

THOMAS FERGUSON AND ROBERT JOHNSON

Too Big to Bail: The “Paulson Put,” Presidential Politics, and the Global Financial Meltdown

Part II: Fatal Reversal—Single Payer and Back

Abstract: This paper is the second part of our study of the world financial crisis. Part I, “From Shadow Banking System to Shadow Bailout,” appeared in the previous issue of this journal (Ferguson and Johnson 2009). The discussion centers on the “Paulson Put” that defined the “Shadow Bailout”—the effort by the Treasury and the Federal Reserve to put off high-profile financial bailouts until after the 2008 presidential election. The role Fannie Mae and Freddie Mac played in the collapse of the Paulson Put is traced at length, along with the failure of Bear Stearns and the eventual nationalization of the GSEs (government-sponsored enterprises). The Lehman bankruptcy receives detailed attention in the context of the U.S. presidential election. John Taylor’s recent arguments about the relative (un)importance of the Lehman episode are examined and rejected. The establishment of the Troubled Asset Relief Program (TARP) and its aftermath are also examined in some detail.

Keywords: bank regulation, financial crisis, investment banks, political economy

This paper continues our study of how a world financial crisis developed out of U.S. subprime mortgage markets. Part I: “From Shadow Banking System to Shadow

Thomas Ferguson is a professor of political science at the University of Massachusetts, Boston. Robert Johnson is a former managing director at Soros Funds Management and former chief economist on the U.S. Senate Banking Committee.

The authors thank Jane D’Arista, William Black, Jan Kregel, Gerald O’Driscoll, Peter Temin, and the editor of this journal for comments and assistance. They also thank Joseph Stiglitz and Walker Todd for extensive comments and discussions.

As in Part I, this paper prunes references to a minimum and collects notes at the end of paragraphs.

Bailout,” appeared in the previous issue of this journal (Ferguson and Johnson 2009). It traced the bipartisan deregulatory bacchanal that allowed Wall Street to build an entire line of new, risky, and almost completely unsupervised financial products out of raw materials that mortgage markets supplied. The analysis also chronicled how, amid growing world economic imbalances, a tidal wave of political money encouraged regulatory failures that allowed banks and investment houses to take on extreme amounts of leverage. The combination of high leverage and regulatory indulgence guaranteed that when a crisis hit, it would be severe.

In the summer of 2007, the paper argued, the gravity of the crisis finally dawned on policymakers. In response, the U.S. Federal Reserve and Treasury evolved the strategy of the “Paulson Put” (analogous to the more famous “Greenspan Put,” which promised Wall Street relief via lower interest rates at times of market stress). The idea behind the Paulson Put was simple: delay high-profile public financial bailouts and regulatory debates until after the election, when they were less likely to trigger a political firestorm and open up a Pandora’s box of reform demands.¹ The Put, we suggested, had two tracks. The first was widely publicized and centered on the the Federal Reserve: It consisted of aggressive cuts of both Fed funds and the discount rate, along with a widening of acceptable collateral requirements for borrowing from the Fed. By contrast, the second track was virtually unheralded. This “Shadow Bailout” aimed to prop up the financial system as unobtrusively as possible. Part I of this paper outlined the first two devices the scheme embraced: assistance on a gigantic scale to banks and thrifts from the obscure Federal Home Loan Bank system and concerted efforts to play down eventual taxpayer liabilities for Federal Deposit Insurance Corporation (FDIC) payouts. As the presidential campaign kicked into high gear in January 2008, the Put appeared to be virtually the only administration initiative that was working. Only rarely did banking issues make the front pages of American newspapers, and they figured hardly at all in the presidential campaign.

The Shadow Bailout, however, had two additional components. One was dicey indeed: large-scale purchases by the government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, of home mortgages and mortgage bonds to stem declines in those markets and alleviate pressures on the balance sheets of private firms. The second involved unconventional expansions of the Federal Reserve’s balance sheet. Along with the crucial fact that existing law blocked Fed assistance to investment banks except in emergencies, the first would fatally undermine the Put and eventually topple the entire world financial system in the midst of the presidential campaign.

We resume our discussion where we left off in Part I.

The Shadow Bailout: Freddie and Fannie

In January 2008, the Republican presidential administration and the Democratic-controlled Congress agreed that modest fiscal stimulus through tax rebates would be good public policy in an election year. Some Democrats, mostly in the House,

appear to have favored a larger stimulus. Most Democratic leaders, however, were at best lukewarm to this, whereas Republican congressional leaders were actively hostile. Proposals for mortgage relief provoked additional discord. Representative Barney Frank (D-MA), chair of the House Financial Services Committee, talked up a plan to let bankruptcy judges modify mortgage terms—normal American legal practice for everything but mortgages.

Other Democratic leaders in both houses of Congress shied away from forcing the issue in the face of intense opposition from banks and the mortgage industry. In the end, the Democrats settled on a plan for mortgage relief originally promoted by Credit Suisse, Bank of America, and other financial institutions. Although decidedly more aggressive than the administration's, the plan did not include the bankruptcy language. The Democrats also embraced a proposal supported by the Mortgage Bankers Association that expanded the size of mortgages the two GSEs—Fannie Mae and Freddie Mac—could purchase. Both choices limited mortgage relief because few banks saw any reason to make concessions while the jumbo provision aided primarily affluent neighborhoods.²

Because the GSEs were, along with the Federal Home Loan Banks, the instruments most perfectly adapted for use in a bailout intended to stay below the radar, they were swept up in the Shadow Bailout. Bending them to this purpose, however, was fraught with political peril and economic risk. Because of the clouds of sometimes-partisan misinformation that now swirl around the GSEs, some clarification is necessary about exactly what they were and how they figured in the debacle that unfolded.

The Federal National Mortgage Association (“Fannie Mae”) was founded during the high tide of the New Deal. For decades, it was the only game in town when it came to secondary mortgage markets; because of defaults and prepayments, making markets in secondary mortgages was just too risky for private lenders.³ In 1968, President Lyndon Johnson wanted to get as much debt as possible off the government's books. So Fannie Mae was privatized. In 1971, Congress chartered a similarly structured competitor: the Federal Home Loan Mortgage Corporation (“Freddie Mac”—both corporations eventually became known by their nicknames). Various administrations kept repeating the mantra that the GSEs were private corporations without full government backing.

Markets, however, mostly disbelieved this. Possibly, in the end, widespread confidence that the GSEs would be bailed out stemmed as much from their sheer size as from any putative moral obligation. In any case, once foreign central banks began buying large amounts of their bonds, perhaps on assurances of government guarantees offered by individuals who may not have had authority to make such commitments, Fannie and Freddie evolved into American originals: semipublic institutions too big and complicated to fail without international ramifications.⁴

The spectacular growth of mortgage lending in the 1980s fundamentally altered the GSEs' environment. They were allowed to buy only medium-size (“conforming”) mortgages from high-grade credit risks. Unlike the much smaller Government

National Mortgage Association (“Ginnie Mae”), whose obligations were carried on the books of the Treasury and were therefore backed by the “full faith and credit” of the U.S. government, Fannie Mae and Freddie Mac remained privately run and owned. But the presumption that they could count on a government bailout allowed them to raise money more cheaply than private firms. The latter thus had little prospect of competing in market segments the GSEs dominated (Muolo and Padilla 2008).

As mortgage companies proliferated and secondary mortgage markets boomed in the 1980s, increasing numbers of banks and other potential competitors began to lobby Congress and successive administrations to prune back or even eliminate Fannie Mae and Freddie Mac. Wells Fargo Bank, General Electric (GE) Finance, Household Finance, and other large firms all became players in one or another of these efforts. GE even tried to persuade a group of Wall Street firms to form a direct competitor to the GSEs (Muolo and Padilla 2008). Prominent business-supported think tanks on the political right took up the cause of abolishing the GSEs; the notion became a staple of media commentators who wanted to appear sophisticated and curry favor.

The GSEs defended themselves by spending more and more money on political contributions and lobbying. A conservative analysis limited to GSE contributions flowing only to sitting members of Congress in 2008 from 1989 onward reported total donations of just under \$5 million (Mayer 2008b).⁵ Another 2008 study that included lobbying totals as well as contributions suggested that “over the past decade” the two GSEs had spent almost \$200 million “to buy influence” (Lerer 2008). Through foundations they controlled, Fannie Mae and Freddie Mac also distributed millions of dollars more in grants, which, reporters have suggested, were sometimes awarded as favors to influential political figures (*Wall Street Journal* 2008b).⁶

The subtlety of the GSE’s maneuvering has been insufficiently appreciated by their myriad critics, in part because of the serpentine ways political money flows in the American political system. The New Deal legacy ensured that the two GSEs had a natural elective affinity with Democrats. Their political contributions reflect this: By one reckoning, between 1989 and 2008, they channeled 57 percent of their political funds to Democrats, with the three biggest recipients being Senate Banking Committee Chair Chris Dodd (D-CT) (\$165,400) and Senators Barack Obama (D-IL) (\$126,349) and John Kerry (D-MA) (\$111,000).⁷ But they also maintained strong ties with a succession of “moderate” Republicans and lobbyists linked to the highest levels of the GOP, including Kenneth Duberstein, Frederick V. Malek, and Robert Zoellick (Shaffer 2008).

In the meantime, Fannie Mae and Freddie Mac mirrored with special force the Democratic party’s broad “right turn” after 1980 (Ferguson and Rogers 1986). Many “New Democrats” gravitated naturally to the GSEs, which were, after all, exactly what New Democrats professed to admire: big, highly profitable businesses. Gradually, the GSEs began to function as a kind of political machine for this wing of the party. As Bill Clinton left office as president, for example, he appointed several

top staffers to the boards of the GSEs, including Rahm Emanuel and Harold Ickes.⁸ In the 1990s, long-time Democratic operative Jim Johnson ran Fannie Mae before moving on to the compensation committee of Goldman Sachs, where he helped set the remuneration of Hank Paulson, then head of the firm. (In 2008, Democratic presidential nominee Barack Obama picked Johnson to vet possible running mates; he was forced to step aside when it came out that he, along with many other political figures, including Senate Banking Committee Chair Dodd, had received a sweetheart loan from Countrywide Credit, long a staunch GSE ally).⁹

The GSE's political evolution affected their business strategies as the housing boom took off in the new millennium. By then they ranked among the largest enterprises in the United States. Like the rest of corporate America, remuneration of their top officers and advisers had spiraled upward, despite all the talk about their public service mission. An indulgent Congress also permitted the concerns to behave like most private companies and conceal or camouflage much of that compensation (Bebchuck and Fried 2005). Individual members of Congress who inquired about these arrangements were sometimes bluntly threatened.¹⁰

Developments in mortgage markets after 2001, however, made traditional GSE rhetoric about their unique role in promoting homeownership ring hollow. Nothing Fannie Mae or Freddie Mac had to offer could top privately offered NINJA (no income, no job, no assets) mortgages that—as long as they lasted—funneled home loans to people who would otherwise not qualify. In the meantime Franklin Raines, who left the job as budget director in the Clinton administration to take over as Johnson's successor at Fannie Mae, and other GSE executives continued steering the two giants in what was sometimes described as more business-like directions—or, in other words, on a trajectory embracing many of the shenanigans other financial houses engaged in to inflate reported profits, Fannie Mae had to serve the public interest and also make profits, not because of any “dual mandate,” but because the top management would then become fabulously rich and share the wealth with friendly members of Congress and allied community groups.¹¹ Soon after he took the helm of Fannie Mae in 1998, Raines explicitly set a target of doubling earnings per share (Office of Federal Housing Enterprise Oversight 2006).¹² William Black has shown that suborning the audit department's internal controls through high pressure and a munificent new bonus scheme appears to have been critical to his success.¹³

The boom in collateralized debt obligations (CDOs), described in Part I, gave the GSEs a new, crucial, and hugely remunerative role: They provided guarantees that helped secure AAA ratings for the top tranches of the CDOs rolling off the assembly lines of Wall Street (Muolo and Padilla 2008). Eventually, however, the GSE's emulation of Wall Street's business models caught up with them. To increase earnings, the firms took on more leverage. Along with the additional risk, they also tried smoothing earnings, just as many American businesses did during the stock market boom. They were caught and eventually forced to restate earnings (Dash 2006; Office of Federal Housing Enterprise Oversight 2006; Smith 2006).

Raines, an African American who was by then co-chair of the Business Roundtable, lashed out at his critics in a stormy congressional hearing. The hearing transcript reveals that he was vigorously assisted by several members of the Congressional Black Caucus who had supported Raines and the GSEs for years. They sought to deflect critics by drawing attention to the campaign business interests that had been mounting against the GSEs. One, Representative William Clay (D-MO), compared the attacks to a “witch hunt” and a “lynching.” Eventually, however, mounting evidence of accounting irregularities and disclosures of bonuses and pension benefits of almost Median proportions to Raines and other executives soured the mood. Representative Barney Frank labeled Raines’s compensation and pension benefits “inappropriate,” and members of Congress started demanding that the money be returned.¹⁴

Although there was talk of indictments, no one was charged, though the Securities and Exchange Commission (SEC) sued Raines and two others. The case was settled after Raines departed Fannie Mae in December 2004 amid a chorus of promises of sweeping reforms by politicians in both parties.

At the time, the GSEs’ prospects looked dire. But in fact their position was not as bleak as it seemed. With the housing boom cresting, homeownership as a political goal was irresistibly attractive, even to Republicans, who might normally be sympathetic to the idea of cutting the GSEs down to size (Becker et al. 2008). In addition, the administration, like the Fed, warmly approved of subprime or any other kind of lending “free markets” threw up.

In a speech in Arizona in 2004, for example, President George W. Bush proclaimed, “We want more people owning their own homes.” Yet the president lamented, “Not enough minorities own their own homes. And it seems like to me it makes sense to encourage all to own homes. And so we’ve done some interesting things. Again, I want to thank Congress. But we passed down payment assistance programs that will help low-income folks buy their own home . . . I proposed that mortgages that have FHA [Federal Housing Administration]-backed insurance pay no down payment.” Just in case that was not enough, however, the housing boom cheerleader-in-chief also averred that “I’ve called on private sector mortgage banks and banks to be more aggressive about lending money to first-time home buyers. And the response has been really good” (Norris 2008).

At just about that moment, the chief executive officer (CEO) of the most aggressive mortgage bank in the United States—who, not coincidentally, happened to be a prominent financial supporter of the president’s reelection bid—was cranking up a broad national campaign in favor of exactly what the president professed to want: “homeownership for all.” But Angelo Mozilo, Countrywide Credit’s visionary founder, was also a long-time supporter of Fannie Mae and Freddie Mac. He and his now gigantic concern were also anything but doctrinaire: Although he supported Bush for reelection, along with many other Republicans, Mozilo and his firm had also maintained close relations with many Democrats in Congress and the GSEs, from Fannie Mae’s Jim Johnson on down (Muolo and Padilla 2008).

The mortgage giant quickly reached across the aisle to Democrats for help with its homeownership campaign—and to shield Fannie Mae and Freddie Mac at their moment of maximum vulnerability.¹⁵

The campaign to save the GSEs enjoyed a singular advantage: It could tap a broad, preexisting network of allies for help. For many years, a network of community organizations including parts of ACORN (Association of Community Organizations for Reform Now) and small, local businesses had functioned as a loose, decentralized, and pluralistic support network for the GSEs. The original inspiration for many participants appears to have been the cause of low-income housing. But as the neoliberal Democratic tilt in the GSEs increased, the network's uses for broader campaigns that profited the GSEs and allied mortgage bankers became apparent.

The result was a political movement and ideological syncretism that has not received the attention it deserves. The mostly neoliberal business executives and their friends in Congress reached out to community activists who were hungry for funds and meaningful roles in a social system that increasingly exalted business as the *speculum mentis*, the highest activity of the human mind. As they became comfortable with casual references to “working-class housing,” mortgage bankers often joined the GSEs in picking up the tab for community “housing campaigns.”

Countrywide's drive on behalf of “homeownership for all” brought this impeccably politically correct movement to a new level of refinement. Fannie Mae, Freddie Mac, Countrywide, Washington Mutual, Ameriquest, New Century Financial, HSBC, and other mortgage firms joined leaders from nonprofits and the Hispanic Political Caucus to support an organization to promote homeownership called Hogar (Spanish for “home”). Mozilo himself actively preached the gospel, and his activities were widely appreciated. In 2004, the National Housing Conference declared him “Person of the Year” for his efforts to advance homeownership among minority and low-income families. As the Bush administration moved to cut the GSEs down to size in the wake of the scandals, Mozilo and like-minded private sector supporters closed ranks with the network to beat back attacks on the GSEs.¹⁶

Democratic congressional leaders were willing to consider certain reforms, but they wanted safeguards on subprime mortgages. They also drew the line at eliminating GSE support for programs promoting public and low-income housing that nourished the activist network. The administration, the financial industry, and the Federal Reserve all strongly opposed restrictions on subprime mortgages. Indeed, though the point vanished in the heat of the 2008 presidential campaign, at the time the administration wanted even more subprime lending. Eventually Bush and Greenspan concluded that the game of reforming the GSEs was not worth playing. With mortgage markets booming, they left House Republican leader Michael Oxley of Ohio in the lurch after he had promoted reforms at their urgings.¹⁷

Ironically, given what the private mortgage firms were up to, in the short run the failure to rein in the GSEs came with a silver lining. Although they, too, eventually started playing with lower-grade mortgages, they mostly maintained their traditional lending standards. Wider private-sector expansion into the GSE's terrain would surely

have brought more of the saturnalia that marked the privates' move into subprime.

Fannie Mae and Freddie Mac never truly recovered from the scandals. Conscious of their political weakness, they deliberately allied themselves with Countrywide, IndyMac, Washington Mutual, Lehman Brothers, and other private firms that would find expanded GSE lending and guarantees useful (Duhigg 2008; Goldfarb 2008).¹⁸ This led the GSEs to buy more and more mortgages for resale or their own accounts and eventually to move heavily into lower-grade (Alt-A) mortgages. It appears that the GSEs never really sorted out their accounting issues and, indeed, considered these a distraction from their main mission of sustaining themselves by supporting homeownership (and short-term profits). Critics continued to complain that the firms were undercapitalized, taking on too much debt, and were extravagantly rewarding top management while lining the pockets of politicians and lobbyists. They were right on all counts, even if the claims many also advanced about how private markets had rendered Fannie Mae and Freddie Mac unnecessary were about to be spectacularly shown up.

As private lenders withdrew from the market in 2007, Fannie Mae and Freddie Mac became virtually the sole sources for mortgage refinancing, as Figure 1 shows. In the face of mounting deterioration in subprime markets, the Bush administration, with the acquiescence of congressional Democrats, pushed to loosen standards. A new phase of the Shadow Bailout began: "Paulson wanted to use the troubled companies to unlock the frozen credit market by allowing Fannie and Freddie to buy more mortgage-backed securities from overburdened banks" (Becker et al. 2008). Accordingly, "the White House pitched in. James B. Lockhart, the chief regulator of Fannie Mae and Freddie Mac, adjusted the companies' lending standards so they could purchase as much as \$40 billion in new subprime loans" (Duhigg 2008).¹⁹

Annual reports and the firms' accounting statements indicate that Freddie Mac's financial position was substantially weaker than Fannie Mae's. Their quarterly reports show both buying mortgages and issuing guarantees in the face of the steep market fall, when from a business standpoint they should have pulled back. But Fannie Mae's response was much more extensive.

The End of the Shadow Bailout

For Paulson to engineer all this in the midst of a presidential election was quite a feat—as well as an eloquent warning about the state of financial journalism in America. But prodigious as it was, the Shadow Bailout was simply not enough. As markets for mortgages and housing collapsed late in the summer of 2007, demand for commercial paper backed by collateralized debt obligations (CDOs) or mortgages also dried up. Conduits and structured investment vehicles (SIVs) that relied on this "asset-backed commercial paper" market for refinancing now faced a new crisis (Tett and Davies 2007). They accordingly pressed banks that had sold them the toxic junk to take it back. As explained in Part I, this frequently meant that they started exercising their "liquidity puts" on those parent banks. Because

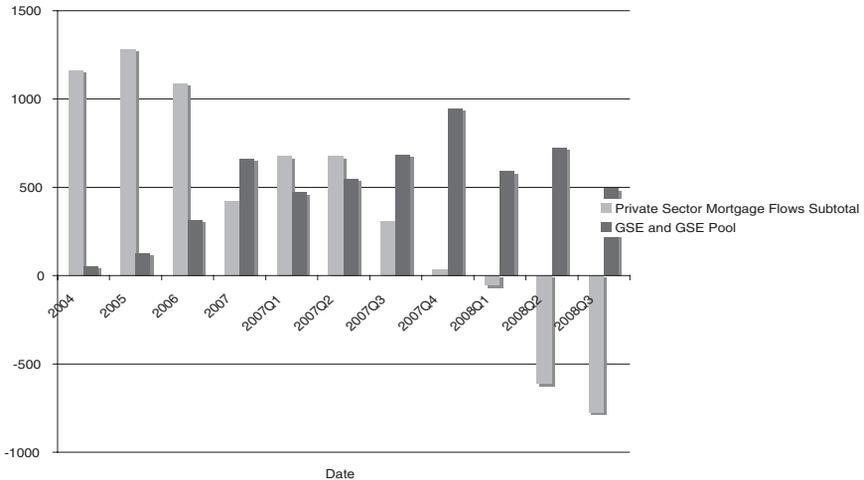


Figure 1. The Shadow Bailout 2007–8: Lending and Guarantees from Government-Sponsored Enterprises Advance as Private-Sector Mortgage Flows Fall

Source: U.S. Federal Reserve Flow of Funds Data.

this threatened to push some of America's largest banks over the edge, Paulson commenced another search for rescue funds that did not require going hat in hand to Congress (Gross 2007).

He located two. For a while the Treasury and many others on Wall Street excitedly talked up possibilities that Sovereign Wealth Funds (SWFs) might provide the necessary funds. These were investment arms of countries that had accumulated hoards of dollars, from either selling oil or pegging their currencies and exporting back into the United States. The notion of buying big blocs of shares in leading U.S. banks clearly attracted some of them. Critics, including some skeptical investment bankers, suggested that was because owning banks carried with it the prospect of substantial political power (Sorkin 2008e).

Former Treasury secretary Lawrence Summers, a prominent Democrat who had parachuted from the presidency of Harvard University into a large investment fund, advised overseas investors to work with American financiers in evaluating possible acquisitions (Summers 2007). Citigroup's Robert Rubin and other American financiers also made strong pitches to various SWFs (Schwartz and Dash 2008). Several eventually made substantial investments in Citigroup, Merrill Lynch, UBS, Morgan Stanley, and a few other firms (*New York Times* 2008e). But as the crisis deepened, and bank stocks sagged, fears of emulating Mitsubishi's legendary purchase of Rockefeller Center at the peak of the last great real estate bubble overcame every

other emotion. After investing some \$38 billion, the SWFs listened, occasionally talked, but effectively withdrew from the market (Brunnermeier 2009).²⁰

Paulson groped in desperation for another solution that did not put the government visibly on the hook. He proposed that the big banks organize a “super SIV” (or “master liquidity enhancement conduit” as the Treasury styled it) into which they would pour their toxic junk (Tett and Guha 2007). What was to happen then was murky, but the idea appears to have been to slowly liquidate the mess over time. The proposal, reminiscent of a scheme briefly floated by President Herbert Hoover in the early stages of the Great Depression, was widely mocked, even by financiers.²¹ In principle, however, it contained the germ of a good idea, one of the few with real prospects for helping to resolve the crisis. If implemented early, on a sufficiently vast scale, the plan would have kept money markets functioning normally, because traders could be confident that the institutions they were dealing with were in fact solvent after the toxic assets were gone. For financial houses, however, the scheme promised less exalted benefits: Warehousing toxic assets would stop fire sales that kept driving down asset prices (Swagel 2009).

The scheme had obvious drawbacks. It was in effect a “bad bank,” a superfund for banks. At what price were bad assets to be transferred to the bad bank? Too low a price would leave huge holes in banks’ balance sheets. Too high a price would overwhelm the superfund with certain losses. Most urgent of all, however, was the question of where the money would come from, because the whole point of the exercise was to avoid going to Congress in the midst of the election.

The only plausible private sources of new cash were the banks themselves. Not surprisingly, they found this prospect daunting. Institutions with a large exposure to conduits, such as Citigroup, JPMorgan Chase, Bank of America, or Wachovia, were reported to be intrigued (Y. Smith 2007a). Other banks, with less exposure, were more skeptical, whereas foreign financial institutions, like the governments that were in several instances bailing them out, wanted no part of what was obviously a U.S.-centered scheme (Y. Smith 2007a, 2007b). So the banks dithered, as did Fidelity, Pimco, and other investment companies.

Paulson, a former Goldman Sachs CEO, neither could nor would force them to do what they did not want to do. The proposal died when HSBC and a few other institutions made a show of putting their conduits and SIVs on their balance sheets (Eavis 2007). Citigroup thereupon quickly and visibly reorganized. Rubin’s choice to run the bank, Vikram Pandit, was announced on December 11 (Dash 2007). The next day the Fed quietly opened a new special facility expressly designed for distressed banks and stated its readiness to engage in swap agreements (for dollars) with foreign central banks. Citi then announced it was moving \$49 billion in SIV assets onto its balance sheet (Merk 2007).²²

Abandonment of Paulson’s superfund proposal left all the toxic waste in place, with more showing up every day. Because no one knew what anyone’s balance sheet was really worth, including his or her own, banks hesitated to lend to anyone, including other banks (“counterparty risk”). They also doubted their own ability to

refinance in a timely fashion, which encouraged them to hoard resources. As a result, the financial system started locking up. With consumers stressed out and actual costs of credit rising as banks, struggling to digest bad assets, ceased making anything but super-safe loans, Fed rate cuts did not filter down to borrowers. They simply fattened banks' otherwise thinning margins by lowering their cost of funds.

Desperate banks also socked customers with all sorts of new charges and fees (Kim 2008). Meanwhile the tide of foreclosures overwhelmed Fannie Mae and Freddie Mac's efforts while igniting fears about their own financial positions. Anxieties about possible insolvency of bond ("monoline") insurers added to all these pressures because many institutions could legally hold only insured bonds (Brunnermeier 2009). Such insurance, for example, was critical for the functioning of the market for "floating rate notes" that many institutions, including hospitals and other nonprofits, used to raise funds.²³ Repeated Fed rate cuts did little to relieve the situation. Downward pressures on the economy, accordingly, intensified, though at first the rate of growth declined surprisingly slowly.

In the midst of all this, a scandal over a call girl abruptly drove from the scene Governor Eliot Spitzer (D-NY), the only public official actively challenging the notion of simply handing out long-dated bills for the bailout to the public.²⁴ His dizzying fall triggered a media firestorm.

It was almost at once eclipsed by the even more sensational story that Bear Stearns had suddenly become Bare Stearns. Bear had been a major player in the market for mortgage-backed securities for many years. Two of its hedge funds had been among the first casualties of the break in mortgage markets the previous year.²⁵ In addition, Bear was a major holder of GSE debt and creditor to an Amsterdam hedge fund that was itself heavily invested in GSE paper. As spreads widened between Treasury notes and GSE paper—an inevitable consequence of the Shadow Bailout—holders of that paper suffered losses. For the Amsterdam hedge fund, the shock was too great. When it failed to meet margin calls, its collateral was seized and partially sold, further depressing GSE securities prices and putting yet more pressure on firms that held large blocs of these instruments, such as Bear (Brunnermeier 2009).

As an investment bank, Bear was not normally eligible to borrow from the Fed or receive cash infusions from Federal Home Loan Banks.²⁶ But like all investment houses and primary dealers in government securities, the firm had borrowed massively on its own account. It also owed millions of dollars to clients whose money it invested. Perhaps scariest of all, however, was the Bear's ubiquitous status as a "counterparty" in the dense web of credit default swaps that radiated out from the principal Wall Street houses (Morgenson 2008b).

The specter of chain bankruptcy, derivative counterparty default, and a consequent run on the dollar plunged the Fed and the Treasury into something very much like a religious crisis. As citadels of market fundamentalism, their leaders clearly found it hard to accept that sticking to the old-time religion and letting Bear go bust would likely bring down the whole system. After Bear's fall, many analysts, including former company executives, also suggested that the Fed and other financial houses,

notably Goldman Sachs (which, of course, Paulson had previously headed), may have been out to get the firm (Bamber and Spencer 2008). To be sure, resolutions of past financial crises, such as those of the New Deal era, were crucially affected by efforts of stronger rival financial houses to enhance their positions (Ferguson 1995). But given the fragmentary state of the documentary record, assessments of such claims in Bear's case have to be provisional and tentative.

Our reading of the evidence is thus deliberately cautious. Bear had famously declined to join the syndicate of investment houses that the New York Fed organized in 1998 to save Long Term Capital Management (LTCM). That mockery of the Fed's leadership and refusal to join peers certainly left a legacy of persistent bad feeling (Bamber and Spencer 2008). But there is no particular reason the lingering bitterness from that episode should have uniquely affected Paulson, even though he had been involved in the LTCM negotiations. In truth, as even Bear executives admit, the house was widely detested (Bamber and Spencer 2008).

The apparent leak to the cable business news channel CNBC of an email to clients by Goldman's derivatives department indicating that the firm would no longer accept Bear as a counterparty was disastrous to Bear's effort to portray itself as still open for business (Bamber and Spencer 2008).²⁷ It is also true that throwing wide open the Fed's discount window to primary dealers in government securities before, rather than just after, JPMorgan Chase purchased Bear might well have kept Bear in business, at least for a while. Instead, the announcement by the Fed on March 11, 2008, of another special facility, the \$200 billion Term Securities Lending Facilities, was widely taken by markets as a signal that the Fed suspected one or more large investment banks were in trouble (Brunnermeier 2009).

In the end, however, judged by the standards of past bailouts, the disposition of Bear itself was unremarkable. Whether run by the FDIC or the Fed, bailouts and forced mergers of banks normally resulted in total losses to stockholders. By contrast, the fates of bondholders and other creditors were negotiable, but, typically, most were rescued. The wrinkle in Bear's case was its stockholders' success in bidding up the share price they were originally offered from \$2 to \$10 a share.

What startled the world were the parts of the bailout that touched JPMorgan Chase and the wider financial world. Paulson and then–New York Fed president Timothy Geithner, with broad support from Greenspan's successor at the Fed, Ben Bernanke, brought in the single-payer insurance scheme discussed at the beginning of Part I. Stretching both law and precedent, they decided to extend the Fed's safety net to cover all primary dealers in government securities, even investment banks. Armed with an unheralded letter from Paulson agreeing that losses by the New York Fed could be deducted from monies the bank annually remits to the Treasury (thus putting taxpayers directly on the hook for losses), the New York Fed took over \$30 billion of the worst junk in Bear's portfolio for its own account.²⁸ Then the Fed hired BlackRock, a large investment fund, to run these assets. This allowed JPMorgan Chase to buy out Bear and save itself billions of dollars in losses it would have been hit with if Bear had simply declared bankruptcy.

Financial markets jubilated both the rescue and new safety net for investment banks. Stocks rose smartly, led by financials. For the Fed and Treasury, however, the downside was profound. Though the Paulson Put was still alive, the Shadow Bailout was over. Henceforth, Paulson, Bernanke, and Geithner would have to work in a glare of publicity, even as they fought to withhold details from the public, whose money was financing the whole thing.

The heightened scrutiny emerged very quickly as a towering problem. Squirreled away in custodial accounts at the Federal Reserve were over \$900 billion of GSE paper belonging to other central banks. SWFs—funds controlled at least nominally by foreign governments—probably held almost as much for their own accounts outside the Fed.²⁹ With criticism running high of the Fed’s policy of holding down interest rates, foreign holders of the GSE securities needed reassurance about the safety of their holdings—or else both the market for GSE paper and the dollar itself could crumble.

Few foreign holders appreciated the subtleties of the Shadow Bailout, if they knew about it at all. But what was happening on the GSE’s balance sheets was easily tracked. In the unlikely event foreign creditors missed the signs of deterioration, the din raised in the U.S. press by domestic critics of Fannie Mae and Freddie Mac, such as William Poole (by then retired from the St. Louis Fed) could hardly escape their attention (Kopecki 2008). *Barron’s* began asking if the two firms were “toast” (Laing 2008). A run began on both GSE stocks and, especially, their debt. Spreads between the agency debt and Treasury notes ballooned, especially after the FDIC took over giant IndyMac, a major mortgage institution in July 2008 (Brunnermeier 2009; see also Laing 2008).

Paulson and Bernanke simply could not permit a GSE collapse. By July 2008, private mortgage firms had all but melted away. Fannie Mae and Freddie Mac were virtually the only players left in the U.S. secondary mortgage market. If they went south, no one would step up to take their place. Primary mortgage markets would soon lock up, bringing housing sales across the United States to a screeching halt. Housing prices, already falling like a runaway elevator, would go into a steeper tailspin, pulling national income—and the dollar—down with it.

Not surprisingly, Paulson and Bernanke lunged once again for single-payer insurance, though it was sure to stir up a hornet’s nest. Claiming that “if you’ve got a bazooka and people know you’ve got it, you may not have to take it out,” Paulson asked Congress for standby authority to inject federal money into the GSEs as capital and, if necessary, to take them over (Lebaton 2008; Sorkin 2008c). In effect, he was offering federal guarantees to GSE debt holders. In return, he agreed to support modest bank-inspired proposals for mortgage relief that congressional Democratic leaders had been elaborating since the late winter (Reuters 2008; Temple-West 2008). As a precaution, the Federal Reserve also granted Fannie Mae and Freddie Mac the right to borrow from the New York Fed (*Los Angeles Times* 2008).

Senator Dodd has stated subsequently that when he agreed to support Paulson’s quest for new powers, he believed Paulson’s assurances that they would never be

used (Lebaton and Andrews 2008b). He and the Democrats mostly went along, though coming on the heels of the Bear bailout, the prospect of nationalization flabbergasted many in both parties.

To many Republicans, the combination of big bailouts for two more giant financial institutions and even modest government help for ordinary Americans with bad mortgages was too much. Many went ballistic, including some Republican House leaders. The Bush administration had no choice but to stand with Paulson on the GSEs, but it could not stomach some of the housing provisions. The president threatened a veto (Faler 2008). Anxious foreign holders thereupon accelerated their selling. GSE paper in Fed custodial accounts started dwindling fast (Setser 2008b). As spreads widened between GSE debt and Treasury notes, the administration had to back down.

The veto threat was withdrawn when it became clear that the bill would not pass without additional Democratic votes to steamroll the raging opposition of congressional Republicans. For a few weeks after passage of the rescue bill, Paulson put on a brave face. He acted as though the crisis had been surmounted. Few agreed. Critics on the right called for breaking up the GSEs. Others railed against the notion that the government would actually use the authority it now possessed to take over the firms. In the meantime, a team of analysts from Morgan Stanley that Paulson had engaged poured over the GSEs' books (Goldfarb et al. 2008). Foreigners steadily sold GSE securities (Setser 2008a), while stocks of Fannie Mae and Freddie Mac fell. Chinese spokespeople issued barely veiled warnings that something had to be done to guarantee the GSEs (Hamlin 2008).

As the *New York Times* recognized, "the bailout became inevitable when central banks in Asia and Russia began to curtail their purchases of the companies' debt, pushing up mortgage rates and deepening the economic downturn" (*New York Times* 2008a). Even as delegates to the Republican National Convention dispersed after their celebration of free markets and the minimal state, Paulson exercised his authority under the new legislation. Surprising both managements, he took both Fannie Mae and Freddie Mac into conservatorship. At a stroke, the federal government was now in charge of financial institutions with gross holdings of securities equivalent to 40 percent of the gross domestic product (GDP) (Wolf 2008). To guarantee GSE solvency, the Treasury also agreed to purchase up to \$100 billion worth of additional preferred stock in each. It also committed to purchasing mortgage-backed securities from them—effectively circumventing legal restrictions on their total lending that the bill also contained (Lebaton and Andrews 2008a)—and opened short-term credit lines for both with the Federal Reserve Bank of New York.³⁰

Fatal Reversal

Reaction was intense. "Comrade Paulson" jokes punctuated late night television and radio and even some newspaper columns. Yet almost immediately alarm bells started ringing about an even bigger crisis. The venerable investment banking firm

of Lehman Brothers was on the edge of bankruptcy. Several firms—U.S. and British press accounts dwelt on Barclays, HSBC, and Bank of America, though Deutsche Bank and BNP Paribas were also mentioned—were interested in buying Lehman. But as with JPMorgan Chase earlier, would-be buyers claimed that any deal would require subsidies or guarantees of some kind from the Fed.³¹

Paulson, Bernanke, and Geithner began another round of meetings stretching into late night with heads of leading private banks and investment houses. In the end, they decided to do what free-market conservatives had been demanding since the beginning of the crisis: Let a giant financial institution fail.

They thereby turned a desperate situation into a world disaster of historic proportions.

Because, as Napoleon famously remarked, victory has many fathers, but defeat is an orphan, pinning down how the trio arrived at their position is even more difficult than in the case of Bear Stearns. At the time, the decision to let the firm go down was presented as a group product in which all three concurred. Both the Fed and Treasury also claimed that they had a much better feel for the markets than they did in March and expected that the fallout could be contained. As Bernanke related to Congress the following week, “We judged that investors and counterparties had had time to take precautionary measures” (U.S. Congress 2008).³²

Later, as the debris scattered around the world, however, stories began to appear that the Fed—presumably Bernanke—had wanted since July (about the time the GSE legislation passed) to approach Congress for legislation sanctioning a broader bailout (Guha and Politi 2008). The implication was that Paulson’s role was critical—an emphasis that Paulson did not dispel in several interviews he gave.

The Treasury secretary’s own rationales for refusing aid to Lehman have been confusing and contradictory. On some occasions he has claimed that he “never once considered it appropriate to put taxpayer money on the line in resolving Lehman Brothers” (Nocera and Andrews 2008). The evidence overwhelmingly contradicts this claim, because some of the private bankers involved in the negotiations talked to the press (Nocera and Andrews 2008). Indeed, on at least one occasion Paulson himself indicated that he was open to government assistance and, according to the reporter, other officials involved corroborated those claims (Guha 2008a).

On the key question of what made Lehman different from Bear Stearns, Paulson later asserted that existing law made it impossible for the government to help the former. Bear, he claimed, had good collateral, but Lehman did not (Nocera and Andrews 2008). Bernanke echoed this line on several occasions.³³ But the story is flimsy indeed. The \$30 billion worth of CDOs and similar instruments that JPMorgan Chase persuaded the Fed to absorb were obviously not AAA paper, whatever their ratings. For a long time, the New York Fed fiercely resisted calls for transparency, but it is now clear that Bear’s collateral depreciated substantially after the deal went through (Y. Smith 2009a).³⁴

The most compelling reasons for regarding the lack of legal justification as a fairy tale, however, are three simple facts. First, just days after Lehman blew up,

the Treasury and the Fed collaborated in the de facto nationalization of AIG, the giant insurance corporation. The law had not changed, and in this case, the collateral was clearly worthless, as AIG's repeated trips back to the well since attest more eloquently than any accounting statement.³⁵ Even more devastating was the belated revelation that, in fact, the Fed did make two gigantic loans to Lehman—for \$87 billion and then, after the first was repaid, for \$51 billion—*after* it went bankrupt, to help wind down its affairs.³⁶ Even if these were so-called conduit loans formally through another bank (that passed the money through to Lehman), the collateral for them cannot have been any better following bankruptcy than it was before. It is also embarrassingly plain that, in other contexts, Paulson trumpeted the need for and his personal willingness to push the limits of the law in emergencies (Cho 2008b). Indeed, as discussed below, it appears that only a few days later, as world markets melted down, his preference, in sharp contrast to Bernanke's, was to push on and avoid going to Congress (Hilsenrath et al. 2008).

The most convincing explanation for the decision begins by recognizing that sometimes the order of events matters. And the commanding fact about the Lehman decision is that it happened only days after the GSE bailouts, as the firestorm their nationalizations triggered still blazed. Though the GSE controversy pales by comparison with the tumult engendered a few weeks later by Paulson and Bernanke's bailout proposal to Congress, statistical indicators of media attention confirm our qualitative judgment about the fierceness of the reaction to the earlier decision (Figure 2).

Although expressions of dismay erupted across the political spectrum, the most vehement responses came from Republicans, among whom faith in markets was virtually a litmus test for party membership but whose frustration had been building since the Bear Stearns bailout. The weathervane most sensitively registering all these tensions was hard to miss: It was Senator John McCain (R-AZ), who had clinched the Republican presidential nomination well before Bear Stearns went down. In March, only days before Paulson and Co. bailed out Bear, McCain had proclaimed: "It is not the government's role to bail out investors who should understand that markets are about both return and risk, or lending institutions who didn't do their job" (McCain 2008a).

For McCain, the sudden embrace of a single payer by Paulson, Bernanke, and Geithner was acutely embarrassing. Nevertheless, he gamely climbed aboard (Myers 2008); his rationale throughout the campaign was that allowing Bear to go bankrupt would have had catastrophic consequences (*New York Times* 2008d). But he obviously found the episode painful and intensely felt the pressure from the party base. Less than two weeks later he went back to preaching the old-time religion. Rejecting government help for Americans with troubled mortgages, McCain declared that "it is not the duty of government to bail out and reward those who act irresponsibly, whether they are big banks or small borrowers" (Rohter and Andrews 2008).

Paulson's appeal to Congress for legislation allowing him to take over the

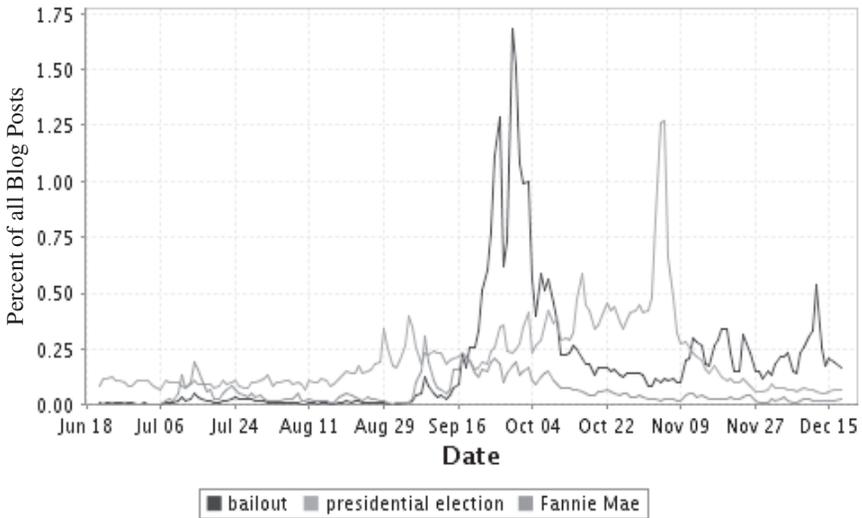


Figure 2. Although Not as Large as That over TARP, Excitement over GSE Nationalization Ran High

Source: BlogPulse, December 18, 2008, www.blogpulse.com. Generated by BlogPulse Copyright 2008 Nielsen BuzzMetrics.

GSEs gave McCain a new headache at a moment when he trailed in the polls and his campaign was sputtering. In the runup to the convention, he was desperate to court the right wing of his party, which took the hardest line against bailouts. But an open breach with the Bush administration was a practical impossibility. The administration still controlled the party machinery. Its assistance remained vital for fundraising (which was increasingly channeled through so-called joint committees with the national party that the administration also controlled, because McCain had earlier accepted public financing out of desperation).

McCain thus fell in line behind Paulson's request for standby authority to seize the GSEs but took pains to register his distaste for bailouts. He justified his position by saying that it was too risky to leave the government without authority in case the worst happened. He did express some hope that perhaps the problem would go away. Though in other contexts he claimed early familiarity with the GSEs' problems, he doubted that it would be necessary to take them over (Martelle 2008).

Haunted by continuing dissension, McCain returned to the question less than two weeks later. In late July, he released a new position statement. It began by reassuring doubters yet again that he was really on their side. "Americans should be outraged at the latest sweetheart deal in Washington. Congress will put U.S. taxpayers on the hook for potentially hundreds of billions of dollars to bail out Fannie Mae and Freddie Mac." Then, after reiterating reluctant support for the legislation, he added several sentences whose explosive import was widely missed.

If a dime of taxpayer money ends up being directly invested, the management and the board should immediately be replaced, multimillion-dollar salaries should be cut, and bonuses and other compensation should be eliminated. They should cease all lobbying activities and drop all payments to outside lobbyists. And taxpayers should be first in line for any repayments. (McCain 2008b)

The place of preferred stockholders in a GSE takeover was just then emerging as an issue. It was obvious that common stockholders would suffer if Paulson took the GSEs over. The government's new equity rights would leave little for them, even if they were not formally wiped out. Saving debt holders, of course, was the point of the whole exercise; they were supposed to emerge whole. Preferred stock, however, lay in a gray zone between debt and common stock. Its owners had rights to income but not to vote. Much of the preferred stock was in the hands of financial institutions, which had strong reasons for expecting to be treated like debt holders: Paulson was actively encouraging banks to buy GSE preferred stock as a way to shore up both the GSEs and themselves because regulators allowed GSE preferred shares to be counted as part of banks' capital (Dizard 2008).

In the end Paulson essentially wiped out holders of both common and preferred stock.³⁷ The decision left many banks' capital adequacy ratios precariously exposed and engendered a widespread feeling of betrayal (Dizard 2008). But the step made perfect political sense: By heavily diluting the preference shares, it met the test laid out by his party's nominee.

Nevertheless, not only McCain but much of the party was clearly taken aback by the decision to emulate Mussolini (their usual comparison was Lenin). Although Senator Barack Obama and most Democrats said little beyond signaling general support, McCain and his controversial new running mate, Alaska governor Sarah Palin, felt obliged once again to take a strong stand. They published a high-profile attack on bailouts in what was virtually a Republican house organ, the *Wall Street Journal's* Op-Ed page. Although they again repeated McCain's reluctant support for the takeover, they ratcheted up the vehemence of their language. They also flatly promised that, if elected, they would break up and privatize Fannie Mae and Freddie Mac (McCain and Palin 2008).

Between the lines, it was obvious that McCain was close to being fed up. This is not an inference. Only days later, as the financial world melted down in the wake of the Lehman decision, McCain stood up and denounced Paulson's nationalization of AIG (Chipman and Nichols 2008). He also drafted a statement attacking the Bush administration's bailout policies. That was not released until many frantic hours later, after it had been watered down beyond recognition, and McCain had done another 180-degree turn. Returning to the administration's fold, he now grudgingly supported the nationalization (Chipman and Nichols 2008; Stein 2008). But the point is clear: As Lehman slid to the brink, Paulson and Bernanke, who both enjoyed solid links to the Bush administration, could hardly expect McCain and an indefinitely large bloc of the rest of their party (including many congressional Republican leaders, who also denounced the AIG rescue [Barrett et al. 2008]), as

well as many Democrats, to take yet another giant bailout lying down.

Bernanke, moreover, had just returned from an almost Dickensian encounter of his own with the ghost of bailouts past. At the annual conclave in Jackson Hole, Wyoming, sponsored by the Federal Reserve Bank of Kansas City, his conduct had been roundly criticized to his face. In front of other central bankers, economists, policymakers, and financiers, a raft of critics assailed him for betraying free-market principles and capitulating to demands from the financial sector for a bailout. One paper in particular (Buiter 2008) accused the Fed of falling victim to “cognitive” interest group capture and specifically referenced historical studies of similar Fed behavior in the Great Depression (Epstein and Ferguson 1984). Some press accounts claim that Bernanke was exhausted and hint that he was demoralized, but there is no question that he appreciated the gravity of the charges, which received wide publicity in the *Financial Times* and other major media.³⁸

The Put Is Dead; Long Live the Put

If the extinction of preferred shareholders in the GSE bailout was an unheeded warning shot that the days of the Paulson Put were numbered, the decision to let Lehman go bankrupt marked the Put’s definitive expiration. Thereafter so much happened so fast that it is easy to lose sight of the disastrous new course that Paulson was now charting, with Bernanke and Geithner assisting.

The trio’s first problem was simply to try to keep up with the dizzying scale and pace of devastation. Contrary to claims recently advanced by revisionists who argue that the real break in world markets came more than a week later when Paulson and Bernanke approached Congress with their broader bailout proposal (Taylor 2009), the evidence that the Lehman bankruptcy sundered world markets is overwhelming.

Every direct indicator of financial risk we have examined explodes, in some cases a day or two in advance of the actual declaration of bankruptcy: Prices of credit default swaps on the four largest American banks, controlling some 40 percent of all deposits, for example, all rose like rockets before falling back when Paulson, Bernanke, and Geithner reversed course two days later and once again embraced single payer by bailing out AIG.³⁹ The same holds for credit default swaps of Goldman Sachs and Morgan Stanley, the two most important remaining investment banks. (See Figure 3, which shows credit default swap prices for Goldman Sachs and JPMorgan Chase.) Another excellent general indicator of stress, the “option adjusted” spread on broad investment grade bank debt—what banks had to pay to raise new capital—also shows a sharp rise as Lehman gave up the ghost (Figure 4).

Default on Lehman’s bonds and subsequent fire sales of assets staggered many firms, including a substantial number of European houses (Larsen 2008). Hedge funds that used Lehman as their prime broker lost access to their funds (Mackintosh and Hughes 2008), while losses on Lehman’s commercial paper caused some money market funds to “break the buck” (Jones 2009). In a matter of hours—not, *pace*

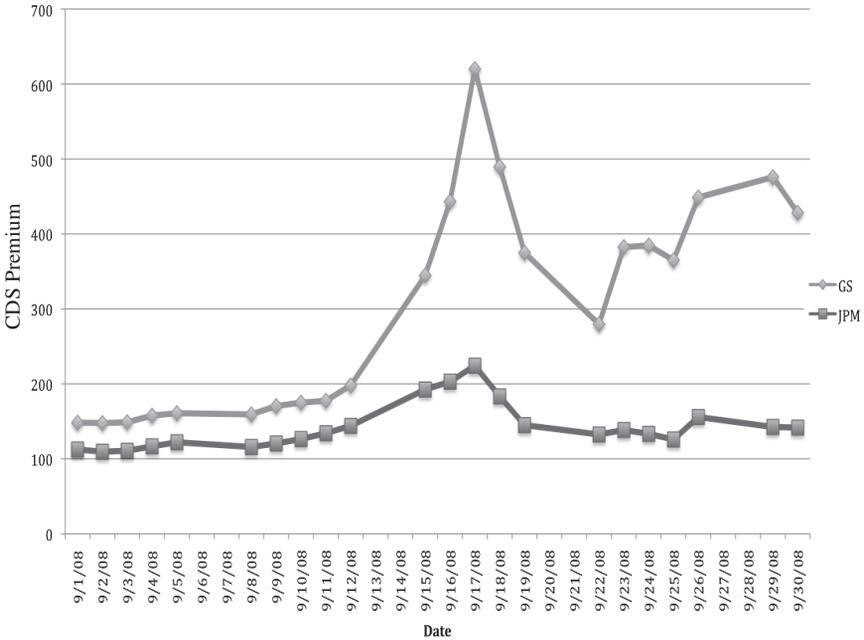


Figure 3. Prices of Credit Default Swaps, Goldman Sachs and JPMorgan Chase: It Was Lehman

Source: Bloomberg (Five-Year Credit Default Swaps).

Taylor, days—markets for both regular and asset-backed commercial paper dried up, and an awesome run began out of money market funds altogether, as panicky depositors recoiled (Jones 2009).

Suddenly unable to refinance by issuing commercial paper, banks became fearful both for themselves and their counterparties (Finch and Cutler 2008). They frantically hoarded reserves at central banks instead of lending them out. In the five days after Lehman collapsed, bank reserves held at the Fed more than doubled (Jones 2009), while bank borrowing from the Fed surged.⁴⁰ Perhaps the most striking indicator of the crisis, however, was the behavior of the London Inter-Bank Offered Rate (LIBOR), the rates banks in London charge each other. Interest rates charged on the shortest maturities, which should be the safest, doubled, while the LIBOR yield curve inverted, as bank willingness to lend at longer maturities appears to have withered (Figure 5).⁴¹

Most of the world, however, only dimly appreciated the meaning of the reports in the financial press that interbank lending was grinding to a halt. Instead, for most observers, the most arresting effects of the bankruptcy came in stock markets, as market operators realized that even the greatest Wall Street houses and banks now could not be worth much more than Lehman.

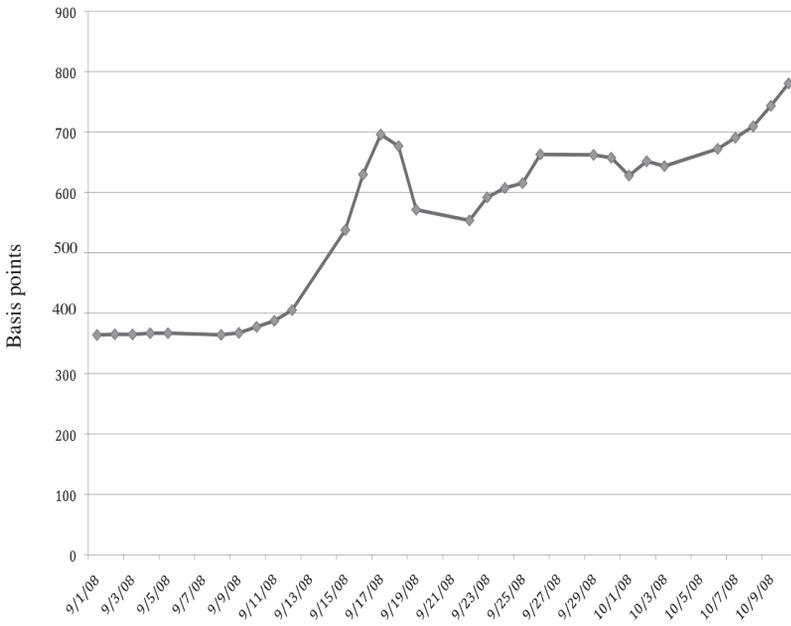


Figure 4. **Spreads on Bank Debt Blow Out as Lehman Collapses**

Source: Citigroup OAS Broad Investment Grade Financial Bonds Spread Against Treasuries.

They immediately started shorting the stocks, as other investors fled. Within hours, one of the most famous and characteristic features of American financial life—the powerful, indeed, often dominant role of a handful of famous investment banks—came to a sudden, terrifying end. Seeing the handwriting on the wall, Merrill Lynch consented to a shotgun wedding with Bank of America just hours before Lehman became history. Beset by wave after wave of short sellers, Goldman Sachs briefly flirted with buying Wachovia (whose CEO was a former Goldman executive) before emulating Morgan Stanley and transforming itself into a bank holding company, able to tap the Fed forever (MacIntosh et al. 2009; Sorkin and Bajaj 2008).

In the meantime, a wave of bankruptcies and defensive mergers rippled through the commercial banking system. Fears of already nervous investors turned to sheer terror, however, when the FDIC's terms became public for JPMorgan Chase's takeover of Washington Mutual (WaMu), the largest savings and loan in the United States. The FDIC insisted that WaMu actually go bankrupt first, then approved sale of the deposits to Morgan for \$2 billion (Sender et al. 2008). This reduced strain on the FDIC's straitened insurance fund but wiped out both stockholders and unsecured creditors of WaMu. On the heels of Lehman's bankruptcy and the GSE restructur-

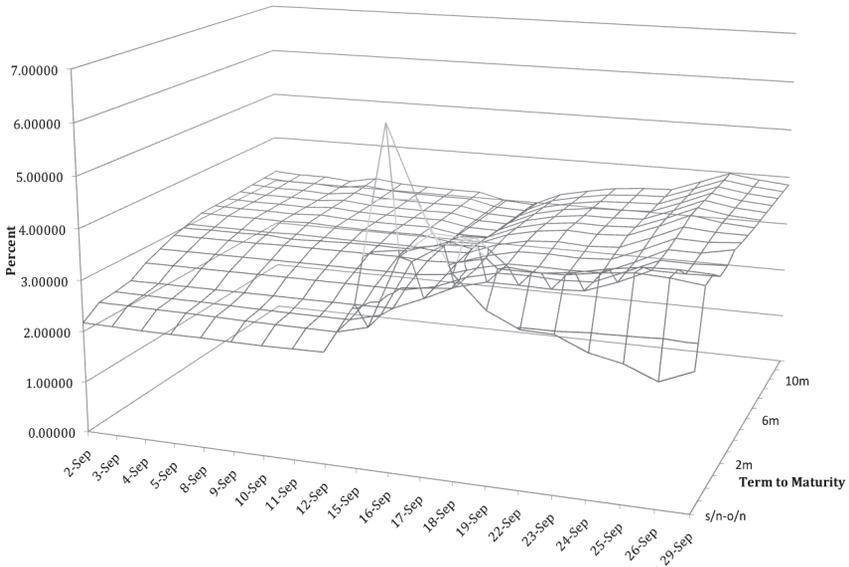


Figure 5. **Lehman's Collapse Inverts the London Interbank Offered Rate Yield Curve**

Source: British Bankers Association.

ings, the message seemed clear: Neither bank debt nor preferred stock in financial institutions was safe; deposits alone were a stable source of bank funds (Lex 2008). Investors responded by stampeding out of bank stocks and dumping debt.

The first step to a new, born-again Paulson Put took place as AIG, the giant insurer, came under attack. AIG was nominally in the insurance business, but the day after Lehman went down the world awoke to discover that the firm had been running a massive, now disastrously money-losing, division that wrote credit default swaps (insurance contracts against defaults on bonds). Though details of the rescue decision remain murky, certain key facts have slipped out. First, AIG had written credit default swaps for a broad cross section of the leading financial houses of New York and Europe. It had also overextended its securities lending with many of the same firms (de la Merced 2009; Mackenzie 2009). Bankruptcy of AIG would leave these firms exposed just as financial companies were going down like nine pins. AIG's biggest domestic counterparty (customer) just happened to be giant Goldman Sachs, the firm Paulson had formerly headed (see Walsh 2009). As officials deliberated on how to respond, only one private bank chief executive was in the room: Goldman CEO Lloyd Blankfein.⁴²

Reeling from the Lehman shock, Paulson and Co. made a dramatic about-face back to single payer: Law or no law, they effectively nationalized AIG by taking warrants for the Treasury worth 79.9 percent of AIG's stock in exchange for an \$85

billion loan from the Fed (Karnitschnig et al. 2008).⁴³ In fact, however, the \$85 billion was just a down payment; AIG soon claimed many billions of dollars more.

The nationalization aroused outrage, not only from McCain but also from many others who could not understand why AIG was being granted what Lehman had been denied. In succeeding weeks, their outrage turned to perplexity, as Treasury and the Fed kept pouring money into the firm with no real explanation. Eventually, the deal's true nature became dimly visible. It only appeared to be about AIG. In fact, Treasury and the Fed were subsidizing the giants—including Goldman, Citigroup, Bank of America, Morgan Stanley, and other large European firms—that were its counterparties on credit default swaps and securities lending. At a time when no one else in the market was getting a hundred cents on the dollar, these fortunate concerns were having their credit default swaps paid off at par by the people of the United States (Morgenson 2009). It was big government corporatism in almost laboratory pure form, public-private partnership in the tradition of Mussolini's Istituto per la Ricostruzione Industriale (Institute for Industrial Reconstruction).⁴⁴

But with world markets raging out of control, Wall Street and the banks now had more problems than just credit default swaps. Short sellers were still having a field day with Goldman and Morgan Stanley, while Citigroup was turning into the Incredible Hulk. There was not a moment to be lost. In a stunning display of money politics in action, Morgan Stanley's John Mack telephoned Senator Charles Schumer (D-NY) (Nocera 2008a). Schumer in turn pressed the Treasury, the Fed, and the SEC to temporarily ban short sales (*New York Times* 2008c). Barely months before, regulators had stonewalled desperate pleas for regulatory relief from consumers as oil prices spiraled upward (Cho 2008a). This time the SEC unceremoniously tossed free-market ideology overboard and honored Schumer's request (*New York Times* 2008c).⁴⁵

The Fed and the Treasury had been discussing the limits of their authority for weeks. For the Treasury, the priority was "to avoid Congress." It "maintained that the Fed had broad legal authority and could possibly take on distressed assets from banks directly, without congressional approval" (Hilsenrath et al. 2008). But the hammer blows of Lehman, AIG, and the worldwide market downturn appear to have crystallized the doubts of Bernanke and senior Fed staff. On September 17, after consulting at least some other Fed governors, Bernanke informed Paulson that the time for bazookas was over. It was time to go to Congress and ask for the economic equivalent of nuclear weapons—a gigantic on-budget bailout fund. Initially noncommittal, Paulson watched world markets plummet. The next morning he agreed (Hilsenrath et al. 2008).

There is no doubt that the Fed understood how this should be done, at least in broad outline. Economic history is littered with examples of bursting asset bubbles. Best practices for coping are not secret. The government, operating preferably through a specially dedicated, on-budget entity, such as the New Deal's Reconstruction Finance Corporation rather than the central bank (which can be tempted to monetize its way out of problems) or the Treasury (which has other things to

do), surveys the condition of the banking system (Todd 1992). It closes banks that only St. Jude, the patron of desperate cases, could love—a step that although wildly unpopular with financiers, saves vast sums for taxpayers. Then the government sweeps all the toxic waste into a “bad bank” and gets it out of circulation. Finally, the state recapitalizes the banking system to a level higher than the minimum capital adequacy requirement after marking down bank assets to realistic levels, not banker fictions. Counterparty risk vanishes, as the new equity gives the banks the cushion they require to take risks and make loans again.⁴⁶

Done properly, as in Sweden or Norway in the early 1990s or the United States in the New Deal, such schemes do not necessarily saddle the public with large losses. They can even show a modest profit in the long run. At least some bad assets can eventually be sold at reasonable prices. The critical step, however, is for the government to take equity (common or preferred stock) or warrants (rights to stock at a set, low price) in banks it recapitalizes. After the banks revive, the shares can be sold, recouping most or all the expense. There is a catch and it is a big one: The new public shares dilute holdings of existing shareholders because the public has first claim on future earnings and the government shares normally also pay a dividend.

The Swedish bailout of the early 1990s is perhaps the most widely acclaimed contemporary example of a rescue along these lines. In the late spring of 2008, after Bear Stearns failed, Federal Reserve vice chair Donald Kohn was reported to be closely studying that experience (Evans-Pritchard 2008). But there were no hints of Kohn’s advance work in the plan Paulson and Bernanke presented to Congress: Their insultingly brief two-and-a-half-page sketch made no mention of inspection or recapitalization. It proposed only a publicly financed version of the superfund that Paulson had tried to interest the banks in without success in the fall of 2007. The maximum size of this superfund was set at \$700 billion (a so-called balance sheet limit, implying that over time the Treasury could replenish it by selling assets it acquired and recycling the proceeds into new purchases). What and how to buy were left entirely to Paulson: There was to be no review or accountability; language borrowed from the Gold Reserve Act of 1934 banned even court reviews (Ferguson and Johnson 2008a).

The concept was breathtakingly flimsy. Paulson subsequently admitted that even he no longer believed in it by the time the bill passed (Paulson 2008a). Buying \$700 billion worth of assets might have made a difference in the earliest days of the Shadow Bailout. But the delay arising from the Shadow Bailout was fatal: There was way too much junk out there. After the Lehman bankruptcy, all \$700 billion could buy was relief for a few lucky financial houses, not a serious bailout for the U.S. banking system.

Realizing this point, critics asked how Paulson and Bernanke planned to determine the prices at which the Treasury bought the assets. Despite heady talk of “reverse auctions” in which the Treasury would select the house that offered the lowest price (which would force would-be sellers to offer only assets they urgently needed to get off their books), under questioning Bernanke proved uncharacter-

istically elusive. Setting aside his prepared text, he indicated a preference for the Treasury to buy at prices “close to the hold-to-maturity price,” that is, well above anything shattered markets were likely to offer (Lanman and Torres 2008b). A leaked Treasury conference call revealed that the Treasury was clearly hoping to pay above market prices (Y. Smith 2008). And, as the Treasury eventually acknowledged, it opposed diluting existing shareholders and thus wanted to avoid injecting capital into banks (Solomon and Paletta 2008). Treasury was also averse to the whole idea of government becoming involved with running private businesses (Guha and Politi 2008).⁴⁷

“Thou shalt not dilute shareholders” was, indeed, the first commandment enshrined in the new Paulson Put and key to the disaster that engulfed the United States and the world afterward. The new, truncated Put’s second commandment was equally predictable: “Thou shalt not constrain bankers’ compensation.” In the face of white hot public indignation, members of Congress called—in public—for restrictions on executive compensation. Treasury responded with proposals that it privately ensured financial houses would be unenforceable.⁴⁸

After his much ridiculed testimony to Congress about asset prices, Bernanke lowered his profile (Lanman and Torres 2008a), whereas Paulson raised his. Under withering criticism from George Soros and many others, the notion of just buying assets lost steam in favor of capital injections. These would support many times their value in new lending and thus held promise of halting the deadly process of “deleveraging” that was now shrinking the supply of credit (Soros 2008).

But capital injections proved a hard sell. Many Democratic congressional representatives, labor, and liberal interest groups did not understand what was at stake. They had little to say about the bailout and concentrated on agitating for an economic stimulus program or mortgage relief. The first version of the bailout legislation contained language authorizing capital injections, though it still afforded pride of place to asset purchases. As the much amended second incarnation of the bill emerged, Representative Barney Frank, chair of the House Financial Services Committee, insisted on taking out the language authorizing capital injections. Eventually, after Soros spoke to Speaker of the House Nancy Pelosi (D-CA), Frank and the Democratic leadership agreed to accept an “intent of Congress” statement from the House floor by Representative Jim Moran (D-VA) in conjunction with Frank that would provide legal cover for capital injections. By then Democratic leaders were claiming that the intervention was in accord with the Treasury’s program; this is consistent with Paulson’s later confession that he changed his mind before the bill passed.⁴⁹ But this backdoor authorization ensured that there were minimal safeguards against frittering the money away.

Path to Disaster

The worldwide market meltdown that greeted passage of the bill and the creation of the Troubled Assets Relief Program (TARP) shocked the American establishment.

It should not have. As soon as the bill passed, Paulson and Bernanke should have followed with a series of rapid-fire announcements of actions taken under its auspices. Instead, they laid low, while the Treasury put out word that a thirty-something former Goldman Sachs executive who had previously served as Paulson's special assistant would start figuring out how to implement TARP.

World markets could see clearly what neither the Democrats nor the Republicans, for different reasons, could admit. That even if TARP worked perfectly, it could at best only unclog the arteries of the financial system. But getting blood flowing through the patient's arteries again would not make her healthy; it would just keep her from dying. Private investment and consumption were collapsing in both the United States and the rest of the world; only large and immediate government fiscal stimulus packages (which included major housing relief) held any prospect of checking this. Republicans, in the main, were opposed to stimulus for the usual ideological reasons. Democrats were divided, with even many friends of a stimulus preferring to hold off until a new Democratic president took office. The United States and some other countries were also reluctant to negotiate internationally coordinated packages for various reasons, including the prospect that the United States veto over the International Monetary Fund would eventually come up for discussion. As a result, leaders of both parties agreed that the bailout would not include a fiscal stimulus. Senator Obama also urged Democratic congressional leaders not to try to include provisions in the bill giving bankruptcy judges power to alter mortgage terms (Edsall 2008).

The TARP, in short, was a failure from its first day. Nothing Paulson did later improved the situation. When, under international pressure, he saw the light and abandoned his emphasis on asset buying (Guha 2008c), he (and Bernanke) did not insist on rigorous bank examinations to find out who was solvent and who was not. The Fed and Treasury did not try to estimate whether and how much money it would take to get solvent banks to normal lending. Instead Paulson conferred with heads of nine leading financial institutions. Then he simply awarded them sizable sums, on terms that contrasted glaringly with, for example, those Warren Buffett received for his much-ballyhooed investment in Goldman Sachs (Landler and Dash 2008; Pittman 2009; Y. Smith 2009b).

Although TARP money was formally a capital injection, it soon became clear that much of the money would, practically speaking, offset funds committed to banks' bonus pools, so that taxpayers were in effect financing bonuses for the people who had created the mess (Bowers 2008). Paulson also pointedly declined to set any targets for lending; indeed, it quickly became clear that the Treasury was deliberately encouraging the lucky banks that received money to consider buying other banks (Nocera 2008b). When no one was looking, the Treasury also issued a ruling giving massive tax breaks to banks—perhaps as much as \$140 billion worth (Paley 2008b). The FDIC also guaranteed new bank debt, allowing banks to raise funds when almost no one else could.

Nonbanks could see the handwriting on the wall. Not surprisingly, they stamped to the trough. American Express, many insurers (Patterson et al. 2009), and even General Motors Acceptance Corporation (GMAC) started turning themselves into banks or buying banks or thrifts. The Fed also obligingly changed the rules to make it easier for private equity groups—by now desperate for financing—to buy into banks (Davis 2008). Other industries began building cases for bailouts too.

But the financial system showed few signs of returning to normalcy.⁵⁰ As a result, the Federal Reserve increasingly moved to fill the vacuum. It cut rates to virtually zero and proliferated special facilities for lending. It lent directly to large corporations. Some of these efforts showed results: With the Federal Reserve buying commercial paper of the fifty largest issuers, that market thawed out. Effectively, however, the Fed no longer was supporting private financial markets. It was extensively replacing them. There seemed little to do but wait for the new U.S. president and hope for the best.

Notes

1. Political leaders of both parties were clear that legislation on financial reform would come after the election. See Chaddock (2008).

2. For Frank and the mortgage provisions, cf. Politi and Guha (2008); for Credit Suisse, Bank of America, and the Democrats, cf. Reuters (2008). Compare this last with Mian et al. (2008), a paper we otherwise much admire. For the jumbos, see Guha and Grant (2008). For the Mortgage Bankers Association support, see Mayer (2008a). The jumbo provision and a small provision for expanding Federal Housing Administration lending made it into the economic stimulus bill. Wider mortgage relief without the bankruptcy provision came later in the year; see Mian et al. (2008).

3. Fannie's operations were initially highly restricted and changed drastically over time via new legislation.

4. The literature is vast, but the points here should be uncontroversial. See, e.g., Muolo and Padilla (2008), which traces historical restrictions on both firms' activities.

5. A crucial issue is whether one counts political contributions by Fannie and Freddie directors as part of the firm's efforts or only management, employees, and political action committees. Mayer's tabulations for the Center for Responsive Politics count only the latter. There are good reasons for such a truncated focus, and it would normally be the technique of choice (Ferguson 1995). In the special cases of Fannie and Freddie, however, it probably does lead to substantial underestimates, because many directors were clearly picked for their political connections.

6. Reporters working for other national publications have described similar behavior to us.

7. The estimate comes from Mayer (2008b). Because the figure refers to existing lawmakers and thus neglects contributions to legislators who are no longer in Congress, the figure for the Democrats is probably a bit low. An earlier report from the same source had included Hillary Clinton among the top four recipients. Revised figures show Clinton received a substantial amount of money but was well out of the top group.

8. For Ickes and Emanuel, see Evans (2008). Emanuel became a mortgage banker in Chicago with a major Wall Street firm before winning election to the House of Representatives. He is now chief of staff to President Obama.

9. For Johnson, Paulson, and Obama, see Mclean (2009), which records Johnson's denial when he left the Obama campaign that he had received favors from Countrywide. But see Goldfarb (2009) on the House Republican investigative study on Countrywide's "special loans." Note that a number of prominent McCain backers also had ties to the GSEs, though links to the Democrats generally ran somewhat tighter. See, for the Republicans, e.g., Weisman (2008).

10. This comes to us from reporters for major national media organizations whose judgment and integrity we have observed at close hand.

11. This point is worth emphasizing, considering studies such as Wallison and Calomiris (2008). As William Black has emphasized to us, it was the bonus and executive compensation systems modeled on those that were then proliferating in the private sector that created the incentive structures that led to the accounting debacles.

12. He set the goal in 1999.

13. "Raines learned that the unit that should have been most resistant to this 'overwhelming' financial incentive, Internal Audit, had succumbed to the perverse incentive. Mr. Rajappa, Senior Vice President for Operations Risk and Internal Audit, instructed his internal auditors in a formal address in 2000 (and provided the text of the speech to Raines): 'By now every one of you must have 6.46 [the earnings per share target] branded in your brains. You must be able to say it in your sleep, you must be able to recite it forwards and backwards, you must have a raging fire in your belly that burns away all doubts, you must live, breath and dream 6.46, you must be obsessed on 6.46. . . . After all, thanks to Frank [Raines], we all have a lot of money riding on it. . . . We must do this with a fiery determination, not on some days, not on most days but day in and day out, give it your best, not 50 percent, not 75 percent, not 100 percent, but 150 percent. Remember, Frank has given us an opportunity to earn not just our salaries, benefits, raises, ESPP, but substantially over and above if we make 6.46. So it is our *moral obligation* to give well above our 100 % and if we do this, we would have made tangible contributions to Frank's goals'" (Black 2008 [emphasis in original]).

14. For Raines, Clay, Democrats, and bonuses, see Bebchuck and Fried (2005) and Lebaton (2004a); for the reaction, see Lebaton (2004b). For the transcript, see U.S. Congress. House (2004).

15. Mozilo himself donated at least \$5,500 to the 2004 Bush campaign, narrowly defined to exclude donations to the Republican National Committee. He was not the only executive from the firm who personally contributed. Countrywide's political action committee, also donated \$5,000. Note that total political contributions by the firm and its executives ran substantially larger, and some party contributions should perhaps be reckoned in. But the subject is too complicated for this paper. It is enough to say that Countrywide's donations in 2004 definitely tilted toward Republicans, though, as discussed below, the firm had important Democratic allies even that year, making smaller contributions even to John Kerry's campaign. The campaign finance data come from the Federal Election Commission, as presented by Political Money Line.

16. For the campaign, see, e.g., Banking (2005) or Lubell (2006). One vehicle for the effort was an organization called Homes for Working Families. Mozilo chaired its board, on which sat the CEOs of both Fannie and Freddie. Lubell (2006) was issued for this group by the Center for Housing Policy, which described itself as "the research affiliate" of the National Housing Conference. For Hogar, cf. Schmidt and Tamman (2009). LatinoPolitics-Blog.com (2009) notes how, since the mortgage bubble burst, the Hispanic Congressional Caucus has distanced itself from even the memory of the effort. For Fannie and Freddie's support of ACORN and the Citizenship Education Fund, which grew out of the Reverend Jesse Jackson's Operation PUSH (People United to Save Humanity), see *Wall Street Journal* (2008b). For Mozilo's award, see National Association of Home Builders (2004). Countrywide sponsored the organization's newspaper, whose report is cited here. The attack on Freddie and Fannie is the real context for the dramatic story related in Duhigg (2008) and

explains why Daniel Mudd was so eager to please Mozilo. The tendency of many critics to view all this through the lenses of battles over the Community Reinvestment Act makes much mischief (Ferguson and Johnson 2009).

17. During the 2008 presidential campaign, many Republicans sought to link the failure to regulate Fannie and Freddie to the opposition of congressional Democrats. See, for example, Hubbard and Neusner (2008). Since the election, the *Wall Street Journal* and Barney Frank have sparred several times over this question and, especially, Frank's role. The issues are complex; here they can be treated only summarily. It is clear that Frank worked with Republican Michael Oxley, who was then chair of the House Committee on Financial Services, to successfully pass a reform bill in the House in 2005. Alan Greenspan and the administration then refused to accept it. Oxley suggests that was because they were insistent on privatization, though it appears to us that other issues, including Frank's interest in checking subprime loans, also played a role. For Oxley's testimony, which has been largely ignored, see Farrell (2008). His basic story is confirmed by Becker et al. (2008). For Frank and subprime in 2005, see, e.g., Frank (2008). For Greenspan's opposition to restrictions on subprime, see, e.g., Ferguson and Johnson (2009), but we are grateful to William Black for reminding us in a private communication of the importance of the Bush administration and the Fed's enthusiasm for subprime lending. Note that we enter no claim about the adequacy of the proffered regulatory response; but there was a real effort, and it was Republicans who finally decided not to push the bill. Former Federal Reserve officials have told us that Greenspan discouraged discussion of the GSEs within the system.

18. Although they have many merits, analyses such as that of Wallison and Calomiris (2008) neglect the context of private sector interests that are the real roots of the GSE's wreck. The story is really another variation on Epstein and Ferguson (1984). Of course, such accounts also omit all mention of the Shadow Bailout, which, as described below, was directly responsible for pushing Fannie and Freddie over the edge.

19. Duhigg (2008) adds considerable detail that illustrates the real relationships between the GSEs and private lenders. The article also relates a story according to which Paulson later sent a deputy, Robert K. Steele, to urge restraint on the GSEs. But for reasons unexplained, Steele failed to convey the message. This part of the story has all the earmarks of a precautionary memo for the files. It is unlikely in the extreme that Steele, who worked closely with Paulson, would have failed to convey a message his boss thought was important. As Becker et al. (2008) demonstrate, the priority just then was the Shadow Bailout.

20. Estimates of SWF investment differ, at least in part because they count slightly differently. This estimate can be compared with those proffered by Brad Setser on his blog at the Council on Foreign Relations. For our purposes, the differences make no difference.

21. The National Credit Corporation; cf. Epstein and Ferguson (1984). From another standpoint, the superfund could be viewed as another Wall Street attempt at financial alchemy: slicing and dicing risk and moving assets around, which, somehow, create value. In other countries, this kind of fund sometimes had worked (a good bank, bad bank) but typically only when the government put in large amounts of money, effectively recapitalizing existing banks and taking the losses from the bad assets on its shoulders. The success was not because of the financial alchemy (though the reduction in risk had some value) but because of the—hidden—equity injections.

22. Note that banks could tap the new Fed facility but not their conduits.

23. An effort to explain the importance of the monolines to one congressional leader, Barney Frank, fared poorly (Ferguson and Johnson 2008b).

24. Spitzer came into the crisis because his state had regulatory authority over monoline insurers located there. The monolines had for years quietly grown rich collecting lucrative premia for insuring state and municipal bonds against default. A thicket of regulations made entry into the industry very difficult so that a handful of concerns divided most of the business.

In the past few years, the monolines had branched out from their bread-and-butter state and local bond business into writing credit default swaps and other forms of insurance on the brainchildren of Wall Street's rocket scientists. This potentially put the monolines on the hook for billions of dollars in payouts (Bajaj and Anderson 2008). They did not have the money, and their capital base was slender. In the fall of 2007, speculation about possible credit downgrades of the major monolines ran rife. This prospect terrified already stressed pension funds, banks, and insurance firms, because downgrades of the monolines would spell downgrades for bonds they insured. Regulated firms that were barred from holding low-rated paper would then have to sell.

In sharp contrast to Paulson and Bernanke, Spitzer and his insurance commissioner, Eric Dinallo, who had been part of Spitzer's team that had brought the suits against Wall Street, came out swinging. Spitzer repeatedly denounced the Bush administration's passive stance toward regulating mortgage companies (*New York Times* 2008b). Dinallo, meanwhile, encouraged Warren Buffett to enter the profitable part of the monolines business—insuring state and local bonds. He also proposed breaking up the older companies and forcing the banks to help recapitalize the portions of the new firms that would take over responsibility for paying off the CDOs and other toxic waste (Bajaj and Anderson 2008; Sorkin 2008a). Then came the scandal: pressure on the banks to pony up at once abated. Many questions remain about this episode, but there is no hope of unraveling it here. Note that a long-time Republican campaign operative admitted sending evidence about Spitzer's dalliances to federal authorities (Hakim and Santos 2008) and that two banks mentioned in the press as having reported evidence about possible questionable payments by Spitzer (Natta and Becker 2008) had been previously investigated by him (S. Smith 2008), though Spitzer's campaign finance director also worked for one (*News.com/blogs* 2008). This last, North Fork, also happens to be owned by Capital One, one of the largest banks in the United States and one that was heavily involved in the subprime business.

25. Subsequent analysts who have claimed that hedge funds played little role in the financial meltdown overlook the Bear case as well as the role hedge funds played in the serial fire sales of assets that helped collapse markets at many points in the crisis.

26. In the final days before the Bear expired, the New York Fed opened the Term Securities Lending Facility to primary dealers. Just afterward it opened the discount window to primary dealers. On the Fed's emergency loan authority, see the discussion and references in Part I.

27. Bamber was a senior managing director at Bear.

28. The New York Fed lent \$29 billion against \$30 billion in assets; the loan was formally to a Delaware corporation set up to hold the assets. JPMorgan Chase contributed \$1 billion in the form of a note subordinated to the Fed's. See Federal Reserve Bank of New York (2008). For the letter from Paulson to Geithner, see Paulson (2008b).

29. The Federal Reserve's H.4.1 weekly releases of "Factors Affecting Reserve Balances" show holdings for foreign central banks and are available on the Web. The estimate of SWF holdings follows credible private estimates.

30. The new facility at the New York Fed was also opened to Federal Home Loan Banks. See Part I of our paper. Treasury also took warrants for 79.9 percent of the common stock of both GSEs and, in sharp contrast to the way it treated private banks under the subsequent TARP program, insisted that the GSE CEOs step down.

31. See, for example, *DiePresse.com* (2008). The head of Deutsche Bank eventually denied interest. There is little doubt, however, that the bank had been interested in Bear Stearns but had been discouraged by the Fed. See Krause et al. (2008); note that Deutsche Bank had a substantial presence in the United States already.

32. For the Fed's confidence that it understood the consequences, see, for example, Dash et al. (2008). For Paulson's, cf. Guha (2008b). There is a simple way of summarizing all this: No one appears to have learned the lessons of the Indonesian debacle during the Asian financial crisis.

33. For example, in his October 15 speech to the Economic Club of New York. See *Wall Street Journal* (2008a).

34. The long and renewable term of the contract the New York Fed signed with BlackRock is also telling about what the Fed really thinks about the value of the assets. Note that, after the failure, some stories have also suggested that Barclays might have bought Lehman if it had secured approval from UK financial authorities in time. That is irrelevant to any judgment about the local regulators, the Fed, and, secondarily, the Treasury.

35. One person in the room as the decision was hammered out has claimed to us that Paulson strongly opposed aid to Lehman, whereas Bernanke weakly concurred with him and Geithner voiced misgivings. This information was provided to us soon after the event, long before Geithner was nominated by president-elect Obama to be secretary of the Treasury. It is consistent with the story in Hilsenrath et al. (2008).

36. The loans were made to a Lehman subsidiary through JPMorgan Chase (Sorkin 2008b). The rationale was to protect interests of customers who had nothing to do with Lehman's problems. Such "conduit loans" are spun largely out of whole statutory cloth and bypass the obvious fact that the best way to protect those interests was surely to avoid bankruptcy in the first place. Some form of at least implicit Fed backing is also involved.

37. He also removed the chief executives of the concerns and ended their lobbying efforts, which McCain had also demanded. The removal of the GSEs leaders stands in stark contrast to the way Paulson treated other banks later.

38. See, for example, Cassidy (2008). Bernanke certainly understood the implications of the Fed's Depression experience. As Epstein and Ferguson (1991) went to the press, Bernanke offered collegial advice and comments.

39. Our discussion here is directed toward highlighting our differences about timing with Taylor. We do not disagree that maladroit handling of the subsequent bailout proposals compounded the disaster, though in our judgment the crux of the problem was the facile and needlessly provocative asset-buying proposal itself together with the refusal to entertain any kind of stimulus program or large-scale housing relief. Because these mistakes compounded the Lehman disaster, it is only to be expected that a wider survey of credit default swaps would show some institutions emulating Citigroup's CDS pattern, which shows a "double spike" with the second one coming around the time Bernanke and Paulson went to Congress.

40. The Fed's H.4.1 statistical release, available on the Federal Reserve Board Web site for the seven days ending September 17, shows that borrowing from the Primary Dealer Credit Facility, which carried a clear stigma, jumped sharply, as indeed, did the whole category of "other loans." The former had been zero the week before then jumped all at once to an average of \$20.268 billion. The use of weekly averages disguises the dimensions of the explosion that followed Lehman's bankruptcy, because the Wednesday total is \$59.78 billion.

41. Taylor relies on the spread between three-month LIBOR and the three-month overnight index swap as his measure of disruption. The latter records the market's guess about what the Fed funds rate will be over the same period, so the difference between the two rates should reflect banks' anxieties about lending to each other. That measure did not move much until roughly the time when Paulson and Bernanke went to Congress. Taylor, accordingly, argues that it must have been the political intervention rather than Lehman's bankruptcy that disrupted world markets. Economic historians will be familiar with previous economic crises in which published rates failed to reflect market realities. Such appears to be the case here.

Let us set aside, for now, suspicions voiced earlier in the year that LIBOR rates had gradually become extensively fictional (Mollenkamp 2008). Jones (2009) well describes problems in interpreting LIBOR quotations even in normal times. In the Lehman crisis, special force attaches to all his reservations. Figure 5 indicates a tremendous demand for the shortest term LIBOR borrowings; it is inconsistent with any notion that money was easily available for longer periods. This conclusion also coheres with the evidence of the Fed's H.4.1 statistical release discussed above, which indicates sharply increasing demand for official short-term

credits, even if they carry a stigma, and with Jones's analysis of the behavior of money market funds and bankers' reserve balances at the Fed. Additional evidence that banks were desperately seeking short-term funds because money for the longer term was unavailable is found in Swagel (2009); see especially his remarks on commercial paper borrowings.

We also think that the "event analysis" approach Taylor uses is more problematic than he allows. He is, of course, aware that, in principle, complex, lagged causal effects could muddy the distinction he wants to draw between market reactions to the bankruptcy as opposed to the government's subsequent interventions. But his paper appears to underestimate the market turmoil. For example, American brokerage houses with operations in London only slowly awoke to the dangers that English bankruptcy laws posed to their ability to gain access to funds they had deposited with Lehman; see, e.g., Mackintosh and Hughes (2008). The Federal Reserve just as clearly misjudged its ability to fund the UK part of Lehman's broker-dealer business (Gapper 2009). Such confusions took some time to sort out, or even to be recognized. They imply that neat distinctions between the periods are likely to be very misleading.

42. Cf. Morgenson (2008a), including the "correction" that ran two days later. AIG also appears to have overextended itself in the repo market. See Mackenzie (2009).

43. Had Treasury taken 80 percent of the stock, AIG would have had to be carried on its books. In August, 2009, incomplete records of Paulson's phone calls during the crisis leaked into the media (Morgenson and Van Natta 2009). These showed the Treasury secretary making far more calls to the head of his old firm than to other leading figures on Wall Street and raised searching questions about possible conflicts of interest. The article quotes a range of views; some claims put forward are obviously far from the truth. The Treasury, for example, had to play a major role in the takeover of AIG; the Fed may have provided the financing, but by law it cannot hold the warrants. The Treasury has control of those, which is surely why it was Paulson himself who informed AIG's chief that he was out, as the story records. The evidence we present in this paper on the price of credit defaults swaps on Goldman Sachs confirms the implication of the phone records—presented in a Web link to the electronic version of the *Times* story at www.nytimes.com/imagepages/2009/08/09/business/09paulson_graphic_ready.htm—that Tuesday and Wednesday, not the weekend before, were crucial decision days for the AIG rescue.

44. Paulson tapped Edward Liddy to be the new head of AIG. Liddy resigned from the board of Goldman Sachs when he took the job but continued to hold over \$3 million worth of stock in Goldman. As of April 2009, he had not divested himself. See Carney (2009).

45. Then Senator Hillary Clinton (D-NY) and many others joined in (*New York Times* 2008c). The ban hurt many hedge funds, which were the short sellers. The speculative run up in oil prices, incidentally, probably owed something to the Fed's willingness to hand out Treasury notes for Wall Street's junk assets because they, but not the junk, could be pledged as collateral for margin loans used to buy oil futures.

46. The literature has become enormous; readable distillations are Stiglitz (2009) and Ferguson and Johnson (2008a).

47. One very special case of Treasury's adherence to this dictum merits separate notice. In October, after declines in Morgan Stanley's stock value threatened a previously negotiated investment by Mitsubishi UFJ Financial Group, Treasury smoothed agreement to complete the deal by helping to work out an agreement that protected the Japanese investors from dilution in the event of later capital injections by Treasury. This deal had obvious foreign policy implications, but they must wait for another paper. Cf. Sorkin (2008d).

48. Treasury made a small change in the final bill limiting its application only to firms that actually sold assets to the Treasury (Paley 2008a)—precisely the plan that Paulson has since confessed he did not believe in by the time the bill passed. None of the banks that subsequently received capital injections were affected by this clause, though heads of several leading houses talked about voluntarily forgoing bonuses and, in the end, sometimes did.

Note that the bonus pool for six large Wall Street houses for 2007 was estimated to amount to 10 percent of the value of the entire TARP. At some moments in fall 2008, indeed, Morgan Stanley's bonus pool was worth more than the firm's entire value on the stock market (Bowers 2008).

49. The best existing account of the legislative maneuvering is Roubini (2008). We had excellent vantage points to observe what happened, and we draw on this experience for other details here. Toobin (2009) portrays Barney Frank as a strong supporter of equity injections; in fact, he came late to that position and remained very friendly to asset buying. Note that Frank represents a Boston area district; the city is a center for money market funds, which, in sharp contrast to investment houses, have no easy way to permit government equity ownership in the funds themselves.

50. Increasing numbers of analysts now suggest that an unusual form of market failure may be involved. The suggestion is that banks fear to lend because they think other banks will not. Thus a single bank will not act, out of fear that its loan will fall victim to eventual borrower inability to refinance. In this situation, the state must act or nothing is resolved.

References

- Bajaj, V., and J. Anderson. 2008. "Next on the Worry List: Shaky Insurers of Bonds." *New York Times* (January 24).
- Bamber, B., and A. Spencer. 2008. *Bear Trap: The Fall of Bear Stearns and the Panic of 2008*. New York: Brick Tower Press.
- Banking, M. 2005. "Countrywide Announces \$1 Trillion Commitment." *Mortgage Banking* (February 5).
- Barrett, T.; D. Walsh; and B. Keilar. 2008. "AIG Bailout Upsets Republican Lawmakers." Available at www.cnn.com/2008/POLITICS/09/17/aig.bailout.congress/, accessed July 28, 2009.
- Bebchuck, L., and J. Fried. 2005. "Executive Compensation at Fannie Mae: A Case Study of Perverse Incentives, Nonperformance Pay, and Camouflage." *Journal of Corporation Law* 30: 807–822.
- Becker, J.; S.G. Stolberg; and S. Lebaton. 2008. "White House Philosophy Stoked Mortgage Bondfire." *New York Times* (December 20).
- Black, W. 2008. "Expert Witness Statement William K. Black in the Matter of Raines, Howard, and Spencer—Notice No. 2006–1." Office of Federal Housing Enterprise Oversight, Washington, DC.
- Bowers, S. 2008. "Wall Street Banks in 70 Bn Staff Payout—Pay and Bonus Deals Equivalent to 10 Percent of US Government Bail-Out Package." *Guardian* (October 18). Available at www.guardian.co.uk/business/2008/oct/17/executivesalaries-banking, accessed July 28, 2009.
- Brunnermeier, M. 2009. "Deciphering the Liquidity and Credit Crunch of 2007–2008." *Journal of Economic Perspectives* 23 (Winter): 77–100.
- Buiter, W. 2008. "Central Banks and Financial Crises." Federal Reserve Bank of Kansas City Symposium on "Maintaining Stability in a Changing Financial System." Jackson Hole, WY., August 21–23.
- Carney, T.P. 2009. "AIG Head's \$3M in Goldman Stock Raises Apparent Conflict of Interest." *Washington Examiner* (April 10). Available at www.washingtonexaminer.com/opinion/columns/TimothyCarney/AIG-heads-3M-in-Goldman-stock-raises-apparent-conflict-of-interest-42779802.html, accessed July 28, 2009.

- Cassidy, J. 2008. "Anatomy of a Meltdown." *New Yorker* (December 1): 48–63.
- Chaddock, G.R. 2008. "Paulson's Plan Too Long-Term for Some in Congress." *Christian Science Monitor* (April 1). Available at www.csmonitor.com/2008/0401/p11s01-usec.html, accessed July 28, 2009.
- Chipman, K., and H. Nichols. 2008. "McCain, Obama Blame Regulators; McCain Shifts on AIG (Update 3)." *Bloomberg.com* (September 17). Available at www.bloomberg.com/apps/news?pid=20601087&sid=akgVN0qgnoRM&refer=home, accessed July 28, 2009.
- Cho, D. 2008a. "Investors' Growing Appetite for Oil Evades Market Limits." *Washington Post* (June 6).
- . 2008b. "A Skeptical Outsider Becomes Bush's 'War Time General.'" *Washington Post* (November 19).
- Dash, E. 2006. "Fannie Mae to Restate Results by \$6.3 Billion Because of Accounting." *New York Times* (December 7).
- . 2007. "Recent Arrival at Citi Now Runs It." *New York Times* (December 12).
- Dash, E.; J. Anderson; and E. Andrews. 2008. "US Demands That Wall Street Save Lehman." *New York Times* (September 13).
- Davis, Polk, and Wardwell. 2008. "Fed Relaxes Traditional Control Rules for Private Equity and Other Minority Investments in Banks and Holding Companies." (September 23). Available at www.davispolk.com/files/Publication/86b5427d-0f44-4ac3-8569-040632e5ad44/Presentation/PublicationAttachment/f7496119-31d5-428f-9590-0a7fcff78a43/09.23.08.Fed.Relaxes.Traditional.Control.Rules.pdf, accessed July 28, 2009.
- de la Merced, M.J. 2009. "A.I.G. Reveals Biggest Beneficiaries of Its Rescue." *New York Times Deal Book* (March 15). Available at <http://dealbook.blogs.nytimes.com/2009/03/15/aig-discloses-counterparties-who-received-224-billion/>, accessed July 28, 2009.
- DiePresse.com. 2008. "Lehman Brothers: US Regierung hilft, einen Kaeufer zu finden." *DiePresse.com* (September 12). Available at <http://diepresse.com/home/wirtschaft/international/413670/index.do?from=suche.intern.portal>, accessed July 28, 2009.
- Dizard, J. 2008. "This Short Term Fix Creates a Long Term Problem." *Financial Times* (September 16).
- Duhigg, C. 2008. "Pressured to Take More Risk, Fannie Hit a Tipping Point." *New York Times*. October 4.
- Eavis, P. 2007. Why Citi Can't Take the High Road over Credit Mess." *Fortune* (November 27). Available at <http://money.cnn.com/2007/11/26/magazines/fortune/fortune500/eavis.HSBC.fortune/index.htm>, accessed July 28, 2009.
- Edsall, T. 2008. "Obama Says Bailout Bill Should Not Include Bankruptcy Reform." *Huffington Post* (September 26).
- Epstein, G., and T. Ferguson. 1984. "Monetary Policy, Loan Liquidation, and Industrial Conflict: The Federal Reserve and the Open Market Operations of 1932." *Journal of Economic History* 44: 957–83.
- . 1991. "Answers to Stock Questions: Fed Targets, Stock Prices, and the Gold Standard in the Great Depression." *Journal of Economic History* 51 (March): 190–200.
- Evans, W. 2008. "Political Networks of Fannie Mae and Freddie Mac." Available at NPR (July 15). Available at www.npr.org/templates/story/story.php?storyId=92540620, accessed July 28, 2009.
- Evans-Pritchard, A. 2008. "Fed Eyes Nordic-Style Nationalization of US Banks." *London Telegraph* (April 1).

- Faler, B. 2008. "U.S. House Approves Fannie-Freddie Bill by 272–152 (Update 1)." Bloomberg.com (July 23). Available at www.bloomberg.com/apps/news?pid=20601087&sid=aAELTC1YJg.A&refer=home, accessed July 28, 2009.
- Farrell, G. 2008. "Oxley Hits Back at Ideologues." *Financial Times* (September 9).
- Federal Reserve Bank of New York. 2008. "Summary of Terms and Conditions Regarding the J.P. Morgan Chase Facility." March 24.
- Ferguson, T. 1995. *Golden Rule: The Investment Theory of Party Competition and the Logic of Money-Driven Political Systems*. Chicago: University of Chicago Press.
- Ferguson, T., and R. Johnson. 2008a. "Bridge Loan to Nowhere." In *Meltdown*, ed. K. Vanden Heuvel, pp. 179–87. New York: Nation Books.
- . 2008b. "Britney and the Bear: Who Says You Can't Get Good Help Anymore?" Huffington Post (March 27). 2008b Available at www.huffingtonpost.com/thomas-ferguson-and-rob-johnson/britney-and-the-bear-who-_b_93744.html, accessed July 28, 2009.
- . 2009. "Too Big to Bail: The 'Paulson Put,' Presidential Politics, and the Global Financial Meltdown, Part I: From Shadow Banking System to Shadow Bailout." *International Journal of Political Economy* 38, no. 1: 3–34.
- Ferguson, T., and J. Rogers. 1986. *Right Turn: The Decline of the Democrats and the Future of American Politics*. New York: Hill & Wang.
- Finch, G., and K.-M. Cutler. 2008. "Money Market Rates Double amid Global Credit Squeeze (Update 4)." Bloomberg.com (September 16). Available at www.bloomberg.com/apps/news?pid=20601087&sid=ag_0LsxCHN3g&refer=home, accessed July 28, 2009.
- Frank, B. 2008. "Wall Street Journal Editorial Board Does It Again." Huffington Post (December 11). Available at www.huffingtonpost.com/rep-barney-frank/wall-street-journal-edito_b_150350.html, accessed July 28, 2009.
- Gapper, J. 2009. "We Need to Share the Bill on Bailouts." *Financial Times* (March 25).
- Goldfarb, Z. 2008. "Internal Warnings Sounded on Loans at Fannie, Freddie." *Washington Post* (December 9).
- . 2009. "House GOP Report Details Countrywide's Efforts to Benefit VIPs." *Washington Post* (March 19).
- Goldfarb, Z.; D. Cho; and B. Appelbaum. 2008. "Treasury to Rescue Fannie and Freddie." *Washington Post* (September 7).
- Gross, D. 2007. "Protecting Paulson's Pals." Slate (October 16). Available at www.slate.com/id/2175724/, accessed July 28, 2009.
- Guha, K. 2008a. "Paulson Rues Lack of Tools As He Stared into the Abyss." *Financial Times* (December 31).
- . 2008b. "Pressure to Avoid Bailout Culture." *Financial Times* (September 15).
- . 2008c. "Washington Forced to Follow the European Bandwagon." *Financial Times* (October 15).
- Guha, K., and J. Grant. 2008. "Analysts Predict Wave of Home Refinancing." *Financial Times* (January 25).
- Guha, K., and J. Politi. 2008. "US Shift as UK Takes Path to Recapitalize." *Financial Times* (October 9).
- Hakim, D., and F. Santos. 2008. "GOP Consultant Says He Reported Spitzer Trysts in 2007." *New York Times* (March 24).
- Hamlin, K. 2008. "Freddie, Fannie Failure Could Be World 'Catastrophe' Yu Says." Bloomberg.com (August 22). Available at www.bloomberg.com/apps/news?pid=20601080&sid=aslo2E01QVFI, accessed July 28, 2009.

- Hilsenrath, J.; D. Solomon; and D. Paletta. 2008. "Paulson, Bernanke Strained for Consensus in Bailout." *Wall Street Journal* (November 10).
- Hubbard, A., and N. Neusner. 2008. "Where Was Senator Dodd?" *Washington Post* (September 12).
- Jones, S. 2009. "Why Letting Lehman Go Did Crush the Financial Markets." *Financial Times* (March 12). Available at <http://ftalphaville.ft.com/blog/2009/03/12/53515/why-letting-lehman-go-did-crush-the-financial-markets/>, accessed July 29, 2009.
- Karnitschnig, M.; D. Solomon; L. Plevin; and J. Hilsenrath. 2008. "US to Take Over AIG in \$85 Billion Bailout; Central Banks Inject Cash as Credit Dries Up." *Wall Street Journal* (September 17).
- Kim, J. 2008. "Banks Boost Customer Fees to Record Highs." *Wall Street Journal* (November 12).
- Kopecki, D. 2008. "Fannie, Freddie 'Insolvent' After Losses Poole Says (Update 1)." Bloomberg.com (July 10). Available at www.bloomberg.com/apps/news?pid=20601087&sid=as4DEc5UFopA, accessed July 28, 2009.
- Krause, C.-K.; R. Benders; R. Landgraf; and A. Hoffbauer. 2008. "Ackermann buhlt um Bear Stearns." *Handelsblatt* (March 20).
- Laing, J. 2008. "Is Fannie Mae Toast?" *Barron's* (March 11). Available at www.smart-money.com/investing/economy/is-fannie-mae-toast-22694/, accessed July 28, 2009.
- Landler, M., and E. Dash. 2008. "Drama Behind a \$250 Billion Banking Deal." *New York Times* (October 14).
- Lanman, S., and C. Torres. 2008a. "Bernanke Jumps Out of Political Fray After Warning of Collapse." Bloomberg.com (September 27). Available at www.bloomberg.com/apps/news?pid=20601087&refer=home&sid=awNB18n8u4Xo, accessed July 29, 2009.
- . 2008b. "Bernanke Says Normal Markets Needed or Growth to Halt (Update 3)." Bloomberg.com (September 23). Available at www.bloomberg.com/apps/news?pid=20601087&sid=agciQviVP4dY&refer=home, accessed July 28, 2009.
- Larsen, P.T. 2008. "Shockwaves That Took Europe by Surprise." *Financial Times* (October 4).
- LatinoPoliticsBlog.com. 2009. "The Great American Mortgage Scam and the Latino Community." LatinoPoliticsBlog.com (March 15). Available at <http://latinopolitics-blog.com/2009/03/15/the-great-american-mortgage-scam-the-latino-community/>, accessed July 28, 2009.
- Lebaton, S. 2004a. "Chief Says Fannie Mae Did Nothing Wrong." *New York Times* (October 7).
- . 2004b. "Shakeup at Fannie Mae: The Overview Assessing What Will Now Happen to Fannie Mae." *New York Times* (December 17).
- . 2008. "Treasury Acts to Shore up Fannie Mae and Freddie Mac." *New York Times* (July 14).
- Lebaton, S., and E. Andrews. 2008a. "In Rescue to Stabilize Lending, US Takes Over Mortgage Titans." *New York Times* (September 7).
- . 2008b. "Reinventing Mortgage Giants: A Big Teardown or a Tear Down?" *New York Times* (September 8).
- Lerer, L. 2008. "Fannie, Freddie Spent \$200 Million to Buy Influence." Yahoo.com (July 16). Available at http://news.yahoo.com/s/politico/20080716/pl_politico/11781, accessed July 28, 2009.
- Lex. 2008. "Washington Mutual." *Financial Times* (September 26).
- Los Angeles Times. 2008. "Treasury, Fed Announce Rescue Plan for Fannie, Freddie." *Los Angeles Times* (July 13).

- Lubell, J. 2006. *Homes for Working Families: Increasing the Availability of Affordable Homes*. Washington, DC: Center for Housing Policy. Available at www.nhc.org/pdf/pub_hwf_solutions_01_07.pdf, accessed July 28, 2009.
- MacIntosh, J.; F. Guerrero; and G. Farrell. 2009. "Goldman Held Talks with Wachovia." *Financial Times* (March 15).
- MacKenzie, M. 2009. "Deleveraging Leads Repo Market into Mire." *Financial Times* (April 8).
- Mackintosh, J., and J. Hughes. 2008. "New York Steals UK Hedge Fund Business." *Financial Times* (October 17).
- Martelle, S. 2008. "Top of the Ticket John McCain and Barack Obama on the Freddie Mac and Fannie Mae Troubles." *Los Angeles Times Blogs* (July 11). Available at <http://latimesblogs.latimes.com/washington/2008/07/fannie-mae-obam.html>, accessed July 28, 2009.
- Mayer, L.R. 2008a. "Seeking Stimulation." Center for Responsive Politics (January 31). Available at <http://www.opensecrets.org/news/2008/01/seeking-stimulation.html>, accessed July 28, 2009.
- . 2008b. "Update: Fannie Mae and Freddie Mac Invest in Lawmakers." Center for Responsive Politics (September 11). Available at www.opensecrets.org/news/2008/09/update-fannie-mae-and-freddie.html, accessed December 14, 2008.
- McCain, J. 2008a. "Statement by John McCain on America's Credit Crunch." www.johnmccain.com (March 13). Available at www.johnmccain.com/Informing/News/PressReleases/831b867e-38ff-4686-9c2f-b37649b6eaa1.htm, accessed December 7, 2008.
- . 2008b. "Taxpayers on Hook to Bailout Fannie, Freddie." www.johnmccain.com (July 24). Available at www.johnmccain.com/informing/news/PressReleases/d41f6b43-44b1-42f6-98d3-f353928bd825.htm, accessed December 8, 2008.
- McCain, J., and S. Palin. 2008. "We'll Protect Taxpayers from More Bailouts." *Wall Street Journal* (September 9).
- McLean, B. 2009. "Fannie Mae's Last Stand." *Vanity Fair* (February). Available at www.vanityfair.com/politics/features/2009/02/fannie-and-freddie200902, accessed July 28, 2009.
- Merk, A. 2007. "Leadership Emerges to Resolve Subprime Crisis." *Merk Hard Currency Fund* (December 18). Available at <http://hw71.blogspot.com/2007/12/axel-merk-leadership-emergesto-resolve.html>, accessed July 28, 2009.
- Mian, A.; A. Sufi; and F. Trebbi. 2008. "The Political Economy of the U.S. Mortgage Default Crisis." National Bureau of Economic Research Working Paper, no. 14468.
- Mollenkamp, C. 2008. "Bankers Cast Doubt on Key Rate amid Crisis." *Wall Street Journal* (April 16).
- Morgenson, G. 2008a. "Behind Insurer's Crisis, Blind Eye to a Web of Risk." *New York Times* (September 27).
- . 2008b. "In the Fed's Crosshairs: Exotic Game." *New York Times*. (March 23).
- Morgenson, G. 2009. "At A.I.G., Good Luck Following the Money." *New York Times* (March 14).
- Morgenson, G. and D. Van Natta, Jr. 2009. "Paulson's Calls to Goldman Tested Ethics." *New York Times* (August 8).
- Muolo, P., and M. Padilla. 2008. *Chain of Blame*. Hoboken, NJ: Wiley.
- Myers, S.L. 2008. "Bush Backs Fed's Actions, But Critics Quickly Find Fault." *New York Times* (March 18).
- National Association of Home Builders. 2004. "National Housing Conference to Honor Angelo Mozilo for Lowering Homeownership Barriers." *Nation's Building News* (May

- 17). Available at www.nbnnews.com/NBN/issues/2004-05-17/Housing+Finance/2.html, accessed October 10, 2008.
- News.com/blogs. 2008. "Darrison Returns (Officially)." NYDaily News.com/blogs (April 14). Available at www.nydailynews.com/blogs/dailypolitics/2008/04/darrison-returns-officially.html, accessed July 28, 2009.
- New York Times*. 2008a. "The Bailout's Big Lessons." *New York Times* (September 8).
- . 2008b. "Hard Ball with Warren and Eliot." *New York Times* (February 16).
- . 2008c. "Schumer's Stands." *New York Times* (December 12).
- . 2008d. "The Times Interviews John McCain." *New York Times* (July 13).
- . 2008e. "Sovereign Wealth Funds: About Those Foreign Investments in the US." *New York Times*, The Board: A Blog by Editorial Writers of the New York Times (April 11). Available at <http://theboard.blogs.nytimes.com/2008/04/11/about-those-foreign-investments-in-the-us/>, accessed July 28, 2009.
- Nocera, J. 2008a. "As Credit Crisis Spiraled, Alarm Led to Action." *New York Times* (October 1).
- . 2008b. "So When Will Banks Make Loans?" *New York Times* (October 24).
- Nocera, J., and E. Andrews. 2008. "Struggling to Keep up As the Crisis Raced On." *New York Times* (October 22).
- Norris, F. 2008. "Who's to Blame." New York Times Floyd Norris Blog (October 8). Available at <http://norris.blogs.nytimes.com/2008/10/08/whos-to-blame/>, accessed July 28, 2009.
- Office of Federal Housing Enterprise Oversight. 2006. "Report of the Special Examination of Fannie Mae. Washington, D.C." Washington, DC (May).
- Paley, A.R. 2008a. "Executive Pay Limitations May Prove Toothless—Loophole in Bailout Provision Leaves Enforcement in Doubt." *Washington Post* (December 15).
- . 2008b. "A Quiet Windfall for US Banks." *Washington Post* (November 10).
- Patterson, S.; D. Solomon; and L. Scism. 2009. "U.S. to Offer Aid to Life Insurers." *Wall Street Journal* (April 8).
- Paulson, H. 2008b. "Letter to Geithner, T., March 17, 2008." *Wall Street Journal*, Available at <http://online.wsj.com/public/resources/documents/Treasuryletter0308.pdf> accessed July 28, 2009.
- . 2008a. "Remarks by Secretary Henry M. Paulson, Jr. on Financial Rescue Package and Economic Update." Press Room, U.S. Department of the Treasury. (November 12). Available at www.treas.gov/press/releases/hp1265.htm accessed July 28, 2009.
- Pittman, M. 2009. "Paulson Bank Bailout in 'Great Stress' Misses Terms Buffett Won." Bloomberg.com (January 10). Available at www.bloomberg.com/apps/news?pid=20601087&sid=aAvhtiFdLyaQ, accessed July 28, 2009.
- Politi, J., and K. Guha. 2008. "Bush Attacks Democrats Housing Crisis Plan." *Financial Times* (February 29).
- Reuters. 2008. "Mortgage Bailout Plan Gains Traction in Congress." Reuters (March 13). Available at www.cnn.com/id/23617044, accessed July 25, 2009.
- Rohter, L., and E. Andrews. 2008. "McCain Rejects Broad US Aid on Mortgages." *New York Times* (March 26).
- Roubini, N. 2008. "How Authorization to Recapitalize Banks via Public Capital Injections ('Partial Nationalization') Was Introduced—Indirectly Through the Back Door—Into the TARP Legislation." RGE Monitor (October 9). Available at www.rgemonitor.com/roubini-monitor/253956/how_authorization_to_recapitalize_banks_via_public_capital_injections_partial_nationalization_was_introduced_indirectly_through_the_back_door_into_the_tarp_legislation, accessed July 28, 2009.

- Schmidt, S., and M. Tamman. 2009. "Housing Push for Hispanics Spawns Wave of Foreclosures." *Wall Street Journal* (January 5).
- Schwartz, N., and E. Dash. 2008. "Where Was the Wise Man?" *New York Times* (April 27).
- Sender, H.; F. Guerrero; J. Macintosh; J. Chung; and S. Scholtes. 2008. "WaMu Seized and Sold to JP Morgan." *Financial Times* (September 25).
- Setser, B. 2008a. "Faltering Central Bank Demand for Agencies." Council on Foreign Relations Blog (August 22). Available at <http://blogs.cfr.org/setser/2008/08/22/faltering-central-bank-demand-for-agencies/>, accessed July 28, 2009.
- . 2008b. "The Flight from Risky Assets." Council on Foreign Relations blog (September 16). Available at <http://blogs.cfr.org/setser/2008/09/16/the-flight-from-risky-us-assets-continues/>, accessed July 28, 2009.
- Shaffer, J. 2008. "Fannie Mae and the Vast Bipartisan Conspiracy." *Slate* (September 16). Available at www.slate.com/id/2200160/, accessed July 28, 2009.
- Smith, E.B. 2006. "Report: Raines Put Priority on Earnings per Share." *USA Today* (May 24).
- Smith, S. 2008. "Unanswered Spitzer Question: Why Did Feds Spend So Much Money Investigating the Transfer of So Little?" *Undernews* (March 16). Available at <http://prorev.com/2008/03/unanswered-spitzer-question-why-did.html>, accessed July 28, 2009.
- Smith, Y. 2007a. "SIV Bailout Plan Having Trouble Enlisting Supporters." *Naked Capitalism* (October 18). Available at www.nakedcapitalism.com/2007/10/siv-bailout-plan-having-trouble.html, accessed July 28, 2009.
- . 2007b. "The SIV Bailout: The Search for Bagholders Is On." *Naked Capitalism* (October 17). 47. Available at www.nakedcapitalism.com/2007/10/siv-bailout-search-for-bagholders-is-on.html, accessed July 28, 2009.
- . 2008. "Mussolini-Style Corporatism in Action: Treasury Conference Call on Bailout Bill to Analysts (Updated)." *Naked Capitalism*, September 29. Available at www.nakedcapitalism.com/2008/09/mussolini-style-corporatism-in-action.html, accessed July 28, 2009.
- . 2009a. "The Fed's Bear Stearns Assets: 'No Prospect for A Profit.'" *Naked Capitalism* (February 5). Available at www.nakedcapitalism.com/2009/02/feds-bear-stearns-assets-no-prospect.html, accessed July 28, 2009.
- . 2009b. "Paulson Overpaid by \$78 Billion for TARP Bank Equity." *Naked Capitalism* (February 5). Available at www.nakedcapitalism.com/2009/02/paulson-overpaid-by-78-billion-for-tarp.html, accessed July 28, 2009.
- Solomon, D., and D. Paletta. 2008. "Treasury Hones Next Rescue Tool—Direct Investment in Bank Likely Would Be Designed to Spare Existing Shareholders." *Wall Street Journal* (October 13).
- Sorkin, A.R. 2008a. "8 Banks in Talks to Rescue Ambac." *New York Times Deal Book* (February 1). Available at <http://dealbook.blogs.nytimes.com/2008/02/01/8-banks-in-talks-to-rescue-ambac/>, accessed July 28, 2009.
- . 2008b. "How the Fed Reached Out to Lehman." *New York Times* (December 15). Available at www.nytimes.com/2008/12/16/business/16sorkin.html?scp=1&sq=How%20the%20Fed%20Reached%20Out%20to%20Lehman&st=cse, accessed July 28, 2009.
- . 2008c. "Paulson's Itchy Finger on the Trigger of a Bazooka." *New York Times Deal Book* (September 8). Available at www.nytimes.com/2008/09/09/business/09sorkin.html, accessed July 28, 2009.
- . 2008d. "U.S. Said to Offer Mitsubishi Protection on Morgan Deal." *New York Times Deal Book* (October 13). Available at dealbook.blogs.nytimes.com/2008/10/13/treasury-said-to-offer-mitsubishi-protection-on-morgan-deal.

- . 2008e. “What Money Can Buy: Influence.” *New York Times* (January 22).
- Sorkin, A.R., and V. Bajaj. 2008. “Shift for Goldman and Morgan Marks the End of an Era.” *New York Times* (September 21).
- Soros, G. 2008. “Paulson Cannot Be Allowed a Blank Check.” *Financial Times* (September 25).
- Stein, S. 2008. “McCain Camp Removed Bush Criticism from Wall Street Statement.” *Huffington Post* (September 18). Available at www.huffingtonpost.com/2008/09/18/mccain-camp-removed-bush_n_127489.html, accessed July 28, 2009.
- Stiglitz, J. 2009. “A Bank Bailout That Works.” *The Nation* (March 23). Available at www.thenation.com/doc/20090323/stiglitz.
- Summers, L. 2007. “Sovereign Wealth Funds Shake the Logic of Capitalism.” *Financial Times* (July 30).
- Swagel, P. 2009. “The Financial Crisis: An Inside View.” *Brookings Papers on Economic Activity* (Spring 2009). Available at www.brookings.edu/economics/bpea/~media/Files/Programs/ES/BPEA/2009_spring_bpea_papers/2009_spring_bpea_swagel.pdf, accessed July 28, 2009.
- Taylor, J. 2009. “The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong.” National Bureau of Economic Research Working Paper no. 14631.
- Temple-West, P. 2008. “Rescue Plan Could Boost Housing Bill.” *Bond Buyer* (July 15). Available at www.bondbuyer.com/article.html?id=20080714Y4LMICT1, accessed July 28, 2009.
- Tett, G., and P.J. Davies. 2007. “Out of the Shadows: How Banking’s Secret System Broke Down.” *Financial Times* (December 16).
- Tett, G., and K. Guha. 2007. “Banks Agree \$75 Bn Mortgage Debt Fund.” *Financial Times* (October 15).
- Todd, W. 1992. “History of and Rationales for the Reconstruction Finance Corporation.” *Federal Reserve Bank of Cleveland Economic Review QIV*: 22–35.
- Toobin, J. 2009. “Barney’s Great Adventure.” *New Yorker* (January 9). Available at www.newyorker.com/reporting/2009/01/12/090112fa_fact_toobin, accessed July 29, 2009.
- U.S. Congress. House. 2004. “The OFEHO Report: Allegations of Accounting and Management Failure at Fannie Mae.” Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, Committee on Financial Services. Available at http://commdocs.house.gov/committees/bank/hba97754.000/hba97754_of.htm.
- U.S. Congress. Senate. 2008. Chairman Ben S. Bernanke, Testimony Before the Committee on Banking, Housing, and Urban Affairs, September 23, 2008. Available at www.federalreserve.gov/newsevents/testimony/bernanke20080923a1.htm, accessed July 29, 2009.
- van Natta, D., and J. Becker. 2008. “Spitzer Fall Began with Bank Reports.” *New York Times* (March 13).
- Wall Street Journal Economics Blog. 2008a. “Fedspeak Highlights: Bernanke on House Prices, Lehman, More.” October 15. Available at <http://blogs.wsj.com/economics/2008/10/15/fedspeak-highlights-bernanke-on-lehman-house-prices-more/>, accessed July 29, 2009.
- Wall Street Journal. 2008b. “Fannie Mae’s Political Immunity.” July 29. Available at <http://online.wsj.com/article/SB121728651034091275.html>, accessed July 29, 2009.
- Wallison, P.J., and C. Calomaris. 2008. “The Last Trillion Dollar Commitment: The Destruction of Fannie Mae and Freddie Mac.” *Financial Services Outlook*. Washington,

- DC: American Enterprise Institute. Available at www.aei.org/docLib/20080930_Binder1.pdf, accessed July 29, 2009.
- Walsh, M.W. 2009. "A.I.G. Lists Banks It Paid with US Bailout Funds." *New York Times* (March 15).
- Weisman, J. 2008. "Figures in Both Campaigns Have Deep Ties to Mortgage Giants." *Washington Post* (July 17).
- Wolf, M. 2008. "No Alternative to Nationalization." *Financial Times* (September 8).