, however, when the question is, should "the government... use taxpayers' dollars to rescue ailing private financial firms whose collapse could have adverse effects on the economy and market...?" [The difference is "ensuring a healthy economy" versus "rescuing private firms." Everyone is in favor of a healthy economy, while many oppose rescuing private firms. Unfortunately, the "private firms" in question are inextricably linked to a "healthy economy." On that even the critics and proponents of the current plan would agree.

As for the pundits, it is open season on Wall Street greed. Wall Street is an easy target, though it has gone unmentioned in much of the popular press that the principals involved in losing such great fortunes on Wall Street are in fact just a handful of individuals. Merrill Lynch's losses in the sub-prime market stemmed from the investment strategies of only three or four men and their actions cost their firm over \$10 billion and its autonomy. Pundits and the public alike have largely overlooked the fact that thousands of Wall Street employees who stand to lose their life's savings are responsible, hardworking men and women who bear no responsibility for the current crisis. Likewise there are thousands of shareholders who stand to lose substantial investments.

Much of the debate follows traditional liberal/conservative party lines. Free market advocates oppose any and all government intervention; for them

the market is everything. Joseph Stiglitz, who opposes the bailout plan on structural grounds, calls such advocates "free market fundamentalists."⁷⁴ It will be better for everyone in the long run, they argue, to let the market determine where the bottom is no matter how much suffering it inflicts on the global economy. The market knows best. Conversely, modern liberals believe that government can be the solution, or at least part of it.⁷⁵ To further confuse the concerned citizen, Nobel laureates and prominent academics populate both sides of the debate.

A recent report on previous government interventions reveals a mixed record. Government action saved Continental Illinois' depositors, but shareholder equity was almost completely wiped out. The Brady Plan allowed U.S. banks to restructure foreign debt, but it merely increased the burden on foreign borrowers. Of the Savings and Loan bailout, the report notes: To the extent that federal intervention led to general confidence in financial markets, consumers benefited. . . . [but] direct and indirect costs to the private and public sectors was \$152.9 billion (\$191.4 billion in 2008 dollars). The Continental Illinois troubles in 1984 eventually led to the FDIC Improvement Act (FDICIA) of 1991. This act was designed to curb excessive risk-taking and thus avoid a similar banking failure in the future. Evidently, this has not been sufficient.

At the outset of the crisis it appeared that the Treasury would have to distinguish between the firms that were merely illiquid, fiscally sound but short of cash owing to the credit freeze, from those that were fundamentally corrupt, short of cash owing to their own bad business practices and unpayable debt. Yet Paulson and his team feared that in the time it would take to conduct a thorough auditing of all the firms involved, the economy could collapse. Instead they made billions of dollars available to all the biggest players in an effort to stabilize markets and assuage the fears of institutional investors, consumers, and the world at large.

VII. CONCLUSION

The debate involves many diverse parties. It is a cliché to say that it affects everyone from Wall Street to Main Street, but it is true. It is also true that those on Main Street may feel aggrieved to face potential tax increases or loss of services in order to pay for the bailout, yet those same people may well have faced even higher taxes and greater loss of services if government had not acted to secure markets.

It would be wise to take some lessons from the demise of Long-Term Capital Management (LTCM), a hedge fund whose collapse in 1998 threatened the solvency of major investment banks.⁸² Populated by

superstar traders and Nobel laureates, LTCM invested heavily in highly leveraged derivatives during a period of low interest rates. Credit was cheap, leverage was high, and regulation was nearly non-existent.

Their total profits in 1996 were an astounding \$2.1 billion. To put this number into perspective, [LTCM]...earned more that year than McDonald's did selling hamburgers all over the world, more than Merrill Lynch, Disney, Xerox, American Express, Sears, Nike, Lucent, or Gillette—among the best-run companies and best-known brands in American business.

Less than two years later, LTCM lost \$4.6 billion in four months. 84 Only an eleventh hour bailout by other private financial institutions, organized by the New York branch of the Fed, averted a chain reaction of even heavier losses. 85 Yet banks with skin in the game learned nothing. Just ten years later the recipe for disaster was the same, but this time the bailout costs started at over \$370 billion, not the \$3.65 billion required to stabilize LTCM's positions. 86 The market principals, left to regulate themselves, merely repeated their mistakes of the recent past, only on a much grander and more damaging scale. Laissez-faire has not served the economy well. As Roger Lowenstein notes, "The Fed's two-headed policy—head in the sand before a crisis, intervention after the fact—is more misguided when viewed as one single policy. The government's emphasis should always be on prevention, not on active intervention." 87

It might be better for the country in the long run to let bad businesses fail, but no economist can predict the depth or duration that such "shortterm" suffering would entail. Indeed, many economists who advocate such an approach are shockingly oblivious to the domino effect. Merrill Lynch found a last minute buyer out of desperation as the financial markets quaked, but one day later Lehman Brothers was not so lucky and the subsequent fallout was severe.⁸⁸ Investor confidence was crippled, capital evaporated from money market funds, and investment-banking giants Morgan Stanley and Goldman Sachs teetered on the brink of insolvency as trading partners abandoned them and traders shorted their stocks during the summer of 2008.⁸⁹ A severe credit freeze holds the potential to be too damaging to too many economies to risk a social science experiment to find out how much pain and unemployment a do-nothing approach to policy would entail. Bernanke, an understated man and a scholar of the Great Depression, warned against such an approach when he told a meeting of congressmen in September 2008, "[If] we [do not] act in a big way, you can expect another Great Depression, and this time it is going to be far, far worse."90

The moral hazard argument might carry more force if financial institutions showed any capacity to safeguard the system in the wake of disaster. Sadly, they have not done so. The biggest banks paid an average of over \$250 million in 1998 for the privilege of keeping LTCM afloat and

the market functioning.⁹¹ They had every reason to impose rules that would obviate the need to bail out anyone ever again, but they declined to act. They gambled, they lost, they suffered—yet they did not learn. Ten years on from the collapse of LTCM, Wall Street's most powerful bankers repeated the same mistakes of the firm they had bailed out with their own money. The idea that the market is a perfect self-correcting mechanism is a fantasy.

The federal government has a long history of interceding in market panics, going all the way back to 1792, when Alexander Hamilton authorized the Treasury to purchase government bonds to quell our nation's first financial crisis. ⁹² In the past thirty years alone it has intervened in Continental Illinois, the Savings and Loan crisis, and LTCM. Whether government's intervention in those cases inspired greater risk-taking is now irrelevant. The current crisis is far greater than those of the past, and government has the popular support to impose regulations that will safeguard the public from Wall Street's brinksmanship. Unless Wall Street is forced to adhere to rigorous standards of responsible and transparent investing, there will surely be a repeat of this crisis before long. History, surely, has taught us that much.

^{1.} U.S. Department of the Treasury, *Troubled Assets Relief Program: Monthly 105(a) Report to Congress*, 6 (January 11, 2010), available from http://www.financialstability.gov/docs/105CongressionalReports/December%20105(a)_final_1-11-10.pdf (accessed June 5, 2010).

^{2.} Ibid., 5–6.

^{3. &}quot;Credit Crisis—Bailout Plan," *The New York Times*, December 10, 2009, http://topics.nytimes.com/top/reference/timestopics/subjects/c/credit_crisis/bailout_plan/index.html (accessed June 5, 2010).

^{4.} Charles Wyplosz, "Why Paulson Is (Maybe) Right" (Vox: Research Based Policy Analysis from Leading Economists, September 22, 2008), http://www.voxeu.org/index.php?q=node/1671 (accessed March 30, 2010); Tim Harford, "Bailouts Are Inevitable, Even Desirable," *Slate*, October 4, 2008, http://www.slate.com/id/2201343/ (accessed June 5, 2010).

^{5.} Acemoglu Daron et al. to Congress, letter written to discourage the passage of TARP, 24 September 2008, The University of Chicago Booth School of Business, available from "http://faculty.chicagogsb.edu/john.cochrane/research/Papers/mortgage_protest.htm (accessed March 30, 2010).

^{6.} Nathan Burchfiel, "Cramer: Bailout Opponents 'Don't Know What They're Talking About," (Business and Media Institute, October 1, 2008), http://www.businessandmedia.org/articles/2008/20081001104112.aspx (accessed May 18, 2010).

^{7.} Jeffrey A. Miron, "Why this Bailout Is as Bad as the Last One," *CNN*, October 14, 2008, http://www.cnn.com/2008/POLITICS/10/14/miron.banks/index.html?iref=mpstoryview (accessed April 23, 2010).

^{8. &}quot;Annual Fed Funds Rates" (Federal Reserve), http://www.federalreserve.gov/releases/h15/data/Annual/H15_FF_O.txt (accessed May 18, 2010); Charles R. Morris, *The Trillion Dollar Meltdown: Easy Money, High Rollers, and the Great Credit Crash* (New York, PublicAffairs).

- 9. "Product Descriptions and Frequently Asked Questions," (International Swaps and Derivatives Association), http://www.isda.org/educat/faqs.html (accessed March 30, 2010).
 - 10. Morris, The Trillion Dollar Meltdown, 74.
- 11. "Derivatives," *New York Times*, http://topics.nytimes.com/top/reference/timestopics/subjects/d/derivatives/index.html?inline=nyt-classifier (accessed May 18, 2010).
- 12. "OTC Derivatives Market Activity in the Second Half of 2007," (Bank for International Settlements, May 22, 2008), http://www.bis.org/press/p080522.htm (accessed March 30, 2010).
- 13. World Bank, http://search.worldbank.org/data?qterm=world%20gdp (accessed May 18, 2010); CIA World Factbook gives a figure of \$70.63 trillion for 2008, *The World Factbook* (Central Intelligence Agency), https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html, (accessed May 18, 2010).
 - 14. "Credit Crisis-Bailout Plan," The New York Times.
- 15. "Credit Default Swaps," *New York Times*, March 10, 2010, http://topics.nytimes.com/top/reference/timestopics/subjects/c/credit_default_swaps/index.html?scp= 1-spot&sq=credit%20default%20swaps&st=cse (accessed May 18, 2010); Morris, *The Trillion Dollar Meltdown*, 75.
- 16. David Mengle, "Credit Derivatives: An Overview" (paper presented at the 2007 Financial Markets Conference, Federal Reserve Bank of Atlanta, Atlanta, Georgia, 15 May 2007): 4, available from www.frbatlanta.org/news/conferen/07fmc/07FMC_mengle.pdf (accessed April 11, 2010).
- 17. "ISDA Market Survey Historical Data, 1987–Present," (International Swaps and Derivatives Association), http://www.isda.org/statistics/pdf/ISDA-Market-Survey-historical-data.pdf (accessed April 11, 2010).
 - 18. Credit Default Swaps," The New York Times.
 - 19. Ibid.
- 20. "Wall Street Bonuses Set New Record," Office of the New York State Comptroller, December 19, 2006, http://www.osc.state.ny.us/press/releases/dec06/121906b.htm (accessed May 18, 2010); "Office of Federal Housing Enterprise Oversight 2d Quarter Report" (Federal Housing Financing Agency, Office of Federal Housing Enterprise Oversight, August 30, 2007), http://www.fhfa.gov/Default.aspx?Page=195&ListNumber=0&ListYear=2007#Year_2007 (accessed May 18, 2010).
 - 21. Morris, The Trillion Dollar Meltdown, 112–115.
 - 22. Malcolm Gladwell, "The Sure Thing," New Yorker, 18January 2010, 26-27.
- 23. Yalman Onaran, "Bear Stearns Seizes Assets from Failed Hedge Fund," *Bloomberg News*, July 26, 2007, http://preview.bloomberg.com/apps/news?pid=newsarchive_en10&sid=a2rP8XvO7WV4 (accessed May 18, 2010).
- 24. Robin Sidel, et al., "J.P. Morgan Buys Bear in Fire Sale, as Fed Widens Credit to Avert Crisis," *Wall Street Journal*, March 17, 2008, http://online.wsj.com/article/SB120569598608739825.html (accessed May 18, 2010).
- 25. Zachary A. Goldfarb, et al., "Treasury To Rescue Fannie and Freddie," *Washington Post*, September 7, 2008, http://online.wsj.com/article/SB120569598608739825.html (accessed May 18, 2010).
- 26. Federal Housing Finance Agency, *Statement by FHFA Director James B. Lockhart*, (September 7, 2008), available from http://www.fhfa.gov/webfiles/23/FHFAStatement9708final.pdf (accessed April 11, 2010).
- 27. "Bank of America to Purchase Merrill Lynch," Associated Press, September 15, 2008, http://www.msnbc.msn.com/id/26708958/ (accessed May 18, 2010).
- 28. "Lehman Brothers Files for Bankruptcy, Scrambles to Sell Key Business," *CNBC*, September 15, 2008, http://www.cnbc.com/id/26708143 (accessed May 18, 2010).

- 29. Sam Mamudi, "Lehman Folds with Record \$613 Billion Debt," *Market Watch*, September 15, 2008, http://www.marketwatch.com/story/lehman-folds-with-record-613-billion-debt?siteid=rss (accessed April 11, 2010).
- 30. Alex Berenson, "Wall St.'s Turmoil Sends Stocks Reeling," *New York Times*, 16 September 2008, C7.
- 31. Paul Krugman, "Edge of the Abyss," *New York Times*, October 2, 2008, http://www.nytimes.com/2008/10/03/opinion/03krugman.html (accessed May 18, 2010).
 - 32. "Credit Crisis—Bailout Plan," The New York Times.
- 33. "JP Morgan Chase, Fed to Help Bear Stearns," CBS News, March 14, 2008, http://cbs3.com/business/bear.stearns.jp.2.677042.html?detectflash=false (accessed May 18, 2010).
- 34. "Historical Changes of the Target Federal Funds and Discount Rates" (The Federal Reserve Bank of New York), http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html (accessed April 11, 2010).
- 35. Andrew Clark, "Paulson Abandons Plans to Buy Up America's Toxic Mortgage Assets," *Guardian*, November 13, 2008, http://www.guardian.co.uk/business/2008/nov/13/harry-paulson-banking-rescue-mortgage (accessed May 18, 2010).
- 36. U.S. Department of the Treasury, *Troubled Assets Relief Program: Monthly 105(a) Report to Congress*, 6 (January 11, 2010), available from http://www.financialstability.gov/docs/105CongressionalReports/December%20105(a)_final_1-11-10.pdf (accessed April 11, 2010).
 - 37. Ibid.
 - 38. Ibid.
 - 39. Ibid.
 - 40. Ibid.
- 41. U.S. Department of the Treasury, *Testimony by Secretary Henry M. Paulson Jr. before the Senate Banking Committee on Turmoil in U.S. Credit Markets: Recent Actions Regarding Government Sponsored Entities, Investment Banks, and other Financial Institutions,* (September 23, 2008), available from http://www.ustreas.gov/press/releases/hp1153.htm (accessed April 11, 2010).
 - 42. Ibid.
- 43. Andrew Ross Sorkin, Too Big To Fail: The Inside Story of How Wall Street and Washington Fought To Save the Financial System—and Themselves (New York: Viking, 2009), 417.
 - 44. Wyplosz, "Why Paulson Is (Maybe) Right."
 - 45. Ibid.
- 46. Alexandra Twin, "Stocks Crushed," *CNNMoney.com*, September 29, 2008, http://money.cnn.com/2008/09/29/markets/markets_newyork/index.htm (accessed April 11, 2010).
- 47. U.S. Senate Roll Call Votes 110th Congress 2d Session (U.S. Senate, October 1, 2008), http://www.senate.gov/legislative/LIS/roll_call_lists/roll_call_vote_cfm.cfm?congress=110&session =2&vote=00213 (accessed May 18, 2010).
- 48. U.S. Department of the Treasury, *Remarks by Secretary Henry M. Paulson Jr. on Financial Rescue Package and Economic Update*, (November 12, 2008), available from http://www.ustreas.gov/press/releases/hp1265.htm (accessed April 11, 2010).
 - 49. Ibid
- 50. "Ruling out US-Style Bailout Plan, EU Looks to Tougher Regulation," *EUbusiness*, September 24, 2008, http://www.eubusiness.com/news-eu/1222273023.78/ (accessed April 11, 2010)
- 51. Morris, The Trillion Dollar Meltdown, 107-117; Roger Lowenstein, When Genius Failed: The Rise and Fall of Long-Term Capital Management, (New York: Random House, 2001), 24-25; "What Is a Hedge Fund?" Barclay Hedge Alternative Investment Databases,

http://www.barclayhedge.com/research/educational-articles/hedge-fund-strategy-definition/what-is-a-hedge-fund.html (accessed May 18, 2010).

- 52. Morris, *The Trillion Dollar Meltdown*, 77; Michael Lewis, "The End," *Portfolio.com*, November 11, 2008, http://www.portfolio.com/news-markets/national-news/portfolio/2008/11/11/The-End-of-Wall-Streets-Boom/ (accessed April 11, 2010).
- 53. Sebastian Mallaby, "A Bad Bank Rescue," *Washington Post*, September 21, 2008, http://www.washingtonpost.com/wp-dyn/content/article/2008/09/20/AR2008092001059.html?hpid=opinionsbox1 (accessed May 18, 2010); Jeffrey A. Miron, "Why this Bailout Is as Bad as the Last One."
 - 54. Joseph Stiglitz, Freefall (New York: W.W. Norton & Co., 2010), xxiii, 30.
- 55. Federal Deposit Insurance Corporation, "Chapter 7: Continental Illinois and 'Too Big To Fail," Vol. I: An Examination of the Banking Crises of the 1980s and early 1990s, 244 (June 5, 2000), available from http://www.fdic.gov/bank/historical/history/235_258.pdf (accessed April 18, 2010).
- 56. Congressional Research Service, *Government Interventions in Financial Markets: Economic and Historic Analysis of Subprime Mortgage Options*, report prepared by N. Eric Weiss, 8–9, available from http://assets.opencrs.com/rpts/RL34423_20080325.pdf (accessed April 18, 2010).
 - 57. Ibid.
 - 58. Jeffrey A. Miron, "Why this Bailout Is as Bad as the Last One."
 - 59. Ibid.
- 60. Matthew Benjamin, "Economists Urge Congress Not to Rush on Rescue Plan (Update 1)," Bloomberg News, September 26, 2008, http://www.bloomberg.com/apps/news?pid=20601103&sid=aNhbZSQz2Vws&refer=us (accessed April 23, 2010).
- 61. Avi Zenilman, "Many Economists Skeptical of Bailout," *Politico*, http://www.politico.com/news/stories/0908/13689.html (accessed May 22, 2010).
- 62. Neil Irwin and Cecilia Kang, "Away from Wall Street, Economists Question Basis of Paulson's Plan," *Washington Post*, September 26, 2008, http://www.washingtonpost.com/wp-dyn/content/article/2008/09/25/AR2008092504531.html (accessed April 23, 2010).
- 63. Kevin G. Hall, "Bailout Funds Being Spent in Ways Congress Never Foresaw," *McClatchey*, October 30, 2008, http://www.mcclatchydc.com/2008/10/30/55036/bailout-fundsbeing-spent-in-ways.html (accessed May 22, 2010).
- 64. Joseph Stiglitz, "Bail-out Blues," *Guardian*, September 30, 2008, http://www.guardian.co.uk/commentisfree/2008/sep/30/marketturmoil.wallstreet (accessed May 22, 2010).
 - 65. Ibid.
- 66. Luigi Zingales, "Why Paulson Is Wrong," *Vox*, http://www.voxeu.org/index.php?q=node/1670 (accessed May 22, 2010); Roger Lowenstein, *When Genius Failed*, 24-28.
- 67. Charles Wyplosz, "Why Government Responses Need to Be Comprehensive and Coordinated," (Vox: Research Based Policy Analysis from Leading Economists, October 9, 2008), http://www.voxeu.org/index.php?q=node/2377 (accessed April 23, 2010).
 - 68. John Cassidy, "Anatomy of a Meltdown," New Yorker, 1 December 2008, 60.
- 69. Jeffrey Miron, "Bankruptcy, Not Bailout, Is the Right Answer," CNN, September 29, 2008, http://www.cnn.com/2008/POLITICS/09/29/miron.bailout/ (accessed May 22, 2010).
 - 70. Wyplosz, "Why Government Responses Need To Be Comprehensive and Coordinated."
- 71. "Most Approve of Wall Street Bailout and See Obama as Better Able To Address Crisis: Interest in the Economy Highest in Nearly 20 Years," (Pew Research Center for the People and the Press, September 23, 2008), http://pewresearch.org/pubs/963/wall-street-bailout-approval (accessed April 23, 2010).

- 72. Matthew Benjamin, "Americans Oppose Bailouts, Favor Obama to Handle Market Crisis," *Bloomberg News*, September 24, 2008, http://www.bloomberg.com/apps/news?pid=20601087&sid=aYK_5_fV5D4M&refer=home (accessed April 23, 2010).
 - 73. John Cassidy, "Subprime Suspect," New Yorker, 31 March 2008.
- 74. Joseph Stiglitz, "Redefining the Role of the State: Joseph Stiglitz on Building A 'Post-Washington Consensus," interview by Brian Snowdon, *World Economics* 2, no. 3 (July–September 2001): 48.
- 75. See Morris, *The Trillion Dollar Meltdown*, 1-35 for a summary of this philosophical split. See also Amity Shlaes, *The Forgotten Man: A New History of the Great Depression* (New York: HarperCollins, 2007) for a conservative rebuttal of New Deal reforms.
- 76. Congressional Research Service, *Government Interventions in Financial Markets: Economic and Historic Analysis of Subprime Mortgage Options*, report prepared by N. Eric Weiss, available from http://assets.opencrs.com/rpts/RL34423_20080325.pdf (accessed April 18, 2010).
 - 77. Ibid., 7.
 - 78. Ibid., 10-11.
 - 79. Ibid., 8.
 - 80. Ibid., 7.
- 81. "Important Banking Legislation" (Federal Deposit Insurance Corporation), http://www.fdic.gov/regulations/laws/important/index.html (accessed May 18, 2010).
 - 82. Roger Lowenstein, When Genius Failed.
 - 83. Ibid., 94.
 - 84. Ibid., 207.
 - 85. Ibid.
- 86. U.S. Department of the Treasury, *Troubled Assets Relief Program: Monthly 105(a) Report to Congress*, 6 (January 11, 2010), available from http://www.financialstability.gov/docs/105CongressionalReports/December%20105(a)_final_1-11-10.pdf (accessed March 30, 2010); Lowenstein, *When Genius Failed*, 207.
 - 87. Lowenstein, When Genius Failed, 231.
- 88. Diya Gullapalli and Shefali Anand, "Bailout of Money Funds Seems To Staunch Outflow," *Wall Street Journal*, September 20, 2008.
 - 89. Andrew Ross Sorkin, Too Big To Fail.
 - 90. Ibid., 443.
 - 91. Lowenstein, When Genius Failed, 207.
- 92. Richard Sylla, "Alexander Hamilton: Central Banker and Financial Crisis Manager," (Museum of American Finance, Winter 2007), http://www.moaf.org/resources/magazine/data/87 (accessed May 11, 2010).