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Essay

Incentive Roots of the Securitization Crisis and Its Early Mismanagement

Edward J. Kane[†]

Structured securitizations transform traditional default and interest-rate risks into hard-to-understand and hard-to-monitor counterparty and funding risks that in distressed times pass onto financial safety nets. This Essay explains the chain of incentive conflicts that led private and government supervisors to neglect their commonsense moral obligation to understand and control these risks and to underinvest in planning and staffing for adverse events. Lack of planning for the bursting of the mortgage-lending bubble made it easy for asset-backed securities markets to sink into turmoil and for authorities to adopt policies that turned market turmoil into crisis. The analysis makes it clear that to bring safety-net subsidies under control, the United States does not need to make major changes in the structure of its regulatory bureaucracy. What it needs to repair is the incentive structure under which financiers and government officials operate.

Introduction

The disastrous meltdown of structured securitization represents a dual failure of market discipline and government supervision. At every stage of the securitization process, incentive conflicts tempted private and government supervisors to short-cut and outsource duties of due diligence that they owed not only to one another, but to customers, investors, and taxpayers.

Much of the conflict traces to the difficulty of reconciling differences in time horizons between principals and agents. When commissions and other fees for service are paid upfront, managers and line employees of firms that originate, securitize, rate, or insure loans fear that they are passing up short-run income whenever they nix a questionable deal. At the same time, accountants, appraisers, and even government supervisors know that they can win business from competing enterprises in the short run by establishing a reputation for not challenging a troubled client's dodgy representations about asset values or not conscientiously assessing its efforts to transfer risks off balance sheet.

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For government supervisors, incentive conflicts trace not only to short horizons, but also to clientele influence and to pressure to support the expansion of homeownership for low-income households. As credit spreads increased in 2007 and 2008, these incentive conflicts led authorities to temporize by adopting policies that risked allowing the depth and duration of the crisis to increase. Ignoring the lessons of the savings and loan (S&L) mess, Federal Reserve press releases and speeches by Chairman Ben Bernanke and New York Federal Reserve President Tim Geithner repeatedly misframed the difficulties that highly leveraged and short-funded institutions faced in rolling over their debt as evidencing a shortfall in aggregate market liquidity rather than volatile and widespread concerns about the individual solvency of troubled institutions.¹ The following passage typifies the way Fed officials interpreted the crisis before September 2008:

In this environment, banks have faced several different types of liquidity and funding challenges. They have been called on to fund a range of different contingent liquidity and credit commitments, as is typically the case in crises. The substantial impairment of securitization and syndication markets has been an additional challenge because it has reduced banks' access to liquidity and their capacity to move assets off balance sheets. As the market value of many securities has declined, and investors have reduced their willingness to finance more risky assets, liquidity conditions have eroded further. In response, even the strongest institutions have become much more cautious, building up large cushions of liquidity, bringing down leverage and reducing financing for their leveraged counterparties.²

This Essay attributes the ongoing financial crisis instead to economic and political difficulties of monitoring and controlling the production and distribution of safety-net subsidies. Regulation-induced innovation by regulated firms outstripped both the monitoring technology and the administrative focus of supervisory personnel. Moreover, the interaction of regulatory arbitrage with rigid capital regulation added positive feedback that intensified the bubble.

Crisis pressures will not relent until access to safety-net subsidies has been capped and managers and authorities acting together find a way to quell doubts about the future viability of institutions known to be struggling with outsized losses. This can be done in the short run by temporarily nationalizing deeply insolvent zombie firms and by producing and publicizing convincing forensic evidence that their insolvency has been repaired.

The Essay goes on to argue that, to reduce the threat of future crises, the critical task is not to reform the architecture of financial regulation, but to repair defects in the incentive structure under which private and government supervisors manage a nation's financial safety net. As explained in earlier

1 See, e.g., Press Release, Federal Reserve Bd. (Mar. 16, 2008), available at <http://www.federalreserve.gov/newsevents/press/monetary/20080316a.htm>.

2 Timothy Geithner, The Current Financial Challenges: Policy and Regulatory Implications, Remarks at the Council on Foreign Relations Corporate Conference 2008, New York City (Mar. 6, 2008).

research,³ a country's financial safety net is a multidimensional policy scheme whose mission is to balance the costs and benefits generated by: (1) protecting financial-institution customers from being blindsided by insolvencies; (2) limiting aggressive risk-taking by financial firms; (3) preventing and controlling damage from runs; (4) detecting and resolving insolvent institutions; and (5) allocating across society whatever losses occur when an insolvent institution is closed. Unless the safety net is backed up by solid crisis planning, cumulative extensions of the safety net are apt to result in less frequent but more devastating crises. The more effective a nation's safety net becomes, the less likely it is that regulatory personnel will have prior hands-on experience in coping with the severity of crisis pressures.

Proposals that would redesign regulatory instruments (such as risk-based capital requirements) or rearrange bureaucratic responsibilities for administering particular elements of the safety net (by merging two or three related agencies or expanding the mission of the Federal Reserve) without remedying the incentive conflicts that reward the mismanagement of safety-net resources will postpone rather than promote genuine reform. Genuine reform entails making financial-institution managers and federal regulators jointly responsible for conscientiously estimating and controlling in a timely manner the safety-net consequences of emerging financial contracts and institutional forms.

I. Financial Crises and Bubbles

Under the regulatory regimes that exist today, financial crises and bubbles are inevitable. Every country's financial sector passes through successive three-stage sequences of: (1) precrisis bubbles in the price of important assets; (2) a period of actual crisis; and (3) a postcrisis interval of healthy economic recovery. Although crises make themselves known immediately, no one can say precisely when a healthy recovery degenerates into a bubble. Moreover, authorities must expect parties that benefit from sustaining an emerging bubble to hide their weakness and to resist supervisory attempts to label such transitions honestly.

It is important to recognize the nature and extent of industry and governmental disinformation and to understand how disinformation intensifies and prolongs the course of bubbles and crises. Bubbles and crises arise dialectically. During a bubble, regulated institutions routinely enlarge their access to implicit safety-net subsidies by devising innovative instruments that serve in part to increase information asymmetries between risk-takers and whatever private and governmental parties are charged with monitoring their risk-taking.

3 Edward J. Kane, *Financial Safety Nets: Reconstructing and Modeling a Policymaking Metaphor*, 3 J. INT'L. TRADE & ECON. DEV. 237 (2001).

Each generation of regulators and supervisors inherits tools that are tailored to previous crisis experience. Part of the work of what we might call a “bubble-blower” is to undercut the ability of these tools to control safety-net subsidies. Institutions extract subsidies from the safety net indirectly by expanding their leverage and/or mismatching the duration of their assets and liabilities. The more complicated a firm’s loss exposures become, the easier it is for its managers to shift responsibility for absorbing its deepest downside risks onto national safety nets. Under the cover of what are purported to be purely resource-saving innovations, financial institutions can expand both forms of risk-taking in hard-to-observe ways.

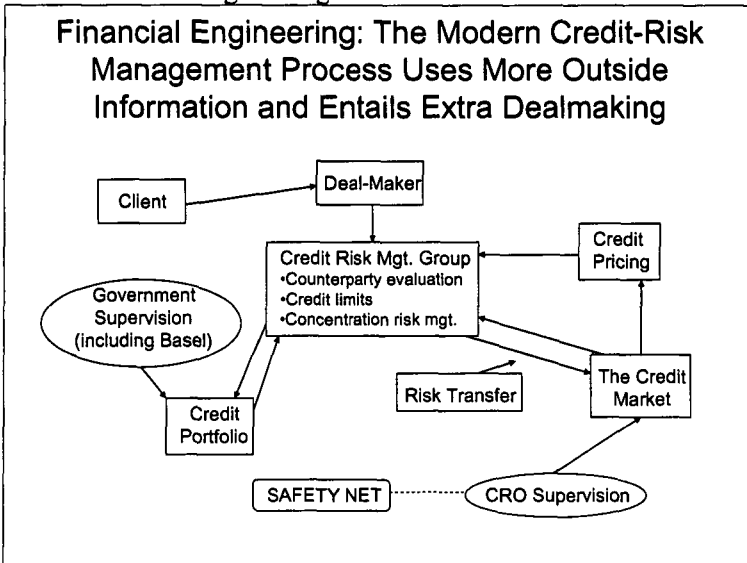
The securitization bubble is best understood as a complicated extension of the simpler government credit-allocation scheme that subsidized builders and homeowners during the bubble stage of the S&L mess. Until the bubble burst in 1989, implicit subsidies were routed to favored borrowers through federal deposit insurers and shared with institutions whose deposit liabilities federal agencies explicitly insured.

Lenders have been willing to shade the interest rates they charged on housing loans because they presumed that the safety-net costs generated by these loans would be supervised with a lighter hand than they deserved and that, in times of banking turmoil, authorities would expand a troubled institution’s access to implicit and explicit federal loans and guarantees. In line with the second presumption, when the S&L bubble burst, the obligations of the insolvent S&L deposit insurer (the Federal Savings and Loan Insurance Corporation) were sustained by a massive injection of funds from hapless taxpayers.

To contrast the securitization bubble with the S&L mess, we must introduce the subsidy-induced participation of important new players into the activities of the housing-finance sector. Poorly capitalized, state-chartered nonbank mortgage brokers stepped in to help originate loans, especially to low-income households targeted by the post-2004 affordable-housing program. To provide an alternative to insured deposit financing of mortgage loans, a new layer of agents developed between lenders and safety-net managers. It is convenient to call these mediating agents “financial engineers.” They claimed that by their joint intervention they could accomplish the quasi-magical task of turning extremely risky mortgage loans to under-resourced households into riskless securities. These would-be financial alchemists (accountants, appraisers, investment banks, derivatives dealers, credit raters, statistical model-builders, credit insurers, and financial servicers) cooperated in overstating collateral values and understating institutional leverage and other risks. Finally, Government-Sponsored Enterprises (GSEs), especially Fannie Mae and Freddie Mac, became the main channel for distributing housing-finance subsidies. However, as the scheme began to unravel, the GSEs were assisted by the Federal Reserve, Federal Home Loan Banks, and the U.S. Treasury.

Figure 1 illustrates the incremental dealmaking and oversight entailed in the financial-engineering business model. As shown in the lower righthand portion of the diagram, securitization introduces a market in which credit exposures can be priced and transferred synthetically. Although the safety-net costs that defective underwriting can generate synthetically are just as worrisome as those produced in traditional forms of dealmaking, supervisory authorities allowed profit-making credit-rating organizations (CROs) to oversee the synthetic market. While the SEC acquired authority to supervise CRO activities in the Credit Rating Agency Reform Act of 2006, that authority focused on registering these companies and overseeing their operations.⁴ The language of the Act in no way tasked the SEC with exploring the safety-net consequences that mistakes in CRO certifications might generate.

Figure 1: The Financial-Engineering Business Model



This gap in the ovals representing the structure of governmental and credit-rating industry oversight of safety-net loss exposures created by risk-transfer transactions is not accidental. It reflects a series of deeper gaps in society’s ability to enforce five ethical duties that a totally selfless regulator would gladly embrace. These duties may be seen to operationalize obligations of competence, loyalty, and care that Kantian logic and common-sense ethics imply that private and governmental regulators and supervisors owe to U.S. taxpayers.

The first of these duties is Vision. To lessen the costs generated by regulation-induced innovations, authorities must continually adapt their surveillance systems to observe the safety-net implications of new fast-growing

4 Credit Rating Agency Reform Act of 2006, Pub. L. No. 109-291, 120 Stat. 1327 (codified in scattered sections of 15 U.S.C.).

financial instruments and evolving networks of intracompany and intercompany connectedness. A good start would be to require each agency's Inspector General to conduct an annual analysis of the adequacy of agency policies with respect to asset classes and technologies whose use has been growing disproportionately.

The second duty is that of Prompt Corrective Action. As envisaged in the FDIC Improvement Act of 1991,⁵ Inspectors General must be empowered to make individual supervisors accept responsibility for seeing that loss-making institutions are closed or recapitalized before they can impose large losses onto the safety net. The third duty is that of Efficient Operation. To manage the size of safety-net expenditures, this duty entails training personnel in crisis management so that they can detect and resolve financial-institution weakness at minimum resource cost. The fourth duty is that of Conscientious Representation. It asks regulatory officials as stewards of the economy to put society's interest coequal or even ahead of their own (particularly in times of stress). Such behavior is required routinely from military, police, fire-control, and nuclear-cleanup personnel.

The fifth and most important duty is that of Accountability. As a way of bonding their commitment to fulfill each of the first four duties, internal and external supervisors must make themselves accountable for neglecting or botching them. This requires that authorities explain and document at least the following three points: why they adopt one set of policies rather than another, how they expected these policies to work, and how (if at all) results diverged from their plan.

II. Principles of Crisis Management

Crisis management unfolds in two dimensions. The first dimension takes place in the arena of political economy. It centers on identifying losses and continuing loss exposures that troubled financial institutions and their counterparties can unload onto taxpayers. Uncertainties about the ultimate size of these losses and about who will end up having to bear them keeps a crisis going. For troubled firms, the idea is to frame the dangers particular losses pose in a manner that makes it seem to be in society's interest not to let the losses reside with parties who volunteered to absorb them when the bubble was expanding.

The second dimension is administrative. Ideally, officials should resolve both uncertainties promptly, decisively, and efficiently. Implementing such a strategy can establish confidence in the judgment and competence of top officials. Adopting and holding to a sensible program can also make it easier to persuade the public that the pattern of loss-shifting chosen is an appropriate one

⁵ Federal Deposit Insurance Corporation Improvement Act of 1991, Pub. L. No. 102-242, 105 Stat. 2236, 2263 (codified as amended at 12 U.S.C. §§ 1811-1831 (2006)).

and that the beneficiaries of the program deserve the assistance they have been offered. However, in practice, officials tend to act chaotically.

For crisis managers, the first steps are both the most important and the hardest to execute well.⁶ A financial crisis resembles a battlefield. The financial arena is littered with wounded firms, all screaming for immediate treatment. The policy problem is how best to contain the further loss of life and limb. Containment begins with sorting firms into three groups: those that are beyond help, those that need virtually no assistance, and those that might be able to survive with a reasonable degree of government intervention.

Supervisory “medics” charged with this task face hostile fire from lobbyists and have limited tools with which to accomplish the kind of triage that would be most effective. In most countries, even if they could prioritize wounded firms appropriately, safety-net officials lack the administrative vehicles they need to move the wounded where they ought to go. Certifiably healthy institutions should be patted on the back and sent back into the fray. Moribund firms need either to be sent to a corporate morgue or to be put into conservatorship before portfolio rot and zombieness can set in. Provisional survivors should be assigned to a watchlist administered by a deposit-insurer’s resolution division whose staffs ought to have been carefully trained (and given experience) in restructuring failing enterprises.

Figure 2 presents a chart that is divided into three panels. It outlines the dialectical sequence of governmental policies that supported the housing-finance bubble and identifies the choke points and incentive conflicts that subsequently led to its bursting. The second panel presumes that, when a bubble first begins to burst, incentive conflicts tempt authorities to try to cover up the depth of emerging financial-institution insolvencies and to adopt showy, but ineffective, patterns of response. Their hope is to move the problem temporarily off the public’s radar screen. If successful, this shifts responsibility for truly resolving the problem to the next generation of government officials.⁷

6 Edward J. Kane & Daniela Klingebiel, *Alternatives to Blanket Guarantees for Containing a Systemic Crisis*, 1 J. FIN. STABILITY 31 (2004). Kane & Klingebiel stress the importance of understanding and controlling the risk-taking incentives of insolvent institutions across all the three phases of a crisis. *Id.* at 51. Based on a detailed analysis of policies followed in twelve recent crises, they advise safety-net managers to adopt policies that estimate losses during the initial triage phase and allocate these losses promptly during follow-on containment and restructuring phases. *Id.* at 62.

7 EDWARD J. KANE, *THE S&L INSURANCE MESS: HOW DID IT HAPPEN?* (1989).

Figure 2: Dialectics of Bubble and Crisis

Panel 1

Thesis: Unsustainable policy mix creates a bubble.

- Low interest rates fueled the loss-causing credit-allocation scheme (“politically sabotaged loans”) vs. consequent desupervision of risk and rising costs of providing loans and guarantees to loss-making institutions.

Panel 2

Antithesis: Market forces test governments’ ability to manage the expanding costs of national safety nets.

- In a banking crisis, market tests consist of silent runs (symptomized by a generalized flight to both quality and simplicity).
- The longer authorities play “coverup,” create new uncertainties, and delay action designed to contain the damage, thereby helping zombie institution to stay in play, the more the probability of further tests and a deepening crisis grows.

Panel 3

Synthesis: Meaningful reform occurs when authorities can no longer quell market doubts about their ability to sustain the contradictory policy mix of subsidizing and limiting leverage.

- Credit-allocation scheme unravels.
- Cost of sustaining decapitalized institutions becomes manifest.
- Regulatory/supervisory system is reorganized in a plausible way.

The synthesis whose unfolding is described in the third panel clarifies that keeping zombie institutions in play is extremely costly and that, as these costs multiply and become manifest, the poverty of these policies is revealed and the need to undertake effective triage eventually becomes inescapable. The middle item in this panel represents the situation in which authorities find themselves today. The credit-allocation scheme has broken down and authorities recognize the need for “plausible” reform of regulatory and supervisory systems. As this Essay goes to press, an interagency working group is drafting a comprehensive program of re-regulation. Confidential sources indicate that the draft program would expand the crisis-management and supervisory authority of the Federal Reserve without addressing the incentive conflicts that would inevitably corrupt the exercise of that authority. One may hope, though it is unlikely, that the politics of policymaking can allow re-regulation to include accountable ways of measuring and controlling the creative manner in which institutions extract implicit and explicit subsidies from the safety net.

III. A Medley of Potentially Effective Reforms

There is no permanent way to prevent bubbles and crises from emerging.⁸ Still, numerous complementary actions could improve the odds of getting less-destructive bubbles and better crisis management in the future. To be effective, a program of reform will have to rework—in both the private and public sectors—the type of information that is collected and the way in which supervisory activities are performed and compensated. More importantly, it will have to make sure that compensation schemes and the division of labor mesh across private and governmental elements of the financial-engineering transaction chains depicted in Figure 1. A preliminary test of the value of each and every program element is to analyze whether and how it might have improved the interaction of private and governmental incentives during the securitization bubble and its aftermath.

It is convenient to consider first some purely private-sector reforms. Some of these will be adopted even in the absence of any government mandate. This will occur if and only if the reform is seen to improve the competitive positions of firms that adopt it. The first reform is to incorporate explicit and effective contractual clawbacks for subsequent interruptions in securitized cash flows into the contracts of employees and firms at all stages of securitization. It is unwise to allow employees and firms that can make, securitize, or over-rate bad loans to collect compensation in advance without bonding their work by accepting liability for future defaults. Bonus payments to senior management should be subjected to the same delays and contingencies as those offered to a firm's operating staff. After vesting, bonuses might also be made payable in the very assets or lowest tranches that each particular employee supervises, originates, or certifies. Second, much like the bottom lines of corporate income and balance-sheet statements, the evolving value of the pools of assets backing various securitized claims needs to be tracked individually and reported explicitly at regular intervals (say, monthly). This would make it easier for investors and supervisors to identify securitization chains in which the performance of due diligence is subpar. Third, credit-rating organizations must change the way they rate asset-backed securities and take explicit responsibility for errors they make in rating them. In my ideal world, CROs would: (1) disclose the information they rely on in forming a rating; (2) bond themselves against negligent construction of rating models or using unrepresentative samples of data to estimate model parameters; and (3) report not just an instrument's rating, but also its downward volatility.

Additional reforms could be made in the management and financing of large financial firms. The crisis makes it clear that such firms failed to plan sufficiently for the downside. To remedy this, Richard Herring and Jacopo

8 CHARLES P. KINDLEBERGER, *MANIAS, PANICS, AND CRASHES: A HISTORY OF FINANCIAL CRISES* (1978). Kindleberger characterizes crises as a "Hardy Perennial." *Id.* at 3. His book stresses that speculative bubbles and the crises they induce are "if not inevitable, at least historically common." *Id.* at 4.

Carmassi have proposed that managers be required to prepare and file with their principal regulator a standby plan with which to handle their firm's bankruptcy and be obliged to update and refile this plan yearly.⁹ The existence of these plans would make the threat of putting an insolvent institution into failure or conservatorship more credible because it would lower the costs of executing the threat. Having a benchmark winding-up scheme in place would also make it much easier for authorities both to close out the claims of stockholders and to haircut uninsured creditors at the moment of takeover. Explicitly planning for crisis management might also make it politically and administratively feasible to re-establish some form of extended liability for owners of financial-institution stock.

To improve incentives in government requires reworking the manner of recruitment and the employment contracts of top officials. The goal would be to define their missions more sharply and make them personally accountable for outsized safety-net expenses. Building on the information used to construct bankruptcy plans at regulated firms, I would require regulators to establish, publicize, and test regularly a benchmark market-mimicking scheme for crisis management. While authorities would be free to deviate from this plan, they would be obliged to explain why they are doing so. To help them to put crisis-management plans into operation more promptly, I would also require regulators to collect and analyze estimates of safety-net subsidies from every regulated institution and consolidate these estimates in ways that would track over time the aggregate value of safety-net subsidies for the firms they supervise. To finish the task, I would ask the Treasury, the Fed, and the FDIC to use these estimates and other relevant data to construct independent estimates of the evolving value of safety-net subsidies to the financial sector as a whole.

Because these reforms would make the jobs of top regulators more difficult, I would also raise the salaries of these officials. However, to lengthen the horizons of safety-net managers, I would fund this raise as deferred compensation that would have to be forfeited if a crisis occurred within three or five years of their leaving office. This would have the further benefit of making new appointees more cognizant of unresolved problems that his or her predecessor might be leaving behind. To discourage elected officials from trying to win special breaks for firms that contribute money to their campaigns, I would require that regulatory personnel report fully on interactions with elected officials that occur outside the public eye.

A third approach to sharpening monitoring and loss-control responsibilities would be to establish schemes in which private and governmental monitors could hold one another responsible for the quality of their work. For example, it has been widely proposed that safety-net managers

9 Richard Herring & Jacopo Carmassi, *The Corporate Structure of International Financial Conglomerates: Complexity and Its Implications for Safety and Soundness*, in OXFORD HANDBOOK OF BANKING (Allen N. Berger et al. eds., forthcoming 2009).

be required to move trading in over-the-counter derivatives and other securities to clearinghouses or exchanges when and as their volume becomes large enough to pose material safety-net consequences. Potential suppliers of clearinghouse services would have strong incentives to see that authorities carry out this duty. A second variation on this approach would be for deposit insurers to reinsure their coverages with private parties. This could be done either by writing credit default swaps or by transacting in reinsurance markets. Changes in the maturity structure of reinsurance or swap premiums would forecast future safety-net expenditures. As a third example, federal regulators could refuse to recognize CRO ratings in setting capital requirements and other risk-management rules unless the CRO issuing the rating bonded the government against safety-net losses that could be traced directly to incompetence or negligence in the rating process.

IV. Summary Implications

Structured securitizations may be visualized as manufacturing risk exposures in a series of work stations located alongside a conveyor belt. The different stations produce contracts that create, disguise, assess, reassign, or insure the risk exposures that move steadily along the belt. During the bubble, product-quality inspectors located at each station (that is, supervisors) were using their computer scanners to entertain themselves rather than to inspect carefully the quality of the work passing by.

Although it is dishonest, it is natural for supervisors to blame the poor quality of the final product on weaknesses either in their lines of sight or in the supervisory equipment they had to work with. But giving supervisors more and better scanners or relocating their work stations will not cure the root problem.

The root problem is the de facto corruption of supervisory incentives that poorly monitored safety-net subsidies create and sustain. Figure 3 shows how massive these subsidies have become. This table is part of a larger recipient-by-recipient table on the Center for Responsive Politics website showing that TARP recipients paid out \$76.7 million on lobbying and \$37 million on federal campaign contributions in 2008 and (through February 2, 2009) received access to \$295.2 billion in TARP funds.¹⁰ The ratio of lobbying expense to TARP receipts suggests that, during the initial stages of the crisis, financial institutions reaped extraordinary benefits from investing in efforts to panic federal officials and to tell them how “best” to dispel crisis pressures. Following this self-interested advice has proved ineffective partly because the return from expanding large firms’ investments in lobbying activity has dwarfed the return they could expect to earn from diligently attending to their ordinary business of intermediating the nation’s flow of savings and investment. This lobbying activity pushes two false hypotheses: that the financial sector is more important

10 Center for Responsive Politics, *TARP Recipients Paid Out \$114 Million for Politicking Last Year*, Feb. 4, 2009, <http://www.opensecrets.org/news/2009/02/tarp-recipients-paid-out-114-m.html>.

than the real sector and that massively expanding access to safety-net subsidies serves the interest of ordinary taxpayers.

Figure 3: The Balance of Influence: Lobbying Expenses for 2008 by Selected Large Firms That Received Government Help¹¹

Company	2008 Lobbying Amount	Government Investment Through Feb. 2, 2009
Bank of America (includes Merrill Lynch)	\$8.8 million	\$45 billion
Citigroup	\$7.6 million	\$50 billion
AIG	\$9.7 million	\$40 billion
JPMorgan Chase	\$5.4 million	\$25 billion
Wells Fargo	\$1.2 million	\$25 billion
Goldman Sachs	\$3.3 million	\$10 billion
Morgan Stanley	\$3.1 million	\$10 billion
PNC Bank	\$0 million	\$7.6 billion
U.S. Bancorp	\$0.570 million	\$6.6 billion
Capital One	\$1.1 million	\$3.6 billion

11 Center for Responsive Politics, *TARP Recipients Paid Out \$114 Million for Politicking Last Year*, Feb. 4, 2009, <http://www.opensecrets.org/news/2009/02/tarp-recipients-paid-out-114-m.html>.