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Policy Advice and Actions during the Asian and Global Financial Crises

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It is certain that a healthy financial system cannot be built on the expectation of bailouts.
—US Treasury Secretary Lawrence Summers, January 2000

For at least a decade, few people thought that the "emerging-market" crises of 1997–98 had something to teach the United States, the world's richest economy and flagship democracy. The differences between Indonesia or the Republic of Korea and the United States are obvious: income level, financial system, political track record, and so on.

US policymakers did draw a number of important lessons from those emerging-market crises—for other emerging markets. Treasury Secretary Lawrence Summers outlined the main points in a high-profile lecture at the 2000 conference of the American Economic Association. Financial crises were the result of fundamental policy weaknesses: "Bank runs or their international analogues are not driven by sunspots: Their likelihood is driven and determined by the extent of fundamental weaknesses." It was more important to look at the soundness of the financial system than to simply count the total amount of debt: "When well-capitalized and supervised banks, effective corporate governance and bankruptcy codes, and credible means of contract enforcement, along with other elements of a strong financial system, are present, significant amounts of debt will be sustainable. In their absence, even very small amounts of debt can be problematic" (Summers 2000).

Companies should not be allowed to expect government support in a time of crisis: "It is certain that a healthy financial system cannot be built on the expectation of bailouts." And in a time of crisis, it was critical to take rapid action to clean up failing banks: "Prompt action needs to be taken to maintain

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financial stability, by moving quickly to support healthy institutions and by intervening in unhealthy institutions" (Summers 2000).

The best advice Summers offered was a principle famously associated with Mexican president Ernesto Zedillo during a crisis earlier in the decade: "Markets overreact, so policy needs to overreact as well."

These were all valid conclusions. In summary, they meant that emerging-market countries should become more like the United States, with strong legal institutions, transparent accounting, elaborate bank regulations, and an independent political system—or, more accurately, they should become more like the conventional image that we held of our own country. The idea that a major financial crisis of the type that ravaged emerging markets in the 1990s could originate in the United States was too preposterous to even be conceived of.

Two of the crucial ingredients—tight connections between economic and political elites and dependence on fickle short-term flows of foreign capital—seemed completely out of the picture.

Despite rising foreign debt due to growing trade imbalances, Summers' argument implied that the US superior financial system made high debt levels sustainable. More fundamentally, the implication was that political economy—the study of interactions between the political and economic systems—was only of first-order importance for developing and emerging-market countries.

In countries that had already "emerged," like the United States, economic questions could be studied without reference to politics. Instead, economic and financial policy presented only technocratic questions, which Summers compared to regulation of air travel: The jet airplane made air travel more comfortable, more efficient, and more safe, though the accidents were more spectacular and for a time more numerous after the jet was invented. In the same way, modern global financial markets carry with them enormous potential for benefit, even if some of the accidents are that much more spectacular. As the right public policy response to the jet was longer runways, better air traffic control, and better training for pilots—and not the discouragement of rapid travel—so the right public policy response to financial innovation is to ensure a safe framework so that the benefits can be realized, not stifle the change.

But in September–October 2008, when Lehman Brothers collapsed and panic seized the US economy, funds flooded out of the private financial system in what resembled aspects of a classic emerging-market crisis. In retrospect, it was clear that the run-up in housing prices of the 2000s was a bubble fueled by overoptimism and excess debt worthy of any emerging market.

The diagnosis of the International Monetary Fund's 1997 Korea letter of intent seemed to apply perfectly to 2008 America (substituting "household" for "corporate"): "Financial institutions have priced risks poorly and have been willing to finance an excessively large portion of investment plans of the corporate sector, resulting in high leveraging. At the same time, the dramatic decline in stock prices has cut the value of banks' equity and further reduced their net worth" (IMF 1997a).

And when the US federal government began rescuing major banks presided over by ultrawealthy executives—while letting smaller banks fail by the dozens—it began to seem as if our government was bailing out a very specific element of the American elite. In similar situations in the 1990s, the United States had urged emerging-market countries to deal with the basic economic and political factors that had created devastating crises. This advice was often perceived as arrogant (especially when the United States also insisted that crisis-stricken countries open themselves up further to American banks), but the basic logic was sound: When an existing economic elite has led a country into a deep crisis, it is time for change. And the crisis itself presents a unique, but short-lived, opportunity for change.

As in the Republic of Korea a decade before, a new president came to power in the United States in the midst of the crisis. And just like Kim Dae-Jung in the Republic of Korea, Barack Obama had campaigned as the candidate of change. Yet far from applying the advice it had so liberally dispensed to others, the US government instead organized generous financial support for its existing economic elite, leaving the captains of the financial sector in place.

What happened and why? This chapter compares and contrasts advice given to Asia during 1997–98 with what the United States actually chose to do in the crisis of 2008–09 and the financial reform phase that followed.

Has best practice for dealing with financial crises changed or is it one set of rules for emerging markets and another for the United States? And if recent actions by the US authorities have increased the degree of moral hazard and enshrined some version of "too big to fail" beliefs, what does that imply for global financial stability—and for Asia—looking forward?

The Asian Financial Crisis

In the mid-1990s, financial crises in less rich parts of the world were only too common. Mexico had a major meltdown in 1994–95, the Russian Federation struggled with volatility caused by financial inflows and outflows through 1996, and banking systems in the Czech Republic, the Ukraine, and other former communist countries struggled with severe shocks. Then in 1997–98, what seemed like the mother of all international financial crises swept from Thailand through Southeast Asia to the Republic of Korea, Brazil, and the Russian Federation. The contagion even spread to the United States via Long-Term Capital Management (LTCM), a relatively large and inappropriately named hedge fund.

In the United States, economists and policymakers took two main lessons from these crises. The first was that other countries needed to become more like the United States. Both directly and through their influence over the IMF, the key architects of US economic policy—Treasury Secretary Robert Rubin, Deputy Treasury Secretary Lawrence Summers, and Federal Reserve Chairman Alan Greenspan—pressed crisis-stricken countries to liberalize their financial systems, increase transparency in their political systems, and model the governance of their corporations on the Anglo-American system (with a greater role for mutual funds and other institutional investors). For their pains, the Rubin-

Summers-Greenspan trio was featured on the cover of *Time* magazine as the "Committee to Save the World."[1]

The second lesson was that while the US economy was not completely immune to financial panics, any real damage could be contained through a few backroom deals. At the urging of the Federal Reserve, LTCM was essentially bought out and refinanced by a group of private sector banks, preventing a major crisis; a series of interest rate cuts by the Fed even kept the stock market bubble growing for another two years. The mature US financial system, it seemed, could withstand any infection that might spread from the developing world, thanks to its sound financial system and macroeconomic management.

Crises were for countries with immature economies, financial systems, and political systems that had not yet achieved long-term prosperity and stability—countries like the Republic of Korea, Indonesia, and the Russian Federation. These countries had three main characteristics that created the potential for serious instability in the 1990s: high levels of debt, cozy relationships between the government and powerful individuals in the private sector, and dependence on volatile inflows of capital from the rest of the world. Together, these ingredients could lead to economic disaster.

Anatomy of a Crisis

In the 1950s, the Republic of Korea was one of the most economically backward countries in the world, ravaged by war and a half-century of Japanese oppression. No outside observer would have regarded it as a candidate for rapid economic development. By 1997, however, the Republic of Korea had arrived—literally, having joined the club of rich countries, the Organisation for Economic Co-operation and Development (OECD), in 1996.[2] The country's leading companies were fast building global reputations in a wide range of technology-intensive sectors, including shipbuilding, computer chips, and consumer electronics. Top family-owned business groups (*chaebol*) such as Samsung, Daewoo, Hyundai, and LG were increasingly prominent global brands. The country also benefited from a stable political system, with relatively open elections dating back to 1987.

However, the Republic of Korea exhibited some of the classic weaknesses that produce emerging-market crises. Economic activity was dominated by the giant *chaebol*, whose weak governance structures did little to constrain the whims of their founders. Hostile takeovers were essentially impossible due to a web of local rules. Institutional shareholders did not effectively monitor or control management (Joh 2003). The *chaebol* were also deeply in debt: Samsung's debt

1. *Time*, February 15, 1999, www.time.com/time/covers/0,16641,19990215,00.html (accessed on July 1, 2013).

2. The Republic of Korea was a leading example of what the World Bank famously and perhaps prematurely termed "the East Asian Miracle" (World Bank 1993).

was 3.5 times its equity, Daewoo's was 4.1 times, and Hyundai's was 5.6 times.[3] Leverage (the ratio of debt to equity) in the corporate sector was more than twice that of the United States.[4]

In earlier decades, the *chaebol* had been kept in check by state-owned banks that had carefully allocated credit, limiting the ability of the system to get out of control.[5] By the 1990s, however, the tables had turned. The *chaebol* had grown big enough to become a political force of their own. With their newfound political influence, they could dictate terms to the banks, making it possible to run up debt cheaply. Because the Republic of Korea belonged to the OECD, its banks could easily borrow short-term money overseas and make longer-term loans to the corporate sector. Alternatively, the *chaebol* could borrow directly from foreign banks that were now eager to lend to the Republic of Korea's booming economy.

The availability of cheap short-term debt led the *chaebol* to splurge on long-term capital investments. The founder of Samsung decided that he needed to add an automotive wing to his already far-flung group—an expensive bet that turned out badly. The founder of Daewoo expanded aggressively into the former Soviet bloc, building manufacturing plants from Eastern Europe to Central Asia, and also placed a big bet on cars. Korean manufacturers, led by Samsung and LG, invested heavily in DRAM chip production capacity, driving down margins. These questionable investments, made possible by cheap borrowing, caused returns on capital to fall, making it harder for the *chaebol* to repay their ever increasing debts.

Trouble first appeared in 1996 and early 1997 among smaller *chaebol* that had made risky bets with borrowed money, attempting to move up to the top tier. Hanbo Group (based on a major steel operation), the number 14 *chaebol* in 1995,[6] defaulted on its debts in January 1997. Kia, the carmaker that was investing heavily to break into the US market, was also in serious financial trouble (Kirk 2001, chapter 8). The government stepped in with various rescue packages, typically providing subsidies or other forms of assistance so that a relatively healthy company could take over a failing company (Haggard 2000, 56–57). The largest firms enjoyed implicit government guarantees—the conventional assumption that the government would not let them go under—which helped protect them from failure (Joh 2001). Still, by the summer of 1997, six

3. Calculated from National Information Credit Evaluation data in Gormley, Johnson, and Rhee (2010).

4. In 1997 the average debt-equity ratio of Korean firms far exceeded that of other economies (the Republic of Korea, 396 percent; United States, 154 percent; Japan, 193 percent; and Taipei, China, 86 percent). Se-Jik Kim (2000) has slightly different data and puts the debt-equity ratio of Korean firms at 350 percent in 1996, with most of the debt being bank loans. There is no disagreement that the Korean corporate sector was one of the most highly indebted in the world.

5. See Krueger and Yoo (2002). For more background on *chaebol* development, see Kim (1997).

6. Joh (2003, table 10) reports *chaebol* rankings for each year from 1993 through 1997 from the Korea Fair Trade Commission. Based on total assets belonging to firms in the same *chaebol*, Hanbo was number 14 in 1995, up from number 28 in 1994.

of the 30 largest business groups had gone bankrupt (Joh 2001; Baek, Kang, and Park 2004).

The Korean model and its high short-term debt levels seemed sustainable as long as economic prospects looked strong and investors thought that companies could pay them back. But financing long-term investments with short-term foreign debt creates a major vulnerability: If investors start to worry about getting repaid, they will try to pull out their money (refusing to roll over loans), but because companies put that money in long-term investments they will not be able to pay it back on demand. In this situation, fears that a country is in trouble can become self-fulfilling as foreign investors scramble to pull their money out first, triggering the defaults that they were afraid of.

For the first nine months of 1997, the Korean economy grew at an impressive rate of around 6 percent.[7] In July, however, the Asian financial crisis broke out in Thailand as a crisis of confidence caused a collapse in the local currency, the baht. Overleveraged companies saw their debts double practically overnight—because their debts were in foreign currencies, the amount they owed doubled when the value of the Thai baht fell in half—and were forced to default, causing mass bankruptcies and layoffs. Indonesia followed in August as its currency also collapsed and domestic companies failed.

At first, investors assumed that the Republic of Korea was sufficiently developed to withstand the storm, but nervousness was spreading outward from Southeast Asia. On October 23, 1997, the Hong Kong, China stock market declined sharply, rattling investors. Then Standard & Poor's downgraded Korean sovereign and corporate debt, stoking fears that the Republic of Korea would be the next country to be hit by the crisis.[8] Financial markets started to think again of the Republic of Korea as an emerging market subject to high economic volatility, which made its short-term debt levels seem excessive. Foreign banks became reluctant to roll over their loans and new international financing became hard to obtain. The currency depreciated sharply, falling from 886 won per dollar in July to 1,701 won per dollar in December. Everyone with dollar debts was hit hard, since now it took twice as many won to cover the same dollar debt payments.[9]

The Government of the Republic of Korea attempted to stabilize the situation, using its foreign exchange reserves to help state-owned banks pay off their foreign debts and to slow down the depreciation. But it could not stop the downward spiral—as the currency fell, it became harder for companies to repay foreign debts, and as some fell behind on repayments, creditors became

7. See IMF (1997a) for details of the Republic of Korea's economic performance immediately prior to the crisis.

8. Standard & Poor's and other credit rating agencies rate bonds issued by governments and companies. The ratings are supposed to reflect the likelihood that the issuer will pay off its debts. A rating downgrade indicates that the agency is losing confidence in the issuer.

9. For a timeline of events, see Congressional Research Service (1998). For more detail on the banking dynamics, see Delhaise (1998).

more reluctant to roll over the debts of others.[10] The stock market declined sharply and credit collapsed as banks, unable to pay their own foreign debts, reacted by cutting off loans to domestic companies, which made it harder for companies to produce the exports they needed to pay off their debts.[11] The economy declined sharply, leading to layoffs and street protests.

In this kind of situation, the IMF is supposed to help orchestrate a rescue, and the Fund did provide financial support with some sensible conditions. The IMF emergency lending program put limits on bailouts to the corporate sector, insisted that support to the banking system become transparent and that insolvent banks themselves be taken over, and outlined changes in the governance of *chaebol* to limit overinvestment. Many of these ideas were strongly supported by Korean reformers working under new President Kim Dae-Jung, who wanted to take advantage of the *chaebol's* weakness to push through reforms that would make future growth more sustainable, in part by undermining the *chaebol's* economic clout in order to constrain their political power.[12]

But the IMF program also contained three striking and controversial dimensions. First, consistent with the view of the US Treasury, it insisted on tightening monetary policy and, despite the strength of the government's balance sheet, did not condone an increase in government spending to offset the contraction in the private sector.[13] As a result, the Republic of Korea was unable to cushion its economic downturn with the type of stimulus package and low interest rates deployed by the United States and most developed countries in 2008–09.

Second, in the debt renegotiations with foreign lenders, in which the US Treasury was closely involved (Blustein 2001, chapter 7), there was no write-down of the amount owed by Korean banks; although the United States did help force creditors to roll over their loans, the amount they were owed did

10. According to Joh (2003, 292): "By the end of 1997, 6.7 percent of all loans were nonperforming loans, totaling 64.7 trillion won (over $45.6 billion).... By June 1998, over 10 percent of all loans were nonperforming loans. These nonperforming loans severely weakened many banks and eventually provoked the liquidity crisis."

11. See the IMF's first letter of intent (IMF 1997a). Further reforms affecting the financial sector were included in a second letter of intent on December 24, 1997, which allowed the Republic of Korea to access further IMF funding (IMF 1997b). Paul Blustein (2001, chapter 7) explains the US role in arranging this additional support, which included official loans and an agreement that foreign banks would not demand immediate repayment of their loans to the Republic of Korea.

12. The IMF agreement was negotiated in the run-up to the presidential election, but the incoming president clearly expressed his support at critical moments and his team implemented the reforms. See Blustein (2001, chapter 7).

13. In such situations it is hard to determine where US suggestions leave off and IMF advice begins. The first deputy managing director of the IMF at the time, Stanley Fischer, was appointed at the behest of the Clinton administration. Fischer, a leading academic authority on macroeconomics, was in charge of economic strategy at the IMF and in that capacity consulted on a frequent basis with Larry Summers of the US Treasury Department. On this relationship and other connections between Treasury and the IMF, see Blustein (2001, chapter 7).

not change. So while Korean companies were left to struggle, foreign investors were effectively bailed out of their poor lending decisions, giving them no incentive to avoid the same mistakes in the future.[14]

Third, the IMF insisted that the Republic of Korea needed to become more open to foreign capital, quickly. Paragraph 31 of the letter of intent between the Republic of Korea and the IMF reads:

> To increase competition and efficiency in the financial system, the schedule for allowing foreign entry into the domestic financial sector will be accelerated. Foreign financial institutions will be allowed to participate in mergers and acquisitions of domestic financial institutions in a friendly manner and on equal principles. By mid-1998, foreign financial institutions will be allowed to establish bank subsidiaries and brokerage houses. Effective immediately foreign banks will be allowed to purchase equity in domestic banks without restriction, provided that the acquisitions contribute to the efficiency and soundness of the banking sector. (IMF 1997a)

The premise was that the crisis had not occurred because the Republic of Korea was too exposed to volatile flows of foreign capital, but because it was not open enough. To many observers, it looked like the IMF and the United States were taking advantage of the crisis to push forward their program of global financial liberalization.[15]

While every crisis is unique, the Republic of Korea was in many ways typical of the experiences of emerging markets in the 1990s. Big, well-connected companies expanded rapidly by taking on large amounts of cheap debt, unconstrained by the forces that should prevent irresponsible corporate behavior in a capitalist economy. Outside shareholders had little influence over powerful founders, and creditors lent money freely, assuming that the leading *chaebol* were too important for the government to let them go bankrupt.[16] Even though state-owned banks nominally controlled the flow of capital, tight relationships between the private sector and the government meant that the *chaebol* had little to fear. Ultimately political factors lay behind the economic crisis.

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14. See Louis Uchitelle, "Crisis in South Korea: The Lenders; A Bad Side of Bailouts: Some Go Unpenalized," *New York Times*, December 4, www.nytimes.com/1997/12/04/business/crisis-in-south-korea-the-lenders-a-bad-side-of-bailouts-some-go-unpenalized.html (accessed on July 1, 2013).

15. Jagdish Bhagwati (1998) argues that a Wall Street–Treasury complex pushed countries into liberalizing their capital inflows in a way that created excessive risks. Rawi E. Abdelal (2006) argues that leading European politicians and bureaucrats also pushed this line—including Michel Camdessus, IMF managing director at the time of the Korean crisis. Blustein (2001), based on extensive interviews with the protagonists, concludes that the United States pushed the Republic of Korea directly and through the IMF to open up to direct investment by foreign investors in financial services.

16. Specific ways in which *chaebol* faced fewer financing constraints are explored in Shin and Park (1999).

Friends and Oligarchs

This central role of politics is common to many emerging-market crises. Political connections were even more central in Indonesia, where the late President Suharto's goals were some combination of maintaining order, improving the economic welfare of ordinary people, and enriching his own inner circle.

Suharto adopted neither a communist-style planned economy nor an "anything goes" free-market system. Instead, he cultivated a small group of private business associates whose family businesses became the backbone of the economy. Aided by the president and his family, who opened doors for their friends (and shut them for their competitors), these entrepreneurs built factories, developed cities, and learned how to export raw materials, agricultural products, and simple manufactured items to the rest of the world. As in many other low-income countries in the past half-century, economic development was dominated by a small economic elite selected because of their personal ties to the ruling family, which traded favors for both political support and cold, hard cash—a system known as "crony capitalism."[17] For example, Indofood became one of the largest conglomerates in the country, largely because of a longtime personal friendship between its founder, Liem Sioe Liong, and Suharto.[18] Suharto's wife, Siti Hartinah Suharto, known as Madame Tien, was involved in so many business deals that she was referred to by critics as "Madame Tien Percent" for her alleged fees.[19] Suharto's children also cut themselves into many major deals. His daughter was involved in the largest taxi company, one son tried to build cars, and another son was a financial entrepreneur.[20]

For a long time, the system worked reasonably well. Annual income per capita grew from $1,235 in 1970, just after Suharto came to power, to just over $4,545 by 1997.[21] Indonesia was still a poor country with pervasive poverty,

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17. The extent to which families run businesses around the world is documented in La Porta, Lopez-de-Silanes, and Shleifer (1999). For Asia, see Claessens, Djankov, and Lang (2000). For the prevalence of political connections between powerful businesspeople and government, see Faccio (2006). Specific countries for which we have detailed data on the role of powerful business interests and their political clout include Thailand (Bertrand et al. 2008); Malaysia (Johnson and Mitton 2003, Gomez and Jomo 1997); and Pakistan (Khwaja and Mian 2005).

18. Liem headed the Salim Group. Bob Hasan, head of the Numsamba group, was another longtime Suharto friend and business ally. See George J. Aditjondro, "Suharto & Sons (And Daughters, In-Laws, & Cronies)," *Washington Post*, January 25, 1998, C1, www.washingtonpost.com/wp-srv/business/longterm/asiaecon/stories/sons012598.htm (accessed on July 1, 2013).

19. Marilyn Berger, "Suharto Dies at 86; Indonesian Dictator Brought Order and Bloodshed," *New York Times*, January 28, 2008, www.nytimes.com/2008/01/28/world/asia/28suharto.html (accessed on July 1, 2013).

20. Ray Fisman (2001) reports on the nature and value of political connections in Indonesia. Michael Backman (2001, chapter 14) details how the Suharto regime interacted with the private sector. On how subsidies were provided, see McIntyre (2000). See also Schwarz (1994, chapter 6).

21. Real GDP per capita (Constant Prices: Chain Series) are from Penn World Table Version 6.3 (Heston, Summers, and Aten 2009). This measure adjusts incomes for their purchasing power, a

but 30 years of economic growth had created higher standards of living for millions of people. The country was regarded as a development success story by the World Bank and by foreign investors, who supplied much of the capital needed to build factories, roads, and apartment buildings. Everyone knew that the flow of capital was controlled by Suharto's family and friends, but this was actually attractive to investors, who quite reasonably thought it safer to lend money to people with strong political connections. The increasing availability of foreign capital fueled economic growth.

But easy credit also fueled overinvestment and increasing risk taking, especially by well-connected businesspeople who assumed they would be bailed out by their powerful friends if things turned out badly. And over time, success in business became less a question of innovation and sound management than of using political connections to obtain government favors and subsidies. The result was an economic boom that could be sustained only by ever increasing amounts of foreign debt, which came crashing down in 1997.

The Russian Federation provided another example of the dangers created by a well-connected economic elite with easy access to foreign capital. With the collapse of communism in 1991, many former Soviet republics attempted to build capitalist economies with independent private sectors. In the Russian Federation, with its vast reserves of oil and gas, privatization of state enterprises provided a direct route to creating the major companies that would be the foundation of the economy. The reformers in the government of President Boris Yeltsin initially planned to create companies with a large number of relatively small shareholders. But in 1995, with Yeltsin facing a difficult reelection campaign the next year, they allowed a small group of powerful businessmen to buy large stakes in major state enterprises cheaply. In return, the businessmen provided crucial financial and media support to Yeltsin during the campaign. This was the creation of the Russian oligarchs, who dominated the economy in the 1990s.[22]

The new power of the oligarchs, however, did not translate into strong economic growth or fiscal stability for the government, whose tax revenues depended heavily on the volatile price of oil. With the Russian Federation needing to keep social spending at a reasonable level to avoid widespread protests, the IMF (and the United States) encouraged the Russian government to open up the country to capital so that foreigners could lend enough money to bridge the government into more prosperous times—the idea being that the Russian Federation could pay back those loans with future economic

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method that has limitations but is reasonably accurate for assessments over long periods of time (Johnson et al. 2009).

22. On Russian reform and the oligarchs, see Åslund (2007), Freeland (2000), and Hoffman (2002). For early accounts of privatization and other reforms before the rise of the oligarchs, see Blasi, Kroumova, and Kruse (1997) and Gustafson (1999). For a broader assessment of Russian reform, emphasizing that there were no good alternatives, see Treisman (2000). On powerful groups controlling the state in the former Soviet Union, see Hellman, Jones, and Kaufmann (2003).

growth.[23] Private capital could also help restructure the oil and gas industry, develop new fields, and fund other productive investment projects that had been neglected under communism.

Although foreign investors were initially skeptical, their fears diminished as the managers of the big Russian companies demonstrated that they could run companies and service debts. This allowed their companies to raise more capital, acquire other companies, and embark on ambitious investment plans that generated jobs, increasing their political importance. Growing political support meant better access to lucrative contracts, tax breaks, and subsidies. And as in other emerging markets, foreign investors were perfectly happy to lend money to people with the implicit backing of their national governments, even if that backing had the faint whiff of corruption.

However, the Russian Federation's fragile economy was vulnerable to the financial crisis that began in Asia in 1997. The resulting slowdown in global economic growth caused drops in the prices of the commodities that the Russian Federation exported, most notably oil, hurting both company profits and government tax revenues. By mid-1998, both the private sector and the government were in serious trouble because they had large short-term debts to global banks and foreign investors, and those debts were magnified by the falling value of the ruble. Even an emergency IMF loan in July 1998 could not bail the government out of its problems, and in August the Russian Federation was forced to default on its foreign debts, causing massive capital flight out of the country (Åslund 2007, chapter 5).

Seats on the Lifeboat

Financial crises have political roots. Although severe crises are generally preceded by a large buildup of debt, that appetite for debt is the product of political factors, most often including close relationships between the economic and political elites.

The downward spiral that occurred in the Republic of Korea, Indonesia, the Russian Federation, and other countries hit by the 1997–98 crisis was remarkably steep. When foreign credit disappears, economic paralysis ensues; the government is forced to use its own foreign-currency reserves to pay for imports, service debt, and cover losses in the private sector. If the country cannot right itself before defaulting on its own government debts, it risks becoming an economic pariah.

23. It is difficult to separate the influence of the IMF and the US Treasury Department. The senior IMF staff member responsible for the Russian Federation makes it clear that the G-7 (the group of seven large industrial nations, within which the United States has a leading voice) agreed with the IMF's overall direction. If anything, the G-7 preferred a bigger budget deficit and, by implication, more capital inflows to the short-term government debt market. See Odling-Smee (2004). The general US preference for capital account liberalization is clear in its subsequent free trade agreements with Singapore and Chile, as well as in its negotiations over the People's Republic of China's accession to the World Trade Organization.

As the currency collapses, companies suspend payments on their debts, unemployment rises sharply, and the reality on the ground becomes nasty. Leading businesspeople—often selected for their personal relationships or political skills rather than their management ability—focus on saving their most prized possessions. Facing shorter time horizons, executives care less about the long-term value of their firms and more about their friends and themselves. As George Akerlof and Paul Romer (1993, 2) wrote in their classic paper entitled "Looting," businesspeople will profit from bankrupting their own firms when "poor accounting, lax regulation, or low penalties for abuse give owners an incentive to pay themselves more than their firms are worth and then default on their debt obligations." In the Russian Federation, as in most emerging-market crises, there was a sharp increase in "tunneling"—borderline illegal ways for managers and controlling shareholders to transfer wealth from their businesses to their personal accounts.[24] Boris Fyodorov, a former Russian minister of finance who struggled against corruption and the abuse of authority, argued that confusion only helps the powerful[25]—when there are complicated government bailout schemes, multiple exchange rates, or high inflation, it becomes difficult to monitor the real market prices of assets and protect the value of firms.[26] In the extreme confusion caused by a crisis, insiders can take the money (or other valuables) and run, leaving banks, industrial firms, and other entities to collapse. Alternatively, confusion means that government officials have extraordinary discretion to save firms or let them fail. Describing an earlier financial crisis, Carlos Diaz-Alejandro (1985, 12) wrote,

> The ad hoc actions undertaken during 1982–83 in Chile to handle the domestic and external financial crisis carry with them an enormous potential for arbitrary wealth redistribution.... Faith in orderly judicial proceedings to clear up debts and claims on assets appeared to be quite low; stories abounded of debtors fleeing the country, and of petty and grand financial chicanery going unpunished.

From a macroeconomic perspective, the government needs to restore the confidence of foreign investors. Large government deficits (the Russian Federation) require cuts in government spending and higher taxes; large private sector debts (the Republic of Korea and Indonesia) need to be resched-

24. The classic techniques involve managers transferring assets (below market price) to, or buying inputs (above market price) from, companies they control. See the discussion of Gazprom in Atansov, Black, and Conticello (2008). These phenomena are also seen in high-income countries (Johnson et al. 2000a).

25. See Boone and Fyodorov (1996). Johnson et al. (2000b) presents more general evidence of tunneling during the 1997–98 emerging-market crises.

26. On the appropriation of state property upon the fall of the Soviet Union, see Johnson and Kroll (1991). There was a great deal more theft under the smokescreen created by very high inflation (Åslund et al. 1996).

uled; and to attract capital, interest rates need to be higher, even though this hurts the local economy.

But responding to crises also has a political dimension. The IMF is ready to lend money, but only if it (along with its backers among the major industrial countries) believes that the government is cutting back on the cozy relationships with economic elites that helped produce the crisis.[27] This means less use of national reserves to cover the private sector's debts, less bailout money for the banking system, and fewer subsidies all around. Essentially, the government needs to choose whom to save; it has to squeeze at least some of the oligarchs. Of course, this is rarely the strategy of choice among emerging-market rulers, whose reflex is to be generous to their old friends (and supporters) when the going gets rough, even coming up with innovative forms of subsidies, such as guaranteeing the debts of private companies. Instead, it is politically easier, at least in the short term, to inflict pain on the working class through layoffs, reduced government services, and higher taxes.

Eventually, however, at least some in the elite have to lose out, both because there are not enough foreign-currency reserves to cover everyone's debts and because external lenders (first among them the IMF) demand some sign that the excessive risk-taking that produced the crisis is being punished. In both Thailand and Indonesia in 1997, the real fight was over which powerful families would lose their banks. In Thailand, the issue was handled relatively smoothly: More than 50 Thai "finance houses" (lightly regulated financial intermediaries) were shut down and some of the country's largest banks were taken over by the government. In Indonesia, however, the question was whether the parliamentary government would close the banking operations belonging to one of President Suharto's sons. In the struggle that ensued, the son's bank first lost its license to operate, but then appeared to have obtained another license with the suspected aid of the presidential palace. In the end, the administration did not have sufficient political will or power to stand up to the ruling family, undermining IMF (and US) support and deepening the economic crisis.[28] In

27. The IMF's voting structure is determined by countries' quotas (their potential financial commitments to the IMF), which imperfectly reflect their economic and financial power. The G-7 and its close allies control a majority of the votes at the IMF and the United States is the only country that has an effective veto over any major policy decision. It is practically impossible for the IMF to make a loan to any country without the support of the US administration.

28. The Indonesia letter of intent, dated October 31, 1997, promised to clean up the banking system (IMF 1997c). In its retrospective study, the IMF's Independent Evaluation Office stressed that closing 16 banks in November 1997 was supposed to "imply a new way of doing business. However, several factors undermined the credibility of this policy. Most importantly, the President's family challenged the closures. His son arranged for the business operations of Bank Andromeda to be shifted to another bank in which he had acquired an interest. The President's half-brother initiated a legal challenge to the closure of his bank. The public also saw some inconsistency in the closure of the 16 banks when it was widely—and correctly—believed that many other banks were in similar condition.... Under pressure from the President, the Minister of Finance soon reversed his previously announced tough position, saying there would be no more bank closures" (IMF 2003, 75). See also Haggard (2000, 66–67). In January 1998, the Indonesian government was supposed

the Republic of Korea, the confrontation was between the government and the largest *chaebol*, some of which had quite blatantly broken the law. After a series of showdowns—in which Daewoo threatened to default and political forces rallied to its assistance—the government won, and the hugely powerful Daewoo group went through bankruptcy and restructuring.

It is unheard of that all the oligarchs lose out, since the government can easily claim that they are essential to the domestic economy; some typically become even more powerful by absorbing their rivals, as happened in the Republic of Korea, where Hyundai acquired the failing Kia. As the oligarchs in Yeltsin's Russian Federation found out in 1998, it's a game of musical chairs; the postcrash government has enough foreign exchange reserves to help some big companies pay their debts, but not all of them. Usually the biggest of the big—the top *chaebol*, Suharto's close business allies (under the protection of Bacharuddin Jusuf Habibie, who succeeded Suharto as president), and the large Russian natural resource companies (such as Gazprom)—survive and prosper thanks to generous bailouts and other forms of government support. It's their smaller competitors that are cut adrift, while ordinary people suffer through government austerity measures. Of course, the "dispossessed" oligarchs fight back, calling in political favors or even trying subversion—including calling up their contacts in the American foreign policy establishment, as the Ukrainians did with some success in the late 1990s (IMF 2005). But the aftermath of an emerging-market crisis typically leads to a shakeout of the oligarchy, with political power often concentrated in a smaller number of hands.

However, another common feature of emerging-market crises is that they do not last forever. Even while outside observers are still despairing over corporate governance, macroeconomic management, and crony capitalism, growth picks up again. In 1999, the Korean economy grew by 11.1 percent; the Russian recovery took slightly longer, with growth of 4.5 percent in 1999 and 11 percent in 2000; and while growth took longest to resume in Indonesia, by 2000 its economy was expanding at close to 4 percent per year.[29] A depreciated real exchange rate boosts exports, widespread unemployment reduces the cost of labor, and companies with rescheduled debts or new companies with clean books can take advantage of both higher sales and lower costs. Surviving businesses can use their increased market shares and reaffirmed political connections to grow bigger and stronger. The oligarchs who run them can become even wealthier; Carlos Slim bought up companies on the cheap after the 1982

to pass a budget that had a surplus equal to 1 percent of GDP. Instead it proposed a budget that appeared to be balanced (with no surplus), which was interpreted as a further sign that Suharto was not willing to take resources away from his family and associated patronage networks. The initial critical reaction from the IMF and the United States helped trigger a further depreciation of the Indonesian rupiah (Reisenhuber 2001, 207). More companies struggled to pay their debts and had to cut costs, contributing to social unrest.

29. Growth rate of real GDP chain per capita from Penn World Table Version 6.3 (Heston, Summers, and Aten 2009).

crisis in Mexico and used the boom-bust cycle of the early 1990s (and his strong political connections) to consolidate his dominant position in telecommunications—becoming one of the world's richest men in the process.[30]

Reform?

Growth can come back even without any real fundamental reforms. Foreign investors learn exactly the wrong lessons from a crisis: They learn that when push comes to shove, the IMF will protect them against the consequences of their bad investments; and they learn that it's always best to invest in the firms with the most political power (and hence the most assurance of being bailed out in a crisis), perpetuating the pattern of crony capitalism. As a result, foreign capital flows back, and emerging markets can repeat the boom-bust-bailout cycle (or what has been called the "doom loop"[31]) for a long time, perhaps indefinitely.

But such economies can also reform. When economic elites capture disproportionate political power—the definition of an oligarchy—it is not just bad for democracy, it is also bad for long-term economic growth. Although oligarchies may be consistent with episodes of growth, they are not good at supporting the development of new entrepreneurs and the commercialization of new technologies (Acemoglu 2008), and they contribute to exaggerated economic cycles that end in debilitating crises. Societies with highly unequal power structures did not industrialize early in the 19th century and generally did not catch up to the income levels of the more prosperous countries in the 20th century.[32] Nor did they become more democratic. This is not surprising—entrenched economic elites have an interest in limiting competition from new ideas and new people and no incentive to level any playing fields. Political elites, dependent on those economic elites for support, are unlikely to adopt policies to increase competition. Without a business environment that promotes innovation and competition from new entrants—like the one enjoyed by the United States early in the 19th century—periodic episodes of debt-fueled expansion do not add up to sustained economic growth.

Fundamental reform requires more than rearranging the seats on the government lifeboat; it requires weakening the economic and political power of the oligarchs and creating a healthier, more competitive economic system. This is only possible for a government with an independent base of support and legitimacy strong enough for it to challenge the economic elites.

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30. See David Luhnow, "The Secrets of the World's Richest Man: Mexico's Carlos Slim Makes His Money the Old-Fashioned Way: Monopolies," *Wall Street Journal*, August 4, 2007, http://online.wsj.com/article/SB118615255900587380.html (accessed on July 1, 2013).

31. The term "doom loop" is from Piergiorgio and Haldane (2009).

32. See Acemoglu et al. (2008) and Acemoglu, Johnson, and Robinson (2005). Weaker institutions are also associated with greater macroeconomic instability, including more crises and worse crises. See also Acemoglu et al. (2003).

The Republic of Korea had the advantage of a serious reformer, Kim Dae-Jung, winning the presidency just as the crisis hit. Kim had fought for years against the previous regime and its backers and was deeply skeptical of the *chaebol* and the claim that they needed special treatment. He had numerous allies, including the prominent People's Solidarity for Participatory Democracy, which lobbied hard for corporate governance reform as a way to constrain the *chaebol*, strengthen the economy, and protect democracy.[33] Big companies such as SK Telecom and Samsung Electronics were forced to become more transparent to protect minority shareholders against looting. The government also pushed through reforms limiting the power of the *chaebol*: They were no longer allowed to cross-guarantee debts within groups, investments across companies within a *chaebol* were curtailed, large companies were required to have outside directors, financial disclosure requirements were strengthened, and *chaebol* control over the nonbank financial sector was restricted.[34]

Although the reforms did not solve all of the problems presented by economic concentration, they did lead to a solid economic recovery. The rapid expansion of 1999 and 2000 was followed by annual growth of 4 to 5 percent in the early 2000s—a respectable rate for a country as developed as the Republic of Korea, though slower than during the pre-1997 period. There is an active debate in the Republic of Korea over whether the postcrisis corporate and political reforms went far enough, because the largest *chaebol*, including Samsung, LG, and SK, still dominate the economic landscape. But the reforms were a step in the right direction, because they addressed the core problem that led to the crisis—concentration of economic power in an elite with the ability to influence the political system.

Ultimately, ending the doom loop of debt-fueled bubbles and wrenching crises takes more than an IMF bailout package and a new minister of finance with a PhD from an American university.[35] Since emerging-market crises are the result of political conditions, sustained growth requires an end to the close relationships between economic and political elites that distort the competitive environment and encourage the misallocation of capital. Making this transition successfully is one of the central challenges for all emerging-market economies.

33. See "Jang Ha Sung, Shareholder Activist, South Korea," *BusinessWeek*, June 14, 1999, www.businessweek.com/1999/99_24/b3633089.htm (accessed on July 1, 2013).

34. See Haggard (2000, chapter 4), Yanagimachi (2004), and Mishkin (2006). Mishkin, a governor of the Federal Reserve from 2006 to 2008, argues that further capital market liberalization is the key to growth in emerging markets.

35. In the 1990s, Argentina tried a version of the Russian strategy—capital inflows that supported a budget deficit and allowed a boom in private sector investment. This was the brainchild of Domingo Cavallo, a distinguished economist with a PhD from Harvard, and it received strong support from the IMF (and the United States) even as the approach ran into trouble. Failure to deal with underlying political issues, including the inability to effectively tax powerful business elites, ended in a collapse of the currency, a banking crisis, and defaults on Argentina's public and private debt in 2001–02. See Blustein (2005) and Mussa (2002).

The United States Is Different

But what does any of this have to do with the United States, the world's richest economy and oldest advanced democracy? Our most ingrained beliefs run directly counter to the idea that a rich, privileged oligarchy could use government relationships in the United States to enrich itself in the good times and protect itself in the bad times. Our economic system is founded on the notion of fair competition in a market free from government influence. Our society cherishes few ideals more than the notion that all Americans have an equal opportunity to make money or participate in government. There is no construct more important in American political discourse than the "middle class."

The United States was not untouched by the emerging-markets crisis of 1997–98. In 1998, the most prestigious hedge fund in the world was Long-Term Capital Management, founded only four years before in Greenwich, Connecticut, by a legendary trader, two Nobel Prize–winning economists, and a former vice chair of the Federal Reserve, among others.[36] When the crisis broke out, LTCM had about $4 billion in capital (money contributed by investors), which it had leveraged up with over $130 billion in borrowed money (Lowenstein 2000, 159). It bet that money not on ordinary stocks or bonds but on complex arbitrage trades (betting that the difference between the prices of two similar assets would vanish) and directional trades (for example, betting that volatility in a given market would decrease).

However, LTCM's models were based on data gathered under ordinary market conditions. When the financial crisis spread and various markets seized up, it began losing money on many of its major trades, and its capital fell to less than $1 billion. But the real problem was that with LTCM on the verge of becoming insolvent, the banks and hedge funds that had lent it money (either directly or through derivatives transactions) were at risk of losing billions of dollars of their own. Fearing the damage an LTCM failure could do to the financial system as a whole, the Federal Reserve Bank of New York brought together representatives from the largest New York banks and pressured them to find a solution. In September 1998, the banks put in $3.6 billion of new money in exchange for a 90 percent ownership stake in the fund, largely wiping out the existing partners. With the new money, LTCM was able to ride out the storm without causing any collateral damage.

LTCM proved that in the new, globalized world, contagion from faraway emerging markets could spread to the United States. However, it also seemed to prove that any damage could be contained through effective intervention and sound macroeconomic management, without requiring taxpayer money or slowing down the real economy. As the long boom of the 1990s continued and the stock market continued to go up, LTCM soon faded into memory.

And when a serious financial crisis hit the United States, the policy response could not have been more different than what was experienced in Asia in 1997–98.

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36. On the LTCM crisis, see Lowenstein (2000).

The US Financial Crisis

The US (or global) financial crisis first became clearly evident in mid-2007, when problems with subprime mortgages began causing major losses at specific hedge funds and structured investment vehicles with large exposures to securities backed by subprime debt. However, the crisis grew rapidly in severity over the spring and summer of 2008. The first major scare was the collapse of Bear Stearns in March 2008, which was brought on by a liquidity panic—essentially, the wholesale version of a bank run.

Bear Stearns was ultimately sold to JPMorgan Chase in a deal brokered by the Treasury Department and the Federal Reserve in which the principal government roles were played by Treasury Secretary Henry Paulson, Federal Reserve Chairman Ben Bernanke, and then–New York Fed President Timothy Geithner.

Increasing losses on mortgage-backed securities prompted the government takeover of Fannie Mae and Freddie Mac in early September 2008. But full-blown panic set in during the week of September 15. Lehman Brothers—then the fourth-largest Wall Street investment bank—was facing a liquidity run similar to the one that had brought down Bear Stearns; however, a weekend of negotiations did not lead to a rescue plan, and Lehman declared bankruptcy on Monday the 15th. On the same day, Bank of America announced that it was buying Merrill Lynch—then the third-largest investment bank. On Tuesday, American International Group (AIG), the world's largest insurance company, received a government bailout in the form of an $85 billion senior credit line to prevent it from defaulting on its portfolio of credit default swaps.[37]

In response to the Lehman bankruptcy, the Reserve Primary Fund, a major institutional money market fund, was considered likely to have suffered substantial losses and experienced a wave of withdrawals by large investors. The Reserve Primary Fund had total assets of $62.6 billion on the Friday before Lehman failed. By the end of Tuesday, its assets were down to just over $20 billion and it had suspended redemptions.[38] It consequently "broke the buck"—that is, it failed to maintain a net asset value of $1 per share (the first time this had happened in a fund open to the general public). This led to a flight out of money market funds and a freeze-up of the commercial paper market, on which both financial and nonfinancial companies depended for raising money. These developments prompted Paulson and Bernanke to propose the bill that eventu-

37. Such a default would have caused large losses at other financial institutions, both US and foreign, that had taken out this form of "insurance" with AIG.

38. The Reserve Primary Fund had only 1.25 percent of its total assets in the form of Lehman commercial paper but its net asset value fell to 97 cents before the suspension. It eventually paid investors 98 cents on the dollar. See Sam Mamudi and Jonathan Burton, "Money Market Breaks the Buck, Freezes Redemptions," *MarketWatch*, September 17, 2008, http://articles.marketwatch.com/2008-09-17/finance/30738259_1_peter-crane-reserve-primary-fund-money-market (accessed on July 1, 2013).

ally became the Emergency Economic Stabilization Act (EESA), the centerpiece of which was the $700 billion Troubled Assets Relief Program (TARP).

On Thursday, September 18, Paulson and Bernanke provided a dramatic briefing to congressional leaders. According to Senator Chris Dodd (D-CT), then chair of the Senate Banking Committee, the leaders were told "that we're literally maybe days away from a complete meltdown of our financial system, with all the implications here at home and globally."[39]

The initial Treasury proposal was published on September 20—it was a short three pages and did not specify any independent oversight mechanisms.[40] This was not the sort of approach that would pass muster with the IMF or other outside scrutiny and, not surprisingly, the initial legislative proposal was rejected by the House of Representatives on September 29. An amended version passed, with more safeguards, and was signed into law on October 3, 2008. In terms of TARP funding, $350 billion was available immediately, while accessing the remaining $350 billion required a reapplication to Congress.

Measured by the cost of interbank lending and the prices of credit default swaps on bank debt—both indicators of the likelihood that banks will fail—the crisis in the financial sector only deepened into early October, first over fears that the rescue bill would not pass, and then over confusion over how it would be applied. On October 14, Treasury, the Federal Reserve, and the Federal Deposit Insurance Corporation (FDIC) announced two measures that finally began to calm the markets. The first measure was that $250 billion of TARP money was available to recapitalize financial institutions, and $125 billion had already been accepted by nine major banks. The second was a program under which the FDIC would guarantee new debt issued by banks.[41]

The goal of both programs was to give banks sufficient access to both equity capital and debt to reduce the risk that they would be unable to fund their operations (liquidity risk) and that their assets would become worth less than their liabilities (solvency risk). Although these measures temporarily brought down the fever in the financial sector, temperature spikes would recur several times over the succeeding months as various events created new reasons for panic. One of these episodes occurred in mid-November, when a crisis of confidence in Citigroup necessitated a second bailout over the weekend of November 22–23, 2008.[42]

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39. See David M. Herszenhorn, "Congressional Leaders Stunned by Warnings," *New York Times,* September 19, 2008, www.nytimes.com/2008/09/20/washington/19cnd-cong.html (accessed on July 1, 2013).

40. See "Text of Draft Proposal for Bailout Plan," *New York Times,* September 20, 2008, www.nytimes.com/2008/09/21/business/21draftcnd.html?_r=0 (accessed on July 1, 2013).

41. Treasury Department, "Joint Statement by Treasury, Federal Reserve and FDIC," press release, October 14, 2008, www.federalreserve.gov/newsevents/press/monetary/20081014a.htm (accessed on July 1, 2013).

42. The first bailout was the Treasury injection of capital, announced on October 14. As Vikram Pandit, CEO of Citigroup, said when told the terms of that injection, "This is cheap capital" (Bair 2012, 5; Barofsky 2012, 26).

Obama was elected to the presidency during this period of intense uncertainty and unprecedented government intervention into the financial system. One question, as the United States faced its financial crisis, was whether the federal government would apply the lessons that it had so earnestly preached to Asian countries a decade before.

The Discretionary Power of the Government

From March 2008, the government—in the form of Treasury, the Federal Reserve Board of Governors (acting largely with and through the New York Fed), and occasionally the FDIC—had intervened in the fates of Bear Stearns, Fannie Mae and Freddie Mac, Lehman Brothers (by not intervening), AIG, Washington Mutual, and Wachovia. At the very least, these transactions showed the vast discretionary power of the government, with Treasury taking the lead. In the case of Bear Stearns, the government essentially decided to punish Bear shareholders and make what seemed like a gift of the bank's assets to JPMorgan Chase, with the New York Fed guaranteeing up to $29 billion of potential losses.[43,44] Fannie Mae, Freddie Mac, and Lehman all showed what could happen if the government decided not to support a financial institution in its current form; the first two were placed in government conservatorship, and the last was allowed to fail. Washington Mutual and Wachovia demonstrated the government's role in brokering sales of failing institutions, potentially to the benefit of their acquirers.

Finally, the government was already the majority owner of AIG, which provided another lever of influence over the financial sector. In September, when AIG was first bailed out, there were already reports that major institutions such as Goldman Sachs had significant exposures to AIG.[45]

In these emergency rescues, the government was primarily represented by Paulson and Bernanke, who presented a united front in public. Geithner, as the Fed's point man in New York, was generally perceived as playing an impor-

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43. Bear Stearns' shareholders were able to insist on a somewhat higher stock price than originally proposed—$10 rather than $2. But the government was still deciding on a potentially significant wealth transfer from Bear Stearns shareholders to JPMorgan shareholders, as well as from taxpayers to JPMorgan shareholders. In the final deal, JPMorgan agreed to take the first $1 billion in losses, with the New York Fed on the hook for the next $29 billion in losses.

44. Jamie Dimon, JPMorgan's CEO, was at the time a director of the Federal Reserve Bank of New York—an early indication that the political governance of the financial crisis would become controversial. The official position is that Dimon had no direct involvement in the decisions that allowed and encouraged JPMorgan Chase to buy Bear Stearns. However, on the basis of information available to outsiders, it is not possible to confirm exactly what happened. Under the circumstances, some observers expected Dimon to step down from the New York Fed Board of Directors. This did not happen—he remained on the board until his term ended on December 31, 2012.

45. See Gretchen Morgenson, "Behind Insurer's Crisis, Blind Eye to a Web of Risk," *New York Times,* September 27, 2008, www.nytimes.com/2008/09/28/business/28melt.html?pagewanted=all&_r=0 (accessed on July 1, 2013).

tant behind-the-scenes role. Before the passage of the EESA, the Fed provided most of the money—such as the $29 billion guarantee for Bear Stearns' assets and the $85 billion credit line for AIG—since it was authorized to provide emergency lending under Section 13(3) of the Federal Reserve Act.[46]

Because Treasury did not have an insurance fund, it also needed the FDIC to guarantee newly issued bank debt in mid-October. Paulson, himself a deal-maker from Wall Street, played a central role in deciding what deals would get done or not done.[47] Paulson was also the front man in the campaign to pass the EESA, which included TARP. TARP explicitly granted broad powers to Treasury to intervene in the financial sector, and Paulson had used it to pressure nine major banks into accepting $125 billion of new government capital on one day.[48]

TARP was especially significant because it gave the Treasury Department a direct role in determining which banks succeeded or failed. First, although the Capital Purchase Program distributed capital on relatively generous terms, all applicants had to be approved by Treasury. Most notably, the dividends on preferred shares were only 5 percent per year.

Access to TARP capital was not guaranteed; in late October, for example, National City was acquired by PNC after learning that its application might not be approved.[49]

At the time, there was little transparency about how applications were being reviewed and what criteria were being used to determine which banks received capital. Pietro Veronesi and Luigi Zingales (2010) calculate that, among the first banks to receive capital, the terms were favorable for Citigroup and the three investment banks but less favorable for JPMorgan Chase.

TARP also demonstrated the ability of the government to channel major subsidies to financial institutions—one reason it was initially a popular program among banks. The investment terms were considerably more favorable than those available from the private sector, such as in Warren Buffett's investment in Goldman Sachs. According to Bloomberg analysis, the government received warrants worth $13.8 billion in connection with its 25 largest equity injections; under the terms Buffett got from Goldman, those warrants would have been worth $130.8 billion.[50] In addition, TARP received a lower

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46. The Fed's ability to provide such support was severely curtailed—and, some legal experts argue, eliminated—by the Dodd-Frank Financial Reform Act of 2010. Most likely, the form of Fed support has morphed, with the next forms becoming clear only when we encounter another crisis episode.

47. Broadly speaking, this is confirmed by Bair's account, including of how Paulson brought in the FDIC (Bair 2012, chapter 9).

48. Damian Paletta, Jon Hilsenrath, and Deborah Solomon, "At Moment of Truth, U.S. Forced Big Bankers to Blink," *Wall Street Journal,* October 15, 2008.

49. Dan Fitzpatrick, David Enrich, and Damian Paletta, "PNC Buys National City in Bank Shakeout," *Wall Street Journal,* October 25, 2008.

50. Mark Pittman, "Paulson Bank Bailout in 'Great Stress' Misses Terms Buffett Won," Bloomberg

interest rate (5 percent) on its preferred stock investments than did Buffett (10 percent), which cost taxpayers $48 billion in aggregate over five years, according to Bloomberg.[51]

The TARP Congressional Oversight Panel made a similar assessment, estimating in early 2009 that TARP had so far exchanged $254 billion for $176 billion worth of assets, implying a cash subsidy of $78 billion.[52]

Although there were justifications for this subsidy—in particular, Treasury wanted broad participation in order to avoid stigmatizing particular banks—it still constituted potential expected value that the government was willing and able to transfer to specific financial institutions.

In addition, the Capital Purchase Program placed significant holdings of preferred stock in the hands of the Treasury, as well as warrants on common stock. Although the preferred stock was nonvoting and Treasury committed not to vote its shares of common stock, this still left open the prospect of increased government influence. Among other things, the investment terms restricted the ability of the financial institution to pay dividends on or buy back preferred or common shares and also subjected it to the executive compensation and corporate governance requirements of the EESA (although these requirements were considerably less stringent than those implemented in February 2009).[53]

At the time, there was considerable uncertainty about how and to what degree Treasury would attempt to exercise influence over banks that had received TARP money. The mechanics of implementing TARP were housed in Treasury and managed by people appointed by Paulson, who was a former head of Goldman Sachs. Neel Kashkari, a Goldman Sachs alumnus, was named interim head of TARP. Reuben Jeffrey, another Goldman alumnus, was named interim chief investment officer, and several other ex-Goldman executives played important roles in the Paulson Treasury, as profiled in contemporaneous articles.[54]

News, January 10, 2009, www.bloomberg.com/apps/news?pid=newsarchive&sid=aAvhtiFdLyaQ (accessed on July 1, 2013).

51. Nobel Prize–winning economist Joseph Stiglitz is quoted by Bloomberg: "Paulson said he had to make it attractive to banks, which is code for 'I'm going to give money away,'" and "If Paulson was still an employee of Goldman Sachs and he'd done this deal, he would have been fired." See Pittman, "Paulson Bank Bailout in 'Great Stress' Misses Terms Buffett Won."

52. See TARP Congressional Oversight Panel, "February Oversight Report: Valuing Treasury's Acquisitions," www.gpo.gov/fdsys/pkg/CPRT-111JPRT47178/html/CPRT-111JPRT47178.htm (accessed on July 13, 2013).

53. Treasury Department, "TARP Capital Purchase Program: Senior Preferred Stock and Warrants," press release, www.treasury.gov/press-center/press-releases/Documents/document5hp1207.pdf (accessed on July 1, 2013).

54. Julie Creswell and Ben White, "The Guys from 'Government Sachs'," *New York Times,* October 17, 2008, www.nytimes.com/2008/10/19/business/19gold.html (accessed on July 1, 2013); Deborah Solomon, "The Financial Crisis: Amid Turmoil, Tireless Team of Advisers Backed Paulson," *Wall*

In short, the crisis situation in general and TARP in particular gave the Treasury Department unprecedented power to use taxpayer money to select winners and losers in the financial sector, a point highlighted by the Congressional Oversight Panel:

> Treasury may have determined that granting the subsidies described above to a group of banks, regardless of their condition, on essentially the same terms was necessary, for one or more reasons, to preserve the integrity of the financial system. Whether the subsidy provided by Treasury to financial institutions represents a fair deal for the taxpayers is a subject for policy debate and judgment, not one that can be answered in a purely quantitative way.[55]

For its part the Treasury Department did not acknowledge these subsidies, instead describing its investments of taxpayer money as "at or near par." To this the Congressional Oversight Panel responded, "if TARP is to garner credibility and public support, a clear explanation of the economic transaction and the reasoning behind any such expenditure of funds must be made clear to the public."[56]

The position of special inspector general for TARP (SIGTARP) was created by Congress to help prevent fraud in TARP-related programs. Neil Barofsky, a former prosecutor, was appointed SIGTARP in December 2008. In retrospect, he writes of the Capital Purchase Program, "We were dismayed by the complete absence of oversight and compliance conditions in the CPP contracts that we received" (Barofsky 2012, 71).

Citigroup, Bank of America, and AIG

In principle, the government is supposed to apply the law without considering the identity of the parties that it is dealing with. During the financial crisis, this became difficult if not impossible because the financial system depended crucially on a handful of large, well-connected financial institutions. In late 2008 and early 2009, Citigroup and Bank of America faced crises requiring extraordinary measures from the government, while AIG needed additional assistance following its initial bailout in September.

The Citigroup bailout in November 2008 and Bank of America bailout in January 2009 both represented major emergency subsidies from Treasury. In each case, the bank received additional TARP capital, but the government also agreed to guarantee a pool of assets against declines in value. These guarantees were effectively a nontransparent and underpriced form of insurance

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Street Journal, September 17, 2008. There were reportedly eight or nine former Goldman people at Treasury during this time, but we have not been able to confirm their precise identities. Treasury does not publish a complete list of its employees and outside advisers.

55. TARP Congressional Oversight Panel, "February Oversight Report: Valuing Treasury's Acquisitions."

56. Ibid.

(compared with what such guarantees would have cost in the free market). As a result, according to the TARP Congressional Oversight Panel, these bailouts contained an implicit subsidy percentage of 50 percent, compared with a subsidy of 22 percent in the TARP Capital Purchase Program.[57]

There was some debate among government officials over the terms of the Citigroup bailout. Sheila Bair, chair of the FDIC, thought they were overly generous to the bank and its executives but claims that she encountered opposition from Geithner: "Tim seemed to view his job as protecting Citigroup from me, when he should have been worried about protecting the taxpayers from Citi" (Bair 2012, 170).

In contrast, Bair portrays Bernanke as having played a positive role. "Throughout the difficult negotiations with Citi and the regulators, Ben, more than anyone, helped us secure some meaningful management and other changes to that institution" (Bair 2012, 171; see also 39).

While the Citigroup bailout (November 2008 edition) was always understood as a means of saving the bank, it was reported in January 2009 that the Bank of America bailout had been promised in exchange for the bank agreeing to complete its acquisition of Merrill Lynch, then the third-largest investment bank on Wall Street. In April 2009, an investigation by New York Attorney General Andrew Cuomo further revealed that Paulson had threatened to replace Ken Lewis as CEO of Bank of America if he refused to complete the Merrill acquisition.

These interventions clearly benefited Citigroup, which otherwise might have failed, and Merrill Lynch, which otherwise would almost certainly have failed. Whether they benefited Bank of America is another question that is almost impossible to answer. As losses mounted at Merrill in December 2008, it may have become rational for Bank of America to walk away from the planned acquisition; the subsidy provided by the government in the form of the January bailout may or may not have compensated it for those additional losses. Paulson and Bernanke, in applying pressure on Lewis, certainly believed that a failure of Merrill could have serious systemic implications; the net effect, however, was to pressure a North Carolina–based retail bank (with relatively small investment banking operations) to complete its acquisition of a New York–based investment bank (Barofsky 2012, 103–104).

In late February 2009, there were signs that Citigroup was facing another wholesale bank run, most evident in its declining stock price, the falling price of its subordinated bonds, and the rising price of credit default swap protection on its senior bonds. Geithner's initial proposal was to split Citi into a "good bank" and a "bad bank." According to Bair (2012, 167),

> initially, he raised the idea of the FDIC setting up and funding a bad bank, without imposing any loss absorption on shareholders and bondholders. I

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57. Ibid. The 50 percent figure is for the Citigroup bailout; the Bank of America bailout was not included in the panel report, which only covered transactions through the end of 2008.

was flabbergasted. Why in the world would the FDIC take all of the losses and let Citi's private stakeholders take all of the upside with the good bank?

The government's eventual response was to engineer a preferred-for-common swap including both the Treasury Department and several large investors in Citigroup.

Treasury converted $25 billion of taxpayer-held preferred securities to common shares, while allowing a substantial share of Citi's nongovernment preferred shareholders, as well as subordinated-debt holders, to keep their priority position. The FDIC argued that all the preferred and subordinated-debt holders should have to convert to common stock before the government converted any of its shares. In Bair's assessment (Bair 2012, chapter 15), the deal was generous to Citigroup and its current shareholders.[58] However, the bank's common stock price fell on the news, so presumably the market was expecting an even more generous bailout.

The AIG bailout of March 2009, in which the government improved the terms on its existing preferred stock, invested more cash in exchange for more preferred stock and improved the terms on AIG's credit line. It was engineered in response to a disastrous fourth quarter of 2008 that threatened AIG's viability as an ongoing concern.[59]

By this point, AIG was largely owned by the US government, so the bailout was not intended to benefit AIG's shareholders; instead, its goal was to keep AIG afloat in order to minimize collateral damage to other firms. Because it was still supposedly solvent, AIG was able to honor its commitments to its counterparties, largely credit default swap protection it had sold to other financial institutions. When those counterparties were revealed in March, the top names (excluding European banks) were Goldman Sachs, Merrill Lynch, Bank of America, Citigroup, Wachovia, Morgan Stanley, and JPMorgan Chase.[60]

Because AIG was able to make its counterparties whole, these banks—including the three largest Wall Street investment banks—received more cash than they would have if AIG had failed.[61]

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58. Treasury also issued a Deferred Tax Asset exemption to Citigroup—another benefit for Citi shareholders. This decision is still being audited by SIGTARP, www.sigtarp.gov/Audit%20Engagement%20Memorandums/Engagement%20Memo%20-%20Review%20of%20the%20Section%20382%20Limitation%20Waiver%20for%20Financial%20Instruments%20Held%20by%20Treasury.pdf (accessed on July 1, 2013).

59. Treasury Department, "U.S. Treasury and Federal Reserve Board Announce Participation in AIG Restructuring Plan," press release, March 2, 2009, www.federalreserve.gov/newsevents/press/other/20090302a.htm (accessed on July 1, 2013).

60. "AIG Discloses Counterparties to CDS, GIA and Securities Lending Transactions," AIG press release, March 15, 2009, www.aig.com/aigweb/internet/en/files/Counterparties150309RELonly_tcm385-155648.pdf (accessed on July 1, 2013). For attachments, see www.aig.com/aigweb/internet/en/files/CounterpartyAttachments031809_tcm385-155645.pdf (accessed on July 1, 2013).

61. Goldman Sachs claimed that even if AIG had collapsed, its positions with AIG were fully hedged. Peter Edmonston, "Goldman Insists It Would Have Lost Little If A.I.G. Had Failed," *New*

Barofsky (2012, 186–87) argues that AIG did not need to pay 100 cents on the dollar, but there was no serious attempt to negotiate a reduction in payments, either when the government rescue was first implemented or when the government closed out these positions.

Rescue Program Design

After taking power in January 2009, the Obama administration, led by the Treasury Department, undertook a number of systemic programs to combat the crisis. The programs were packaged as a Financial Stability Plan, the broad contours of which were announced in a high-profile speech by Geithner on February 10, 2009.[62]

Geithner told CNBC, "We're being exceptionally careful that the taxpayer is being protected, that we're taking risks we understand, and that we're using these resources in a way that's going to give the maximum benefit in getting these markets going again."[63]

The February 10 speech was followed on February 23 by a more dramatic—and ultimately effective—joint statement by the Department of the Treasury, Federal Reserve, FDIC, Office of the Comptroller of the Currency (OCC), and Office of Thrift Supervision (OTS). It included the following statement of principle:

> The US government stands firmly behind the banking system during this period of financial strain to ensure it will be able to perform its key function of providing credit to households and businesses. The government will ensure that banks have the capital and liquidity they need to provide the credit necessary to restore economic growth. Moreover, we reiterate our determination to preserve the viability of systemically important financial institutions so that they are able to meet their commitments.[64]

York Times, March 20, 2009, www.nytimes.com/2009/03/21/business/21goldman.html (accessed on July 1, 2013).

62. See full text of speech via subscription at www.ft.com/intl/cms/s/0/4ff706b4-f78b-11dd-81f7-000077b07658.html#axzz2a5Tm4JoC.

63. On this and the broader market reaction, see Deborah Solomon, "Market Pans Bank Rescue Plan," *Wall Street Journal,* February 11, 2009, http://online.wsj.com/article/SB123427167262568141.html (accessed on July 1, 2013).

64. For the full text of the statement, see "Joint Statement by the Treasury, FDIC, OCC, OTS, and the Federal Reserve," February 23, 2009, www.federalreserve.gov/newsevents/press/bcreg/20090223a.htm (accessed on July 1, 2013). In the assessment of Dennis Kelleher (2012, 6), then a senior aide in the Senate, this statement marks the moment when the full faith and credit of the US government was put behind the banking system. Bair agrees with Kelleher's assessment, at least as far as the largest institutions subject to stress tests were concerned: "[W]e all joined in another statement that essentially said that the chosen nineteen would be propped up by the government no matter what" (Bair 2012, 159). This February 23 statement was Geithner's idea (Bair 2012, 159).

This declaration helped turn around market perceptions. The federal government, including the Federal Reserve, was putting its balance sheet and its capacity to provide credit behind the country's biggest banks. The implication was that these banks would not go through any form of resolution process—and their creditors would not face losses.

This commitment meant that loss-absorbing equity capital would be available to banks that needed it, so there had to be an official process to determine where capital deficiencies existed.

The Capital Assistance Program (CAP) provided a new source of capital. The terms of CAP were generally favorable to the recipients of capital, but it is not obvious whether the program was more or less favorable than the Capital Purchase Program created by Paulson in October 2008. Investments under the CAP were in convertible preferred stock, which has the potential to dilute existing bank shareholders. However, the conversion option is held by the bank, not by Treasury, which essentially gives the bank a put option that always has some positive value.[65]

At the same time, the CAP was coupled with bank stress tests by Treasury and the Federal Reserve that were announced in February and conducted in March and April 2009. These tests were conducted on 19 major financial institutions, with results disclosed to the public on May 7, 2009. Of the 19 institutions, 10 were found to need additional capital: Bank of America, Citigroup, Fifth Third, GMAC, KeyCorp, Morgan Stanley, PNC, Regions, SunTrust, and Wells Fargo. The nine that did not need capital were American Express, BB&T, Bank of New York Mellon, Capital One, Goldman, JPMorgan Chase, MetLife, State Street, and US Bancorp. On paper, the stress tests were a regulatory action applied equally to all of the institutions. However, the complexity of individual bank balance sheets, and the process by which the test results were released, left significant room for firm-specific negotiation.

At least Citigroup, Bank of America, PNC Financial, and Wells Fargo negotiated with the government over the final stress test results.[66] According to the *Wall Street Journal,* "The Federal Reserve significantly scaled back the size of the capital hole facing some of the nation's biggest banks shortly before concluding its stress tests, following two weeks of intense bargaining."[67] These negotiations created latitude for regulators to take actions that might favor some banks over others. For example, the decision to base capital requirements on

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65. Treasury Department, "Capital Assistance Program, Summary of Mandatorily Convertible Preferred Stock ('Convertible Preferred') Terms," fact sheet, February 25, 2009, www.treasury.gov/press-center/press-releases/Documents/tg40_captermsheet.pdf (accessed on July 1, 2013).

66. Eric Dash, "Citi Is Said to Require New Capital," *New York Times,* May 1, 2009, www.nytimes.com/2009/05/02/business/02stress.html (accessed on July 1, 2013).

67. David Enrich, Dan Fitzpatrick, and Marshall Eckblad, "Banks Won Concessions on Tests," *Wall Street Journal,* May 9, 2009, http://online.wsj.com/article/SB124182311010302297.html (accessed on July 1, 2013).

Tier 1 common capital rather than tangible common equity affected different banks differently, arguably hurting Wells Fargo the most.[68]

In addition to the CAP and the stress tests, the Public-Private Investment Program (PPIP) delivered on the expectation that Treasury would revive Paulson's original plan to use government money to purchase banks' troubled assets. The PPIP offered nonrecourse government loans and FDIC loan guarantees to private sector investors willing to acquire troubled assets.[69]

This plan effectively provided a subsidy to these investors in order to increase their willingness to pay for the assets and help close the gap that separated bids and asks in the open market. Therefore, the plan aimed to benefit banks holding large amounts of troubled assets, but it particularly helped institutions seeking to buy assets—or to manage assets on behalf of investors. These included hedge funds, private equity firms, and asset management firms that were presumed able to raise private capital to participate in the program; beneficiaries may also have included banks themselves, which were free to sell their own troubled assets at the same time that they bought assets from other institutions.

Top administration officials claimed to the press that Treasury did not consult with Wall Street on the details of the PPIP.[70] This has been contested by Barofsky, then special inspector general for TARP, who claims (2012, 129), "PPIP had been designed by Wall Street, for Wall Street"—with BlackRock, the Trust Company of the West Group, and PIMCO heavily involved.[71]

In Barofsky's view, there were insufficient safeguards against fraud and money laundering in the PPIP and in the administration's actions more generally: "We saw Geithner's Financial Stability Plan for what it was: an unprecedented trillion-dollar playground for fraud and self-dealing" (Barofsky 2012, 132). But Barofsky's efforts to protect the taxpayer against abuse in the PPIP were resisted by the Treasury Department.

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68. Felix Salmon, "Chart of the Day: Common Capital vs. TCE," Reuters, May 9, 2009, http://blogs.reuters.com/felix-salmon/2009/05/09/chart-of-the-day-common-capital-vs-tce (accessed on July 1, 2013).

69. Treasury Department, "Treasury Department Releases Details on Public Private Partnership Investment Program," press release, March 23, 2009, www.treasury.gov/press-center/press-releases/Pages/tg60.aspx (accessed on July 1, 2013).

70. "The Obama team also steered clear of consulting Wall Street about its plan in an effort to avoid being seen as joining with a much-maligned industry, officials say. Top bank executives have been complaining in recent days of being frozen out as the administration crafted its plan." As quoted in Deborah Solomon, "Market Pans Bank Rescue Plan," *Wall Street Journal,* February 11, 2009, http://online.wsj.com/article/SB123427167262568141.html (accessed on July 1, 2013).

71. BlackRock and TCW were selected as fund managers for the PPIP. Other managers included Wellington Management Company, Invesco, AllianceBernstein, and Angelo, Gordon & Co. (Barofsky 2012, 167), as well as Oaktree Capital Management, Marathon Asset Management, and RLJ Western Management. See David Ellis, "9 Firms to Run Toxic Rescue Plan," CNN Money, July 8, 2009, http://money.cnn.com/2009/07/08/news/companies/ppip/index.htm (accessed on July 1, 2013). PIMCO applied to run a fund but later withdrew its application (Barofsky 2012, 129).

The Treasury Department also clashed with the FDIC over the PPIP. In concept, there was one program for securities (which Treasury controlled and did not involve the FDIC) and another for loans, which was supposed to be run by the FDIC.[72]

Both programs were structured the same way, with auction pricing and government-backed financing provided to bidders to help overcome the liquidity discount prevalent in the market at that time. Unlike the securities program, however, the PPIP for loans would have forced banks to take losses on their toxic mortgages, as those assets were being held at inflated "book value" (in contrast to legacy securities, which were mostly marked to market). The FDIC supported the PPIP for loans, with Bair arguing that officials should do more to force banks to sell off their legacy mortgages—but encountered opposition from Treasury.

Treasury and the Fed jointly announced a plan to expand the Term Asset-Backed Securities Loan Facility (TALF), originally announced in November 2008, to a wider range of securities (including mortgage-backed securities) and to $1 trillion in total lending. This plan was designed to greatly increase liquidity in these markets, making it easier for banks to lend money and giving all financial institutions a new market for their assets. In Barofsky's assessment, insufficient safeguards were built into the way that TALF could be used in conjunction with the PPIP—again, raising the specter of potential self-dealing and illegal profits for asset managers, investors, or the banks themselves. In this instance, Treasury was again skeptical, but the Federal Reserve was much more responsive and eventually declined to participate in the way that had been proposed by Treasury (Barofsky 2012, 169–70; see also 122).[73]

In retrospect, it appears that several programs of both the Bush and Obama administrations were designed to get as much support out to banks as fast as possible. This meant distributing money with relatively few strings attached and little concern for whether well-connected bankers or asset managers could exploit the programs for their own ends. Confirming these concerns, Ran Duchin and Denis Sosyura (2012) find that firms with connections to politicians were more able to obtain TARP funds. Moreover, according to their findings, investments in such firms underperformed investments in unconnected firms.

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72. The FDIC needed a "systemic risk exception" to launch the PPIP for bank loans. This required the Fed's approval, which it provided, and Treasury's approval, which never happened.

73. The New York Fed's chief of compliance, Martin Grant, met with the Treasury's PPIP team and told Barofsky that "they just didn't get it"—meaning that Treasury refused to put adequate safeguards into PPIP (Barofsky 2012, 68). On one occasion, Barofsky quoted Treasury's Herb Allison on an issue, and Grant responded, "'It sounds like Larry Fink [the CEO of BlackRock] is talking, and their mouths are moving'" (Barofsky 2012, 168).

Subsidies for Banks, Not Homeowners

Geithner's February 10 speech included a housing plan with expanded refinancing options for homeowners and cash incentives to lenders, borrowers, and servicers for each mortgage modification.[74]

Arguably, by helping to unblock economically rational loan modifications that would reduce monthly payments, reduce the risk of costly foreclosure, and increase expected payment streams to investors, these incentives aided all parties involved. Insofar as the plan had differential effects within the financial sector, however, its main impact was probably to aid loan servicers, which received new cash bonuses for modifications, and banks that owned whole mortgages, which now had one more option for how to deal with those mortgages. Investors in securitized mortgages, by contrast, could lose some of their existing rights under the plan.

Barofsky (2012, 125–26) was concerned that servicers would gain, potentially at the expense of both investors in mortgages and homeowners. The Treasury Department, however, was not willing to strengthen safeguards in the program and there were subsequent problems with servicer behavior—for example, with the mishandling of trial modifications (Barofsky 2012, 152).

As a practical matter, the housing plan received relatively little attention and few resources from the Treasury Department; apparently Geithner saw it primarily as a way to "help foam the runway" for banks, meaning that it would give the banks more time to absorb losses (Barofsky 2012, 156). Herb Allison, a senior financial services executive brought in to Treasury, referred to "helping them [the banks] earn their way out of this" (Barofsky 2012, 157). By the end of 2011, only $3 billion out of the $50 billion allocated to the Home Affordable Mortgage Program (HAMP) had been spent (Barofsky 2012, 199). Both Bair and Barofsky criticized the lack of attention to housing (Bair 2012, chapters 11 and 13; Barofsky 2012, chapter 8).

This was not an important priority of the Treasury Department, which preferred to provide direct support to the financial sector.[75] In the opinion of journalist Noam Scheiber, the Geithner doctrine was to apply so-called overwhelming force, but this meant primarily subsidies for large firms in the financial sector.[76] This brought Geithner into conflict with other administration officials, such as Christina Romer, chair of the Council of Economic Advisers. "When Tim Geithner imagined the uses of overwhelming force, it was always

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74. Treasury Department, "Making Home Affordable: Updated Detailed Program Description," fact sheet, March 4, 2009, www.treasury.gov/press-center/press-releases/Documents/housing_fact_sheet.pdf (accessed on July 1, 2013).

75. The *New York Times* reports that, "In one bailout instance, Mr. Geithner fought a proposal to levy fees on banks that would help protect taxpayers against losses." See Jo Becker and Gretchen Morgenson, "Geithner: Member and Overseer of Finance Club," *New York Times,* April 26, 2009.

76. This doctrine originated with the Rubin Treasury and was also articulated by Summers. See Scheiber (2011, 30).

to save the system. When Christy Romer imagined the uses of overwhelming force, it was to save human beings" (Scheiber 2011, 38). In addition, when scandals later erupted regarding how banks had treated borrowers—including the "robosigning" of foreclosure papers—Treasury again sided with the banks. In the assessment of Bair, this undermined the authorities' ability to seek redress from those banks: "If [Treasury and the OCC] had put pressure on the big banks to reach a settlement, the banks would have been more willing to agree to meaningful reforms and financial redress. But without a clear signal from their two chief protectors, Geithner and Walsh, they were reluctant to give much" (Bair 2012, 256; see also 251).

Treasury also refused to pursue action against banks that violated the terms of the HAMP. There were well-documented abuses by servicers of these loans, which included prominent banks. "Treasury, however, demonstrated no interest in taking even the most modest steps to punish them" (Barofsky, 2012, 154; see also 133).

Oversight Concerns

Relative to market expectations in November 2008, oversight of government rescue efforts and TARP in particular was stronger than would have seemed likely. The TARP Congressional Oversight Panel, chaired by Harvard Law School professor Elizabeth Warren, was created as part of the original EESA legislation, but the panel proved more effective than most observers initially expected.

Similarly, while the EESA also created a special inspector general for TARP, this office also proved to have more teeth than seemed likely in November 2008. Barofsky consistently pressed Treasury to provide better supervision of TARP funds than would otherwise have been the case. He also brought a high-profile successful prosecution for fraud against one TARP recipient—and the executives involved were sentenced to jail. Other cases were still pending when he left office in early 2011.

Overall, Barofsky's assessment of the process within Treasury is not positive (Barofsky 2012, 174): "The hurried decisions, lack of transparency, and unquestioning deference to Wall Street that characterized the approach to the PPIP, HAMP, and CPP programs were hardly isolated incidents; it became clear to us that they were part of an emerging pattern that no secretary would want exposed."

For example, SIGTARP found that the process of selling warrants acquired under TARP was flawed because the criteria for pricing were not documented in a consistent manner. This makes it impossible to know with any certainty if taxpayer interests were protected adequately or if some financial institutions received better treatment than others.[77]

77. See SIGTARP, "Assessing Treasury's Process to Sell Warrants Received from TARP Recipients," May 10, 2010, www.sigtarp.gov/Audit%20Reports/Assessing%20Treasury%27s%20Process%20to%20Sell%20Warrants%20Received%20From%20TARP%20Recipients_May_11_2010.pdf (accessed on July 1, 2013).

Financial Reform

In addition to attempting to restore financial stability, the Obama administration, led by Treasury, was deeply involved in shaping the proposals that eventually became the Dodd-Frank Financial Reform Act in 2010.

Financial reform legislation initially passed the House of Representatives in 2009. There were moves to strengthen the restrictions on big banks when the debate moved to the Senate, in part because of several complementary factors: perceived large bonuses paid by Wall Street firms for 2009; a March 2010 report by the Lehman bankruptcy examiner that shed unfavorable light on Wall Street practices and the ability of regulators to keep these in check; and the Securities and Exchange Commission's filing of a high-profile lawsuit against Goldman Sachs in April.

The Dodd-Frank Act is complex and reflected input from people favoring reform in the administration, the House, and the Senate, as well as a great deal of resistance from the industry, some of which was channeled through the administration. Among the huge amount of lobbying against the reforms was that from the "end users" coalition, which was organized in part by JPMorgan Chase, a leading player in the over-the-counter derivatives market.

Treasury requested new powers from Congress to take over systemically important nonbank institutions, including bank holding companies.[78] Such powers are not generally in the interests of large financial institutions and their shareholders because they strengthen the government's hand in negotiating with those banks and potentially make it easier for the government to seize control of them.

According to Bair (2012, chapter 17), Treasury's original idea was to keep a legal mechanism that would have made it easier for the government to provide support to specific financial sector firms, while keeping them in business. Bair's proposal was to allow FDIC resolution for nonbanks, putting them out of business in an orderly fashion (as the FDIC could already do for banks with insured deposits). However, her scheme was altered by Treasury to make it more favorable to banks (and their shareholders) in any future crisis.[79]

Indeed, a number of participants have documented that Treasury also pushed back, mostly behind the scenes, against proposals that would have further restricted the size and activities of very large financial firms and to defeat measures Treasury regarded as unduly onerous for big banks. Most notably, Senators Sherrod Brown (D-OH) and Ted Kaufman (D-DE) proposed

78. Tim Geithner, testimony to the House Financial Services Committee, March 24, 2009, www.treasury.gov/press-center/press-releases/Pages/tg67.aspx (accessed on July 1, 2013).

79. Writing of a meeting in the Oval Office in March 2009, in which she proposed expanded resolution powers, Bair states, "You would have thought they would be grateful, and for a time Treasury did embrace empowering the FDIC with powers to close down large nonbank firms. But later Tim would backtrack from the understanding we reached in the Oval Office that morning" (Bair 2012, 182–83).

the SAFE Banking Amendment, which would have imposed a binding size limit on banks. It failed on the floor of the Senate by a vote of 33 to 61, and a senior Treasury official subsequently remarked, "If enacted, Brown-Kaufman would have broken up the six biggest banks in America. If we'd been for it, it probably would have happened. But we weren't, so it didn't."[80]

In December 2009, Paul Volcker, former chairman of the Federal Reserve, proposed to prevent banks from proprietary trading or the similarly risky activity of investing heavily in hedge funds and private equity funds. The version taken forward by Treasury was significantly weaker and senatorial efforts to strengthen significantly what became known as the "Volcker Rule" did not succeed, in part because of a lack of support from Treasury.[81]

A new Office of Financial Responsibility (OFR) was included in the legislation, reportedly at the initiative of Senator Jack Reed (D-RI). He wanted to create a body that would track data and look for systemic risks in an integrated manner so that potential dangers would not slip through any regulatory cracks. Treasury was apparently opposed to this initiative. However, once it became clear that the OFR would be created, the administration insisted that it become part of Treasury. No head of the OFR was appointed for the first 18 months, then the job went to a Wall Street executive (from Morgan Stanley). In the latest development, the OFR has announced a council of outside advisers. According to an assessment by Propublica, an independent news organization, almost all 30 council members are industry insiders or academics with close ties to industry.[82]

There were various proposals to create an independent systemic regulator, including prominent ideas put forward by Bair (2012, 249–51 and 337–39). Treasury opposed these suggestions but, when it became clear that something along these lines would be created, insisted that the new Financial Stability Oversight Council (FSOC) be chaired by the Treasury secretary. To date, the FSOC has not taken any initiatives that could be considered harmful to the interests of big banks, although it did take up the issue of money market reform in fall 2012.[83]

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80. John Heilemann, "Obama is from Mars, Wall Street is from Venus," *New York Times,* May 22, 2010. This assessment is confirmed by Jeff Connaughton (2012), then chief of staff to Senator Kaufman.

81. Senators Jeff Merkley (D-OR) and Carl Levin (D-MI) proposed a tronger version that was supported by Volcker. Senator Chris Dodd (D-CT), chairman of the Senate Banking Committee, prevented this amendment from being voted on. Presumably he had the support of the administration on this point. See Johnson and Kwak (2011, 229).

82. Jesse Eisinger, "New Financial Overseer Looks for Advice in All the Wrong Places," *Propublica*, November 28, 2012, www.propublica.org/thetrade/item/new-financial-overseer-looks-for-advice-in-all-the-wrong-places (accessed on July 1, 2013).

83. The Securities and Exchange Commission (SEC) is responsible for money market mutual funds. SEC proposals for reform were stalled due to deadlock among commissioners. The FSOC put forward its own proposals for comment. This put pressure on the SEC to act and reform now

The Treasury Department also consistently and successfully opposed proposals to impose assessments on the largest financial institutions that would provide working capital for any subsequent bailout. Bair (2012, 335) writes:

> The assessment would have made the large financial institutions internalize the risks they pose to society and helped level the playing field between small banks and financial behemoths. Funds raised through the assessment would have insulated taxpayers from supporting the liquidation of big financial institutions, even temporarily. Secretary Geithner worked hard to defeat the assessment in the Dodd-Frank bill.

Overall Assessment

In summary, the Treasury Department placed a high priority on helping the financial sector with various forms of explicit and implicit subsidy. In this instance, the general doctrine of "overwhelming force" meant assisting financial firms with subsidies to the greatest extent possible. The most clear case of this strategy is Citigroup, which undeniably received a generous subsidy from the government in early 2009. There was a realistic alternative, which was Bair's preferred course of action:

> ...the preferred shareholders would have been wiped out. This was a high-risk course, granted, but a tool that we could have threatened to use to extract more concessions from shareholders and bondholders.... (Bair 2012, 167)

But this proposal was defeated by the Treasury Department. According to Bair, Citigroup's needs also appear to have guided overall administration policy:

> I frequently wonder whether, if Citi had not been in trouble, we would have had those massive bailout programs. So many decisions were made through the prism of that one institution's needs. (Bair 2012, 125)[84]

Similarly, in the financial reform process, Treasury consistently sided with Wall Street against proposals in the Senate that would have imposed more restrictions on big banks' size and activities. The big New York–based financial firms, in particular, were helped by Treasury efforts to push back against attempts to strengthen the Volcker Rule and on other fronts.

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seems more likely. This confirms that the FSOC structure can play a useful role in ensuring that systemic risks do not fall between the cracks of the byzantine regulatory structures.

84. The quote is about the November 2008 Citigroup bailout episode, before Geithner became Treasury Secretary, but while he was very much involved in designing policy. Bair expresses this same concern about Citigroup as a recurring theme in her book.

Conclusion

There are two ways to deal with troubled financial firms: put them through some form of resolution process, in which equity is wiped out, debts are converted to equity, and management is typically replaced; or provide various forms of implicit and government financial support. The second approach is known colloquially and not inaccurately as a "bailout."

In the Asian financial crisis, the policy response involved strong elements of the resolution approach. Advice from the US Treasury, both directly and via the IMF, reinforced this approach. And Summers' aforementioned lecture at the 2000 conference of the American Economic Association made a coherent case for why this makes sense (Summers 2000).

The structure of government support during a crisis matters, in part because it establishes expectations regarding how future situations will be handled—including who will bear what kind of costs. This is the heart of the critiques of the US Treasury approach by Bair and Barofsky. Both worked closely with Treasury during the crisis, bailout, and reform period. They both came to the conclusion that Treasury policy was overly favorable to the shareholders and creditors (and management) of particular financial sector firms.

Bair (2012, 120) puts it well: "How many other smaller businesses and households could also have survived intact if the federal government had been willing to give them virtually unlimited amounts of capital investments, debt guarantees, and loans?"

It remains to be seen what will be the full impact of those actions on future financial sector behavior, on the buildup of systemic risk, and on what happens in the next crisis. All crises must end. But the way in which they end affects incentives. We ignore moral hazard issues at our peril.

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