Failure Is an Option: An Ersatz-Antitrust Approach to Financial Regulation

**ABSTRACT.** We distinguish the economic problems when large financial institutions ("banks") become insolvent from the political challenges that exist before banks are distressed. These political problems arise because policymakers would like to be able to precommit while a bank is still healthy to refrain from bailing out the bank later, should it become distressed. Political theory and historical experience show that politicians facing unsettled capital markets and highly anxious voters will always bail out the financial institutions that they deem “Too Big To Fail.” As such, the only way for government credibly to commit to refrain from pursuing a Too Big To Fail policy is to break up the largest financial institutions before they become Too Big To Fail. We identify the size at which we believe banks become Too Big To Fail. Banks that reach this size should be broken up. Liabilities should be limited to a metric based on the actual funds devoted to resolving failed banks. The metric that we identify is the targeted value of the FDIC’s Deposit Insurance Fund. We would prohibit any financial institution from amassing liabilities in an amount greater than five percent of the targeted value of this fund. The government could thereby commit credibly to stopping bailouts and to pursuing a policy of allowing financial institutions to fail. We believe that the lost economies of scale associated with this “ersatz-antitrust policy” would be offset by the large savings realized by avoiding future bailouts.

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INTRODUCTION

Use of a precommitment device enables a government or other entity to make a promise that it will be expected to keep in the future. A government implements a precommitment device by taking some action (like tying oneself to the mast or burning one’s bridges) that eliminates its ability to take certain other actions in the future. By eliminating certain options, a government can increase the deterrence effect of a particular promise or threat by making the promise or threat far more credible.¹

In this Feature, we analyze massive government bailouts of financial institutions as an example of a classic precommitment problem. In times of economic stability, governments understand that future bailouts of massive financial institutions will be expensive and inefficient; they will lead to significant moral hazard on the part of the financial institutions that are eligible for such bailouts. Policymakers, however, cannot credibly commit to refrain from supporting large, important financial institutions.

The government’s inability to precommit to refrain from engaging in massive bailouts creates an implicit government guarantee: those institutions in this “Too Big To Fail” category will be bailed out, despite the government’s inevitable prior pledges (usually made immediately after prior bailouts) to refrain from orchestrating such bailouts in the future. These implicit guarantees would be considered bad policy if articulated as explicit guarantees. Some sort of precommitment device is needed to bring to an end the vicious circle of bailouts in which the United States appears to be trapped. In our view, the only precommitment device that enables the government to make a credible promise to refrain from future massive bailouts is to act preemptively to prevent financial institutions from growing so large that they become too big to fail.

Our precommitment device takes the form of a bright-line rule that operationalizes the adage—once popular among regulators but never implemented—that “any financial institution that is too big to fail is too big to survive.” What this means, as a practical matter, seems obvious: we must determine how big is Too Big To Fail and dismantle institutions larger than that size. These institutions should be divided into smaller sizes such that they

can be wound up without government intervention in a dissolution process if they become insolvent.

Under this rule, no financial institution could amass aggregate liabilities in an amount greater than 5% of the then-current targeted value of the FDIC Deposit Insurance Fund (DIF) for the current year. We have selected the targeted value of the DIF for several reasons. First, it is a standard that is readily identifiable; the FDIC publishes this target in the Federal Register. Second, the standard is reasonably objective; the FDIC’s target for the DIF is expressed as a percentage of FDIC-insured deposits. Third, the standard is flexible but reasonably protected from political influence; the FDIC is empowered by the Federal Deposit Insurance Act to use its judgment to set the target value of the DIF, taking into account any economic factors that it deems appropriate. It must, however, select a target value of not less than 1.15% of aggregate insured deposits but no greater than 1.50% of aggregate insured deposits. This standard provides a practical protection against arbitrary easing as well. If the target value is increased to allow bigger banks, then all banks will have to pay higher assessments into the DIF. This has two consequences: greater resources available for possible future resolutions and higher costs for banks, the latter of which will temper those banks’ fervor for growth.

This leads to our fourth reason for selecting this metric: it is linked to our ability to absorb the failure of a financial institution without jeopardizing the stability of the rest of the banking system. By way of illustration, the current targeted value for the DIF is equal to 1.15% of total insured deposits, so the bright-line limitation we propose would not allow any bank to have total liabilities in excess of 0.0575% of total deposits, or approximately $3.096 billion.

2. Many insurance programs are organized such that disbursements to insured entities are made from an insurance fund. Such insurance funds are often capitalized by premiums that are adjusted to achieve certain targeted values or balances. As the fund grows larger, premiums decline. Premiums can even reach zero or turn negative if the fund generates a surplus. If the value of the fund declines due to investment losses or large payouts to insured parties, then premiums go up until the fund is replenished. The United States, along with several European countries, uses reserve targeting systems to determine the premiums paid by the banks that participate in their government-sponsored deposit insurance programs. See George G. Pennacchi, The Effects of Setting Deposit Insurance Premiums To Target Insurance Fund Reserves, 17 J. FIN. SERVICES RES. 153, 153 (2000).


5. For the details of this calculation, see infra Section III.B. Prior to the enactment of the Dodd-Frank Act in 2010, the FDIC was required to set the targeted ratio in the range between 1.15% and 1.50%. If at any point the ratio was predicted to fall below 1.15%, the
We understand, of course, that the government does not always achieve its targets. For example, the current actual DIF reserve ratio is well below 1.15% and is not projected to reach the targeted level until 2018. Under our proposed rule, however, the actual DIF reserve ratio is irrelevant; our analysis focuses solely on the targeted ratio, which, by statute, cannot fall below 1.15%. If our approach were adopted, Congress would have a strong incentive never to lower the minimum targeted ratio: if the ratio ever were reduced, then our rule would result in an even larger number of banks being deemed “too big” than it would under the current 1.15% target figure. And though Congress might have an incentive to raise the minimum targeted ratio in response to political pressure to allow large banks to retain their current size or to grow, any increased risks of bailouts associated with such larger banks would be offset by the larger deposit insurance premiums paid by all banks, since such premiums are tied to the targeted, not the actual, reserve ratio.

Finally, by tying the metric to the target value of the DIF and not the actual balance of the DIF, our bright-line rule does not compound a problem in times of financial crisis (that is, an unintended negative feedback loop) and avoids arguments over market accounting of DIF assets and questions of liquidity versus capital in the fund.

The bright-line rule that we are proposing would require the largest financial institutions to choose between downsizing themselves in order to comply with the size rule or acquiescing to a government-mandated breakup plan. We estimate that only a small percentage of financial institutions would be affected by our rule.

FDIC was required to develop a plan to ensure that the ratio increased to 1.15% within five years. Between 2007 and 2009, the rate set by the FDIC was 1.25%, but the FDIC never achieved this higher target. As of this writing, the targeted ratio is 1.15%. See Office of Mgmt. & Budget, Exec. Office of the President, Appendix: Budget of the U.S. Government 1264 (2010), available at http://www.whitehouse.gov/sites/default/files/omb/budget/fy2011/assets/appendix.pdf. Section 334 of the Dodd-Frank Act amended section 7(b)(3)(B) of the FDIC Act to make the minimum designated ratio 1.35% of estimated insured deposits. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 334, 124 Stat. 1376, 1539 (2010). Importantly for our purposes, the Dodd-Frank Act requires that the FDIC publish for a period of not less than five years the amount of estimated deposits that serves as the basis for calculating the DIF ratios. Id.

6. See Office of Mgmt. & Budget, supra note 5.
7. While we do not here articulate a detailed statutory scheme for operationalizing our plan, we note that the approach that we envision requires that there will be a clear statutory deadline for breaking up financial institutions that have crossed the permissible size threshold. In addition, the power to implement a breakup scheme would have to be delegated to some administrative agency or combination of administrative agencies. We recommend that the task be assigned to a group consisting of members of the Antitrust...
The bright-line rule is simple by design. It is simple to understand. It is simple to administer and monitor. It is simple to enforce. It works prospectively and does not require large groups of lawyers, accountants, or financial engineers for implementation or compliance. It also does not rely on the hope that the government will, in the future, permit large institutions to fail, notwithstanding the fact that the government has never permitted such institutions to fail in the past. Importantly, it provides for corrective action before there is a crisis and not during or after a crisis, when political forces are at their strongest.

We are limited in our choice of contingency plans for two reasons. First, regulation, even massive regulation, has been tried and has failed. Elaborate ex ante commitments to protect some creditors—including federally sponsored deposit insurance, minimum capital requirements, activities restrictions, and government inspections—have not enabled the government to make a credible commitment to refrain from bailing out all the rest during a crisis.

Second, history is relevant. Because we have bailed out the banks in the past, people have rationally come to expect that we will bail them out in the future. Despite serious prior efforts to refrain from using taxpayer funds to bail out companies like AIG, Citigroup, and Goldman Sachs, the political fallout from the failures of these or other financial behemoths was deemed too great for bailouts to be avoided in time of crisis. Put another way, our country’s established record of bailouts actually makes it far more difficult for the government to make a remotely credible commitment to stop future bailouts.

Thus, because traditional regulation does not work and because people have come to expect bailouts, the only solution to the Too Big To Fail problem is to break up the largest financial institutions to a size that is sufficiently small. This should be done so that (1) bankers, customers, and taxpayers do not expect these institutions to be bailed out; (2) voters do not want their political leaders to bail banks out, if and when they do become insolvent; and (3) banks do not have sufficient political influence to “capture” regulators or government leaders and perpetuate a false sense of economic importance. In this Feature, we articulate the guidelines that we believe should be used to break up the largest financial institutions in the economy.
The rule that we propose would limit the economic risk of future financial institution failures by severely limiting the size of banks and other financial institutions that benefit not only from explicit FDIC insurance but also from the broader set of implicit government guarantees.

In Part I of this Feature we discuss the current understandings of the concept of Too Big To Fail. Specifically, we treat the twin problems that we identify with “Big Banks.” First, the government cannot credibly commit to refrain from bailing them out when they get into financial distress, as they inevitably do. Second, their size, and the certainty that they will be bailed out, creates a “follow-the-leader” mentality that magnifies the costs and the consequences of errors in judgment and analysis on the part of these institutions’ managers.

Part II of this Feature analyzes two facets of the current legal regime that governs large financial institutions. First, we argue that the Too Big To Fail doctrine, which is typically analyzed as a policy issue dealing with “interconnectedness” (the term for the complex web of transactions and dealings that appears to bind financial institutions together), is actually a political issue. We posit that it is irrelevant whether bailouts are good public policy or bad public policy: as long as bailouts are a political necessity for elected officials and top bureaucrats, they will continue. Consequently, rather than continue a meaningless debate about whether Too Big To Fail is good public policy or bad public policy, we must accept the fact that bailouts are inevitable as a practical matter as long as behemoth financial institutions exist.

In the second Section of Part II, we consider the role of antitrust policy in our analysis. Ironically, antitrust law has not just tolerated big banks; U.S. antitrust policy has actually created exceptions and loopholes for banks that have exacerbated the problem of excessive size. These antitrust laws’ exceptions are misguided. The policy and practice of coddling and protecting the biggest financial institutions should not just be ended; it should be reversed. Regulators should move aggressively to dismantle banks that are too big to fail.

We recognize that our idea of breaking up the banks fits uneasily into the current paradigm of antitrust law, which posits that the only legitimate concern of antitrust law is fostering price competition in the markets for capital, products, and services. As we point out below, however, the current Too Big To Fail policy actually does convey an inappropriate and inefficient competitive advantage to big banks; it provides them with artificially cheap funding because, ceteris paribus, creditors inevitably prefer financial

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8. Hence our use of the term “ersatz” in the title.
institutions that enjoy implicit or explicit government guarantees rather than risk their funds with smaller banks that might actually be allowed to fail.

Finally in Part III, we discuss what we call the “original” Volcker Rule, which would have put strict curbs on bank size. Legislators considered this rule when they were drafting the Dodd-Frank Act, but they ultimately discarded it. This is the main rival to our approach. Then, in the final Section of Part III, we present our proposed rule, which we characterize as the “bright-line” rule. It is the only simple, objective rule that has been proposed to deal with the Too Big To Fail problem. A conclusion follows.

I. THE INTRACTABLE (POLITICAL) PROBLEM OF BIGNESS: HISTORY AND CONTEXT

Bank bailouts may be bad policy, but politicians who face a choice between reelection and good public policy will invariably choose reelection. Democracy creates an environment of “survival of the fittest” among politicians. Those unwilling or unable to satisfy the voters will inevitably be replaced. History may reward the statesman who takes unpopular views on the important issues of the day, but politics does not. If an incumbent politician fails to pursue the politically expedient path, then he or she will be replaced by a politician who is willing to make the popular choices, irrespective of whether that path is bad policy.

A. The Problems: Credible Commitments and Public Expectations

Bailouts of large, systemically important financial institutions are inevitable not because economic policy requires them but because political survival does. As long as large financial institutions exist, governments will continue to bail them out. And elected officials and regulators, all of whom can be replaced (either by voters or by politicians), cannot make a credible commitment to refrain from bailing out large institutions. Those who will not orchestrate

bailouts in times of crisis will inevitably be replaced by others who will. When we focus on issues of interconnectedness, proprietary trading, uses of derivatives, or subprime lending, we become distracted with the details of what may have contributed to the problem and, importantly, miss what grabs the attention of the political class that will craft the solution.

In 2008, world financial markets faced the worst financial crisis since the Great Depression. Equity markets tumbled, debt markets froze, and banks stopped lending. Brand-name financial firms like Merrill Lynch, Lehman Brothers, Bear Stearns, Citibank, Bank of America, AIG, Fannie Mae, and Freddie Mac—all once highly regarded—either failed or required extraordinary assistance to stay afloat. Even the staunchest of free market advocates strongly advocated government investment in financial institutions in order to avoid a potential depression or, indeed, the complete collapse of the financial system. Pundits and market participants alike thought that we were on the edge of the abyss.\textsuperscript{11}

The Great Recession will also be remembered for making the phrase “Too Big To Fail” part of everyday discourse and not just an obscure term used in policy discussions among regulators, lawyers, and bankers. While concerns about bank failures have long been a part of American financial history, the idea that a particular bank would be saved because it was considered to be too big to fail became a viable policy alternative in connection with the collapse of Continental Illinois National Bank and Trust Company (Continental Illinois) in 1984.\textsuperscript{12} At the time of its failure, Continental Illinois was the seventh-largest banking institution in the United States and represented the largest bank failure in modern times by a wide margin.\textsuperscript{13} The resolution of Continental Illinois presented problems for regulators due to the bank’s size and complexity. In resolving Continental Illinois, the FDIC departed from its existing policy of paying uninsured depositors only a portion of their claim at the time of the bank’s closing, with the remainder paid only if net resolution proceeds were available. Uninsured depositors were paid in full along with

\textsuperscript{11} See Paul Krugman, Op-Ed., \textit{Edge of the Abyss}, N.Y. TIMES, Oct. 3, 2008, at A25. The column quotes bond trader John Jansen as stating that current conditions are “the financial equivalent of the Reign of Terror during the French Revolution” and Joel Prakken of Macroeconomic Advisers saying that the economy seems to be on “the edge of the abyss.” \textit{Id.} Krugman himself concludes that “the people who should be steering us away from that abyss are out to lunch.” \textit{Id.}


\textsuperscript{13} See \textit{id.} (“[T]he crisis involving Continental Illinois National Bank and Trust . . . was and still is [as of 1997] the largest bank resolution in U.S. history.”).
The distinction between being insured and not being insured became meaningless. This came to be referred to as Too Big To Fail in likely reference to Continental Illinois’s significant size and general prominence compared to the other banks that were resolved under the FDIC’s modified payoff policy. There was genuine concern at the time that a run on Continental Illinois could trigger a system-wide run with devastating consequences for all financial markets and the U.S. economy in general.

“Too Big To Fail” was essentially shorthand for saying that in extraordinary circumstances the normal rules would not apply and, in turn, that depositors and creditors of banks that were big or important would be paid more than would be the norm. In retrospect, it should have been apparent that “extraordinary” times are the norm for when most banks fail and that Too Big To Fail was the new normal. Not surprisingly, this policy was less than popular with small banks and those who saw this as an expansion of the moral hazard that already existed in bank insurance programs.

The Too Big To Fail policy continued in this indeterminate form until the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) attempted to limit Too Big To Fail as a policy alternative in all but the clearest of cases. Following a flood of savings-and-loan failures and the failure of a few large banks (for example, Bank of New England and MCorp Bank) in the late 1980s and early 1990s, the resolution process became a focal point for Congress as insurance resources became strained. FDICIA was intended to strengthen the Bank Insurance Fund by providing the FDIC with access to the U.S. Treasury and requiring it to pursue the “least cost” resolution of a failed institution regardless of size. In other words, uninsured depositors and other creditors were not to be treated like insured depositors.

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16. As the name implies, the “least cost” method of resolution requires that the FDIC take into account all costs and benefits associated with all alternative methods of resolving a failed institution and select the method that represents the smallest net present value cost to the insurance fund. An excellent description of the process and the factors that the FDIC normally considers can be found in FDIC, Overview of the Resolution Process, in MANAGING
Ironically, this statute was supposed to make certain that the Too Big To Fail policy was no longer an alternative open to regulators—or so it was generally thought. FDICIA provided that the FDIC did not have to use the “least cost” resolution if the FDIC (by two-thirds majority vote of its board), the Board of Governors of the Federal Reserve (by two-thirds majority vote), and the Secretary of the Treasury (after consultation with the President) determined that the failure of a particular bank would present “systematic risk.” Until the Great Recession, it was generally considered that this exception would never be used. Not only has it now been used, but also the law has been twisted so as to permit government bailouts of uninsured financial institutions—such as investment banks and insurance companies.

Consider the BP oil spill in the Gulf of Mexico. Much of the discourse surrounding that event involved speculation as to whether it was “right to say that the BP oil spill is something like Obama’s Katrina.” Hurricane Katrina was considered a defining moment in the presidency of George W. Bush, and the federal response was pointed to as “a symbol of then-President George W. Bush’s inattention to the hard work of managing the nation’s domestic business.” The seemingly uncontrollable flow of oil from BP’s well, which became the largest spill in U.S. history, also turned into “a public test of [President Barack Obama’s] competence at handling an unanticipated crisis.” For a time at least,

Obama’s authority and credibility were leaking away with the gulf’s deep water oil.

As with Katrina, the White House responded to an unexpected problem with hesitation and missteps. Obama’s aides were slow to assert federal responsibility; they initially described the problem as BP’s

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17. Robert A. Eisenbeis & Larry D. Wall, Reforming Deposit Insurance and FDICIA, FED. RES. BANK ATLANTA ECON. REV., First Quarter 2002, at 1, 13 n.5, available at http://www.frbatlanta.org/filelegacydocs/wall_eisenbeis.pdf (“The ‘systemic risk’ part of least cost resolution provides that the FDIC need not follow least cost resolution if doing so would have very adverse consequences for the system as a whole. However, for the systemic risk clause to be invoked, approval is required by not only two-thirds of the FDIC Board but also by two-thirds of the Federal Reserve Board and by the Secretary of the Treasury. These changes are intended to make it more difficult for the deposit insurer to extend coverage to uninsured depositors and other creditors.”).


20. Id.
FAILURE IS AN OPTION

to solve, not theirs. After that wore thin, Interior Secretary Ken Salazar abruptly suggested that the federal government might seize control of the well—only to be publicly contradicted by his crisis manager, Coast Guard Adm. Thad Allen, who said such a move would be foolish.21

Tellingly, in the midst of the crisis, President Obama claimed that history would absolve him of blame for the oil spill. At a news conference in late May 2010, Obama predicted that “[w]hen the problem is solved . . . I’m confident that people are going to look back and say that this administration was on top of what was an unprecedented crisis.”22 Ratcheting up the political rhetoric, political commentator George Will said that the oil spill was like the Iranian hostage crisis that ruined President Jimmy Carter’s chances of winning a second term as President.23

While a general consideration of when and how the government becomes liable for crises is outside the scope of this Feature, some preliminary insights can be distilled, even at this early stage of research on the topic. There is a clear consensus that government is ultimately responsible for resolving certain problems, notwithstanding the fact that the government was not responsible for, and may have had nothing to do with, the problems that created the crisis. Under certain conditions, there exist implicit (as well as explicit) government guarantees to solve certain social problems, notwithstanding that public policy might indicate that the best way to address the problem would be to leave the government out.24

Moreover, while we have yet to develop a theory of what causes an issue to move from the sphere of private responsibility into the sphere of public responsibility, some observations can be made. Intriguingly, for example, the issue is not purely ideological, as one might at first expect. In other words, one would think that “liberals” and others who advocate active government involvement in the economic sphere would favor government responsibility,

21. Id.
22. Id.
24. Despite BP’s responsibility for the major oil spill in the Gulf of Mexico, polls demonstrate that there exists a consensus among the American public that the government should play a more active role in curtailing any further damage that the spill may cause. See Jon Cohen, Poll Shows Negative Ratings for BP, Federal Government, Wash. Post: Behind the Numbers (June 7, 2010, 12:00 PM), http://voices.washingtonpost.com/behind-the-numbers/2010/06/poll_shows_negative_ratings_fo.html.
while “conservatives,” who favor a laissez-faire approach toward the economy, would argue that the government should decline to take responsibility for problems that are outside of the government’s sphere of expertise or interest. But this does not appear to be the case. For example, Louisiana’s Republican governor, Bobby Jindal, has made it clear that he thinks that the federal government has a large role to play in dealing with the BP oil spill off of the Louisiana coastline.\textsuperscript{25} Interestingly, when asked how he could reconcile his belief in limited government with his demands for more federal assistance and support of the BP disaster, Jindal observed that “[w]hen government grows too big, it doesn’t do its core functions properly. . . . Absolutely, I believe in a limited government that is effective and competent in what it does. We need . . . our federal government exactly for this kind of crisis.”\textsuperscript{26}

Of course, the public expects the government to solve crises—like the Iranian hostage crisis—that involve issues that are clearly within the government’s purview, such as national defense and foreign policy. We believe, however, that the government can also expand or contract the issues for which it is held responsible. The recent debate over health care, for example, can be viewed as a debate about whether the government or the private sector is responsible for providing health care. Still more recently, the creation of a new Bureau of Consumer Financial Protection, as part of the financial reform package, likely will alter expectations about the federal government’s responsibility for protecting consumers involved in commercial transactions.

Since the passage of the Depression-era financial regulations,\textsuperscript{27} banking and investment banking have been among the most heavily regulated industries in the United States. The existence of deposit insurance and the responsibility that the Board of Governors of the Federal Reserve System has assumed for the stability of the financial system, as well as the SEC’s responsibility for the stability of the securities markets, are also likely accountable for the assumption that the government is responsible not only for managing financial crises but also for preventing financial crises from occurring in the first place.

Thus, generally speaking, as the government has grown, so too have public expectations about its responsibilities for systemic mishaps. Those expectations exist regardless of whether such mishaps occur naturally and regardless of


\textsuperscript{26} Id.

whether solving them is something at which the government has any competence, much less expertise or experience.

As such, this Feature is written under the premise that, regardless of the provenance for the assumption, the ineluctable reality is that when financial crises occur, the government (at least in the United States) naturally and inevitably assumes responsibility for resolving the immediate crisis and for “making sure” that such a crisis will not happen again. Government officials recognize this. They no longer purport that regulation can prevent future financial crises, but they do promise to refrain from future bailouts. President Barack Obama defended financial reform by saying, “I am absolutely confident that the bill that emerges is going to be a bill that prevents bailouts. That’s the goal.”28 Senator Christopher Dodd made the same point, emphasizing that his proposed statute “ends bailouts. Nothing could be more clear.”29 In fact, the only thing that could not be “more clear” is that politicians have tried for decades without success to solve the Too Big To Fail problem by instructing regulators to refrain from bailouts.30

This phenomenon is not unique to the United States. There have been large or systemic banking failures in a large and diverse group of industrialized democracies, including (but not limited to) Austria,31 Denmark,32 Sweden,33 Ireland,34 the United Kingdom,35 Russia,36 Germany,37 Indonesia,38 Japan,39

29. Id.
30. See, e.g., 137 CONG. REC. 31,657 (1991) (statement of Rep. Mary Rose Oakar) ("H.R. 2094 eliminates the too-big-to-fail doctrine . . . . No longer will regulators be able to prevent large banks from failing because they view these large institutions as too important to the financial industry or the country. Too often, managers at these large banks have abused this policy and taken risks that were totally unjustified, secure in the knowledge that if their big gamble failed, the Government and taxpayers would bail them out."); id. at 5182 (statement of Sen. Donald Riegle) ("This legislation is specifically designed to stop the current practice of bailing-out uninsured depositors in the big banks, based on the existing theory that such banks are considered too big to fail. That practice must end and this legislation will end it.").
32. See id.
33. See id.
34. See id.
Belgium, Canada, Italy, the Netherlands, and France. In every one of these countries, bank failures inevitably have led to bailouts. Why? Because these countries are democracies, and in democracies politicians who decline to pursue a dramatic response to crises are unlikely to survive. It is for this reason that Too Big To Fail is so often an attractive policy alternative.

In our view, then, the Dodd-Frank Act, like other schemes to deal with the Too Big To Fail problem, is likely to be ineffective because it treats the public policy problem associated with banks’ failure as a technical problem in banking regulation when it should be treated as a political problem. Our plan to break up the banks addresses this political problem in three ways. First, because smaller banks exert less political pressure than behemoth banks, politicians are less likely to be captured by smaller banks than by large financial institutions. To be sure, community banks have better access and more influence with

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41. Simon Johnson and James Kwak offer an excellent analysis of economic crises in emerging market countries as a framework for evaluating the handling of the U.S. financial crisis before concluding that

[us]ually the biggest of the big—the top chaebol, Suharto’s close business allies . . . 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 who are cut adrift, while ordinary people suffer through government “austerity measures.”

members of the House of Representatives, but large national banks dominate in the Senate and with national political parties.42

Second, because politicians and regulators have an established track record of bailing out big banks and allowing smaller institutions to fail, people do not expect that smaller institutions will be bailed out when they find themselves in financial distress. In contrast, based on past experience, the public expects that large financial institutions will be bailed out, just as surely as the police and rescue teams come to the aid of reckless motorists who hit a wall. In other words, over time, bailouts become a self-fulfilling prophecy: bailouts inevitably occur because people expect them to occur. And because people expect them to occur, they plan as if they will occur. These expectations, and the concomitant lack of planning by bank managers, make it practically impossible for politicians to decline to respond to crises with bailouts.

Third and most importantly, the largest financial institutions should be broken up because they tend to make bad bets and to follow each other to doom by consistently making the same bad bets. In other words, the big banks act like lemmings. As former Citigroup CEO Charles Prince admitted in a famous interview with the Financial Times, “When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you’ve got to get up and dance. We’re still dancing.”43 It is hard to imagine the CEO of any large bank advocating a strategy of becoming smaller, serving fewer clients, and not boldly moving forward, particularly when size of bank and size of CEO paycheck are strongly correlated.

B. The Lemmings Problem

In economic terms, the big banks are caught in an “information cascade.” An information cascade occurs when a market participant can easily observe the behavior of those around him and follows the behavior of the other market participants without regard to his or her own information, beliefs, or views of

42. Because community banks are distributed more broadly around the country from a geographical point of view, many more members of Congress have community banks in their districts than have large national banks in their districts. Thus, we believe that community banks likely will have relatively more influence in Congress. Community bankers exercise their political influence through state-level organizations. See, e.g., CMTY. BANKERS ASS’N OF ALA., http://www.mycbaa.com/ (last visited Oct. 6, 2010). The largest banks tend to be represented by their own lobbyists.

Breaking up the banks in the way that we suggest in Part III will reduce the proclivity of banks to play “follow the leader” in conforming to the moves of the dominant firms in the industry.

Information cascades occur because, under certain conditions, “individuals rapidly converge on one action on the basis of some but very little information.”45 In its current form, the financial services industry has a few very dominant firms such as AIG in insurance; Goldman Sachs and Morgan Stanley in traditional investment banking; and Bank of America, Citigroup, and JPMorgan Chase in traditional commercial banking. These firms are closely linked, and their actions are highly visible to one another. This market structure leads to copycat behavior.

If the market were broken up in the way that we suggest, such behavior would still be possible, but it would be far less likely for several reasons. First, increasing the number of participants would make copycat behavior more costly because it is more difficult and time-consuming to observe the behavior of numerous actors than to observe the behavior of a small number of large financial institutions. Second, the process of breaking up the banks that we propose would, by definition, result in the largest, most copied institutions being broken up. Consequently, after this breakup occurred, the institutions on which people tend to focus would no longer exist in their current form. There would be several versions of each one, and thus there would be no obvious leader for the other market participants to follow.

In addition, because it often is the case that “the same objective information may be capable of sustaining different, even highly different belief patterns,”46 increasing the number of market participants would increase the chances of multiple responses to any particular instance of observed behavior. Finally, and perhaps most importantly, increasing the size of the market would reduce the returns to lemming behavior because the very act of increasing the number of competitors in the financial markets would lower the probability of—and therefore the expected returns associated with—following the industry leader.

As noted above, when a large financial institution fails, people expect a government response. This expectation is the sort of event that creates an information cascade: because everybody rationally expects a government bailout of certain firms, it becomes rational to bail out those firms. Breaking up


45. Bikhchandani et al., supra note 44, at 994.

the banks can stop the current herd behavior, because such a breakup would send a strong signal that the previously observed herd behavior is no longer rational. As Bikhchandani, Hirshleifer, and Welch observe, “Cascades can be sensitive to public information releases.”47 Those information releases, however, must be credible. Empty rhetoric about “ending bailouts” is no substitute for a credible signal such as actually breaking up the banks.

Moreover, if the largest banks are broken up, then cascade behavior will be far less likely because there will be no “leader of the pack” to follow. The cascade literature assumes that there is a leader, or at least a “first mover,” who may or may not have qualities that one normally associates with leadership.48 Simply put, if the big banks are broken up, there no longer will be first movers for the rest of the industry to follow. This, in and of itself, will make the banking system more resilient; the diminution in the current lemming-like behavior and increase in diversity of decisionmaking will translate into a diversification of strategies within the banking industry. This will lead to a significant reduction in systemic risk.

Thus, as long as we have big banks, we will have implicit insurance of large financial institutions and the culture of bailouts that such an insurance scheme brings with it. Our approach is to address the root cause of the problem, which is that the size of the largest institutions makes bailouts inevitable.

II. THE SHORTCOMING OF CURRENT LAW

While the “systemic risk” exception to the “least cost” resolution directive of FDICIA was intended to limit severely Too Big To Fail as an alternative, it has ironically opened the loophole even further and produced even more uncertainty among financial institutions and investors. “A risk to the system” is, by definition, whatever the FDIC Board of Directors, the Board of Governors of the Federal Reserve, and the Secretary of the Treasury say it is. During the throes of the Great Recession, the bailout of the brokerage house Bear Stearns was justified (in part) because it was determined that Bear Stearns was too interconnected within the financial system to be allowed to fail.

47. Bikhchandani et al., supra note 44, at 1004.
48. “An information cascade is a situation in which an individual makes a decision based on observation of others without regard to his own private information.” Sushil Bikhchandani, David Hirshleifer & Ivo Welch, Information Cascades, in 4 THE NEW PALGRAVE DICTIONARY OF ECONOMICS 329, 329 (Steven N. Durlauf & Lawrence E. Blume eds., 2d ed. 2008).
A. Interconnectivity and the Uncertainty of Too Big To Fail

Bear Stearns was the fifth-largest brokerage house in the United States before it was acquired in an assisted transaction by JPMorgan Chase, itself a very large bank. But as we would learn from the failure of the fourth-largest investment bank in the United States, Lehman Brothers, size alone does not translate into systemic risk. Bear Stearns was a leading underwriter of mortgage securities, but Lehman Brothers was bigger. Bear Stearns was a large underwriter of equity securities and dealer of commercial paper, but, again, Lehman Brothers was bigger on both counts. Bear Stearns was reportedly a big participant in the credit default swap market, but so was Lehman Brothers, and because this is a private and highly opaque market we have no way of knowing who was in fact bigger in this field. And while at the time of its failure Bear Stearns was not a bank or a bank holding company, within six months the only two large investment banks remaining in the United States would be. All of this makes the question of what constitutes “too interconnected” in the context of a securities business relevant. As former Treasury Secretary Henry Paulson wrote in his account of the Great Recession, On the Brink,

They [critics of the decision to provide assistance] thought we should have let Bear fail. . . . To be fair, I could see my critics’ arguments. In principle, I was no more inclined than they were to put taxpayer money at risk to rescue a bank that had gotten itself in a jam. But my market experience had led me to conclude—and rightly so, I continue to believe—that the risks to the system were too great.49

In September 2008, insurance giant AIG was determined to be too important to fail. In the words of then-Secretary Henry Paulson, “If any company defined systemic risk, it was AIG, with its $1 trillion balance sheet and massive derivatives business connecting it to hundreds of financial institutions, governments, and companies around the world.”50

Just a few weeks later, in working to find a way to inject capital into several large banks, then-Secretary Paulson offered his own interpretation of how systemic risk should be determined. In his view, systemic risk existed if “an institution’s failure would seriously hurt the economy or financial stability.”51

50. Id. at 204-05.
51. Id. at 340.
We highlight these differing interpretations of systemic risk, not to be critical of former Secretary Paulson or his actions, but rather to illustrate just how nebulous the concept of Too Big To Fail has become. Even to someone as financially experienced and sophisticated as Henry Paulson, a former Goldman Sachs CEO, systemic risk can mean, variously: too interconnected, too important, causing serious hurt to the economy, or causing financial instability. These are not insignificant differences, particularly when hundreds of billions of dollars are at stake.

In October 2008, the Federal Reserve Board of Governors, the FDIC Board of Directors, and the Secretary of the Treasury determined that several of the largest financial institutions in the United States were systemically critical to the economy and should not be allowed to fail. These banks were at the time: Bank of America Corp., Bank of New York Mellon Corp., Citigroup, Inc., Goldman Sachs Group, Inc., JP Morgan Chase & Co., Merrill Lynch & Co. (which was soon merged into Bank of America Corp.), Morgan Stanley, State Street Corp., and Wells Fargo & Co. Just four of these institutions—Citigroup, JPMorgan Chase, Bank of America, and Wells Fargo—held 39% of all of the deposits in FDIC-insured financial institutions. Seventy-seven percent of the $13.3 trillion in assets owned by the 8204 FDIC-insured banks are owned by the largest 116 banks, which means that 77% of banking assets are held by 1.4% of banks.

To ensure their future security, the Treasury invested an aggregate of $205 billion in capital in these banks and other financial institutions through the Capital Purchase Program.

One of the most dramatic moves during the crisis was the Treasury’s decision to bail out all investors’ losses in money-market mutual funds. A money-market mutual fund is a type of mutual fund that must, by law, invest

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in highly liquid, low-risk securities.\textsuperscript{56} The fundamental economic principle underlying money-market mutual funds is that such funds are substitutes for, and compete with, the traditional transaction (checking) accounts offered by banks. The trade-off is that money-market mutual funds offer slightly higher rates of return but, because they are not insured by the federal government, also pose somewhat greater risks than bank deposits do.

Without even attempting to explain the tortured logic that would allow the use of the Exchange Stabilization Fund (established by the Gold Reserve Act of 1934 in order to stabilize currency markets) to be used to backstop money-market mutual funds, on September 29, 2008, then-Secretary Paulson announced that the share prices of all such funds would be protected.\textsuperscript{57} Money-market mutual fund assets were valued at approximately $3.45 trillion on the date of this announcement.\textsuperscript{58}

Bailing out money-market mutual funds was perverse public policy because it gave the relatively affluent money-market mutual fund investors a “free lunch” in the form of government insurance of their assets that they did not pay for—or even reasonably anticipate. Unlike money-market mutual funds, banks are required to pay insurance premiums to the FDIC for insuring their deposit accounts. Money-market mutual funds—and their investors—received the benefits of such insurance without having to pay for it.

So it is that in twenty-five years Too Big To Fail was transformed from a somewhat vague notion that, in certain cases, uninsured depositors and creditors of very large banks might be treated like insured depositors into a multifaceted rationale for investing in banks engaged in a wide range of financial services businesses. In its original formulation, Too Big To Fail protected debtholders. In its latest version, Too Big To Fail protects all

\textsuperscript{56} Mutual funds, also known as investment companies, exist to invest money on behalf of their shareholders. Mutual funds raise money to invest by selling their shares to investors. Mutual funds then invest this money in stocks, bonds, and other assets. The combined holdings of stocks, bonds, or other assets the fund owns constitute the mutual fund’s portfolio. The shares purchased by investors represent claims on a pro rata portion of the assets in the mutual fund’s portfolio. Certain mutual funds, known as open-end mutual funds, stand ready to purchase (“redeem”) their investor’s shares at their average price. See \textit{Money Market Funds}, U.S. SEC. & EXCH. COMM’N, http://www.sec.gov/answers/mfmmkt.htm (last updated Sept. 23, 2009).


stakeholders, including common shareholders and employees with incentive plans. It protects banks, investment banks, insurance companies, and money-market mutual funds. This expansion of the policy occurred despite the efforts of Congress to make the use of even the more limited, depositor-focused Too Big To Fail policy extremely difficult.\footnote{See supra notes 14-16, 30 and accompanying text.}

On July 15, 2010—after several months of negotiating, drafting, compromising, lobbying, and political dealmaking—the House of Representatives and the Senate passed a bill nominally intended to reform financial services and prevent the next crisis.\footnote{H.R. 4173, 111th Cong. (2010) (enacted).} Generally referred to as the Dodd-Frank Act, it addresses Too Big To Fail through a combination of studies, the expansion of discretionary regulatory powers, and a limitation on the ability of banks to engage or invest in proprietary trading and other alternative asset investments. The Act was signed into law by President Obama on July 21, 2010. Accompanying the announcement of the passage of the roughly 2300-page legislation, the House Committee on Financial Services released a summary of the key provisions of the Dodd-Frank Act entitled \emph{Brief Summary of the Dodd-Frank Wall Street Reform and Consumer Protection Act: Create a Sound Economic Foundation To Grow Jobs, Protect Consumers, Rein in Wall Street and Big Bonuses, End Bailouts and Too Big To Fail, Prevent Another Financial Crisis.} To be sure, this was an act born of high expectations.

In fact, there is reason to believe that the Dodd-Frank Act actually will increase the probability that financial institutions in general, and insurance companies in particular, will be bailed out in the future.\footnote{See Joe Nocera, \emph{Dubious Way To Prevent Fiscal Crisis}, N.Y. TIMES, June 5, 2010, at B1; Peter J. Wallison, \emph{The Arbiter of Success? The Fed.}, N.Y. TIMES: ROOM FOR DEBATE (May 21, 2010, 7:45 PM), http://roomfordebate.blogs.nytimes.com/2010/05/21/what-will-wall-street-look-like-next-year.} While the Act gives regulators new resolution authority over large financial firms and encourages regulators to take prompt corrective action against insolvent firms, regulators have received similar powers before and opted to continue bailouts rather than impose resolution strategies that shut down insolvent firms. Dodd-Frank does not address the fundamental issue of providing a clear end to Too Big To Fail as a policy option.
What the Dodd-Frank Act does instead is increase regulators’ discretion and power. The notion that this discretion and power will necessarily be used to avoid bailouts of big financial firms is unrealistic from a political point of view. The Act also requires banks, investment banks, and insurance companies viewed as posing a systemic risk to submit periodic “funeral plans” laying out how they could be wound up in an orderly way if they become insolvent. The idea here is that agencies will not have to bail out insolvent institutions because they can just follow the funeral plans. Of course, there is no requirement that regulators must follow these plans. And there is no reason to believe that they will.

The Act also creates a new bureaucracy, or “council of regulators,” with the authority to identify and resolve problems of systemic risk. Financial institutions like insurance companies, hedge funds, and venture capitalists that now operate to some extent without interference from federal regulations could then be brought into the regulatory fold. But the bureaucrats running this new council could face peculiar incentives. Nobody will ever know if they have intervened too much or too early—and if in doing so they destroyed assets that were legitimate.

But if, hypothetically, a financial bubble were ever allowed to burst, the bureaucrats in the council of regulators would face intense criticism for having failed in their basic mission. Thus, this council will consistently err on the side of overintervention. When regulators fear an institution is about to become insolvent or is operating while insolvent, they will bail it out to prevent the systemic risk ogre from running amok through the economy. This is precisely what happened during the Great Recession—first for Bear Stearns and AIG, then for the hundreds of financial institutions that collected TARP money, and then for the thousands of banks and mutual funds that got the benefit of a vastly expanded federal safety net.

There is, undeniably, a great demand for regulation of financial institutions. What is less well understood is that the massive regulation of financial institutions generates expectations. Specifically, the existence of a massive regulatory scheme creates the expectation on the part of voters that the government will confront and remediate the failure of all financial institutions, and not just commercial banks.

63. See Wallison, supra note 62.
B. Antitrust: Change in Focus Needed

The overwhelming trend in the financial services industry over the past thirty years has been toward consolidation. There were 10,787 banking mergers in the United States between 1980 and 2009, and, during this time, no regulator challenged a prospective merger involving an institution with more than $1 million in assets on antitrust grounds. Today, the five largest banks in the United States hold an astonishing forty-two percent of all deposits, up from twelve percent in 1980. This is remarkable on its own, but it is even more incredible when one factors in the amazing growth of commercial banking and financial services generally during this period. In fact, to date, no federal banking agency or the Department of Justice has ever considered the competitive effect of a merger on the stability of the financial system. Despite the fact that competition policy in banking has struggled to balance antitrust law and stability concerns since the development of federal statutory antitrust law in the late nineteenth century, as applied to banking, antitrust law . . . has never accommodated stability concerns such as the ones discussed in this Feature.

As noted in the Introduction, our point is not that the recent consolidation of the financial services sector permits collusion or price-fixing among financial institutions—although we do observe significant evidence of such illegal activities in some parts of the sector, particularly in the credit card industry.

66. Id.
67. See JOHNSON & KWAK, supra note 41, at 59 (“In addition, the financial sector itself simply got bigger and bigger. When John Gutfreund became CEO of Salomon in 1978, all commercial banks together held $1.2 trillion of assets, equivalent to 53 percent of the U.S. GDP. By the end of 2007, the commercial banking sector had grown to $11.8 trillion in assets, or 84 percent of U.S. GDP. But that was only a small part of the story. Securities broker-dealers (investment banks), including Salomon, grew from $33 billion in assets, or 1.4 percent of GDP, to $3.1 trillion in assets, or 22 percent of GDP. Asset-backed securities such as collateralized debt obligations (CDOs), which hardly existed in 1978, accounted for another $4.5 trillion in assets in 2007, or 32 percent of GDP. All told, the debt held by the financial sector grew from $2.9 trillion, or 125 percent of GDP, in 1978 to over $36 trillion, or 259 percent of GDP, in 2007.” (footnote omitted)).
68. Kaden, supra note 65, at 2.
69. Anticompetitive conduct in the credit card industry manifests itself in a variety of ways. In particular, interchange fees and strict exclusivity rules have run afoul of the antitrust laws.
and in the brokerage industry. Rather, our view is that breaking up the banks is fully justified on the grounds that such a breakup would make the economy safer and more stable by limiting or eliminating the proclivity of regulators and elected officials to engineer massive bailouts of the largest financial institutions whenever a financial crisis appears.

We recognize, however, that our plan involves a sea change in the current U.S. approach to antitrust policy, which generally embraces the idea that the only appropriate concern of antitrust law is to promote and protect competition so that the prices paid by consumers will be as low as possible. And, clearly, antitrust law is designed to protect competition from price-fixing and other anticompetitive behavior.

Interchange fees are the fees that the banks of the customers who use credit cards (known as the “issuing” banks) charge to the banks of the merchants that accept credit cards (known as the “acquiring” banks). The interchange fees paid by acquiring banks are passed along to the merchants. As a result of banks’ interchange fees (and other fees charged by the card companies themselves), merchants receive less than 100% of the price of goods and services that are paid for with credit cards instead of cash. Different types of cards (affinity cards) have higher fees than other “no-frills” cards do. See Andrew Martin, Visa’s Strategy in Debit Cards: Push Up Costs, N.Y. TIMES, Jan. 5, 2010, at A1. These card networks’ practices, including interchange fees, have been the subject of past and current investigations under the antitrust laws. See U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-10-45, CREDIT CARDS: RISING INTERCHANGE FEES HAVE INCREASED COSTS FOR MERCHANTS, BUT OPTIONS FOR REDUCING FEES POSE CHALLENGES (2009), available at http://www.gao.gov/products/gao -10-45. In 1998, the U.S. Department of Justice brought a civil suit against the two largest credit card companies, Visa and MasterCard, for alleged antitrust violations regarding, among other things, rules imposed by the companies that forbade banks from issuing rival Discover and American Express cards. The court found an antitrust violation and enjoined such practices.

70. See In re NASDAQ_Mkt.-Makers Antitrust Litig., 184 F.R.D. 506 (S.D.N.Y. 1999); Arthur M. Kaplan, Antitrust as a Public-Private Partnership: A Case Study of the Nasdaq Litigation, 52 CASE W. RES. L. REV. 111 (2001). This massive litigation was prompted by an important article, William G. Christie & Paul H. Schultz, Why Do NASDAQ Market Makers Avoid Odd-Eighth Quotes?, 49 J. FIN. 1813 (1994). This article identified and described what appeared to be collusive behavior by the large investment banks that made markets in stocks listed on the NASDAQ stock market. Id. at 1835. At the time, stock prices were quoted in fractions, with the smallest permissible quotation being one-eighth of a point or $0.125. Though dealer firms were permitted to buy and sell shares on any eighth they chose, the Christie-Shultz study found that odd-eighth quotes were “virtually nonexistent” among one hundred of the most active stocks in 1991. Id. at 1813-14. Ignoring odd-eighth quotes permitted the colluding dealers to receive a minimum 25-cent spread between the bid price and the offered price for these stocks, which was twice as large as the permissible 12.5-cent spread. Id. at 1814.

Those who subscribe to this approach to the antitrust laws might view it as inappropriate to burden antitrust with the competing goal of promoting the economic stability of financial institutions. After all, the antitrust laws were not written with stability in mind, and scholars have not tried to incorporate stability into their analyses.

We have three responses to this criticism. First, to the extent that one considers it important that the antitrust laws remain pure in their single-minded focus on competition, we note that we are suggesting a new statute. We are not suggesting that any current antitrust laws or regulations or judicial outcomes be revised or reinterpreted. Second, because our proposed approach applies only to financial institutions, we do not view it as a new antitrust law so much as we view it as a new law for financial institutions. And there can be no disagreement with the point that financial stability is a central focus, if not the central focus, of the law of financial institutions. Therefore, while we think that it might be preferable to have the Antitrust Division of the Department of Justice or the Federal Trade Commission enforce the regulatory regime that we advocate, this regime could also be implemented by financial institutions’ regulators (subject, of course, to the not-insignificant problem of regulatory capture by the financial institutions of their various regulators72).

Finally, we note that while the policy of protecting price competition has much to recommend it, this is by no means the only approach that one might take to antitrust policy, as students of Louis D. Brandeis73 and William O. Douglas74 are well aware. Moreover, when it comes to banking, antitrust rules
have always made exceptions. Generally, however, such exceptions have favored permitting anticompetitive banking mergers that would not be permitted for other sorts of firms. Specifically, under the Bank Merger Act, even if a merger is anticompetitive, it may be allowed if bank regulators find that “the anticompetitive effects of the proposed transaction are clearly outweighed in the public interest by the probable effect of the transaction in meeting the convenience and needs of the community to be served.”

Nor is it anomalous to place a heavy emphasis on stability when promulgating bank regulation. Financial stability has long been a factor in banking regulation, just as financial stability has historically been an important principle in antitrust policy. Ironically, in the past, it was generally thought—erroneously, in our view—that greater consolidation in the banking sector would lead to greater stability. Even when the government was vigorously enforcing the antitrust laws, the banking sector was left untouched because antitrust policy was seen as “subordinate to stability concerns.”

As Bernard Shull observed, it makes sense that the stability concerns about banks and issues related to bank supervision should require that a different antitrust policy be directed toward banks. Congressional action, such as the refusal to include banks in the 1950 Celler-Kefauver Amendment to the Clayton Act, reflected a “determination to deal with banking differently. The extent of the differential treatment for mergers and acquisitions in banking was the subject of congressional debates . . . undertaken within the context of a

service stations] with their own stations. There will still be competition between the oil companies. But there will be a tragic loss to the nation. The small, independent business man will be supplanted by clerks.”).


76. Kaden, supra note 65, at 7-8.

77. Id. at 6.

failure is an option

widespread belief that the antitrust laws were largely inapplicable or impractical and, to an important degree, inappropriate for banking.\textsuperscript{79}

In fact, we believe that the opposite is true. Consolidation has led to lemming-like behavior and excessive risk-taking in institutions that have been allowed to become so big that politicians and bank regulators could not survive if they were to permit those institutions to fail.

There have been occasional attempts by regulators to limit bank size, but Congress has allocated most authority to deal with bank size to friendly bank regulators rather than to antitrust regulators in the Justice Department or the Federal Trade Commission. For example, the Bank Holding Company Act of 1956 empowered the Federal Reserve to review mergers and acquisitions by bank holding companies to determine “whether or not the effect of [the proposal] would be to expand the size or extent of the bank holding company system involved beyond limits consistent with . . . the preservation of competition.”\textsuperscript{80}

It remains the case, however, that unlike other mergers, bank mergers will be permitted, even if they are anticompetitive, as long as they promote the public’s interest in stability. The Bank Merger Act exempted existing bank mergers, including those in pending government suits, from section 1 of the Sherman Act and section 7 of the Clayton Act.\textsuperscript{81} In the 1966 amendments to the Bank Merger Act, banking agencies were prohibited from approving mergers “whose effect . . . may be substantially to lessen competition,” or that would


\textsuperscript{80}. Bank Holding Company Act § 3(c), 70 Stat. 133, 135 (codified in scattered sections of 12 U.S.C.). The statute relegated the Department of Justice to an advisory role providing that it and certain other agencies could submit advisory opinions on competitive issues for the Federal Reserve to consider during the merger approval process. It took the Supreme Court, in \textit{United States v. Philadelphia National Bank}, 374 U.S. 321 (1963), to change matters. In that opinion, the Court held that section 7 of the Clayton Act, as well as the Sherman Act, were applicable to all bank mergers. \textit{Id.} at 355 (“It would be anomalous to conclude that Congress, while intending the Sherman Act to remain fully applicable to bank mergers, and § 7 of the Clayton Act to remain fully applicable to pure stock acquisitions by banks, nevertheless intended § 7 to be completely inapplicable to bank mergers.”).

\textsuperscript{81}. 12 U.S.C. § 1828(c) (2006). These provisions reflected Congress’s displeasure with certain Supreme Court bank antitrust decisions. \textit{See} United States v. Third Nat’l Bank in Nashville, 390 U.S. 171, 177 (1968) (“Congress was evidently dissatisfied with the 1960 Bank Merger Act as that Act was interpreted in \textit{United States v. Philadelphia National Bank}, 374 U.S. 321 (1963), and in \textit{United States v. First National Bank & Trust Co. of Lexington}, 376 U.S. 665 (1964), and wished to alter both the procedures by which the Justice Department challenges bank mergers and the legal standard which courts apply in judging those mergers.”).
result “in restraint of trade.” And, as noted above, even when a merger is anticompetitive, regulators may nonetheless approve it if they find that “the anticompetitive effects of the proposed transaction are clearly outweighed in the public interest by the probable effect of the transaction in meeting the convenience and needs of the community to be served.”

Our point here is not to quarrel with the current state of antitrust law as it relates to banking. We agree with the general notion that regulators and policymakers should take financial stability concerns into account when formulating policy in general, particularly when formulating antitrust policy. However, we believe that longstanding antitrust policy has gotten the issue precisely backwards, because concerns over financial stability should make bank regulators and policymakers more inclined to break up banks and to deny merger applications—not less so. By not factoring in the enormous costs of bailouts, traditional antitrust analysis leads to a flawed conclusion.

III. Two Proposed Solutions and the Final Legislative Outcome

We readily acknowledge that one cannot implement a policy of breaking up banks that are Too Big To Fail without clear guidelines that permit regulators and market participants to delineate the parameters of the policy. Banks must have a clear rule that enables them to know precisely the limits to their growth. Further, we believe that the specific contours of the guidelines on bank size should not appear random. Rather, they should be grounded in some rational metric.

In this Part, we discuss the “original” Volcker Rule, which was considered in early stages of the development of the Dodd-Frank bill but ultimately discarded. This rule also would have broken up banks and is the primary rival to our proposed rule. We argue that the transformation of the Volcker Rule from its “original” version to its “as-enacted” version ironically reflects the political process that transformed the original Too Big To Fail policy into the ambiguous “too important, too interconnected, too systemically significant, Too Big To Fail” policy of the Great Recession. We then present our proposed rule. We argue that our rule provides clear and easy-to-implement guidelines that are based on a rational metric. Our rule prevents financial institutions’ liability from growing larger than the size of the government’s deposit...

failure is an option

insurance fund. This would prevent financial institutions from growing so large that their size outstrips the ability of the federal government to unwind their activities without bailing them out.

A. Paul Volcker’s Original Too Big To Fail Rule

In the earliest days of the financial crisis, Treasury Secretary Paulson issued a series of proposals to restructure the financial regulatory system. These proposals were based on the findings and recommendations of a committee of former and current regulators and industry executives that the Secretary had asked to rethink regulation with a view to creating a market that was at once more efficient and more competitive with foreign markets.

More recently, President Obama modified these proposals to include a couple of ideas aimed to limit institutions from becoming Too Big To Fail. These ideas were championed by Paul Volcker, a former Federal Reserve Board chairman and the current chairman of the President’s Economic Recovery Advisory Board. President Obama called these ideas the “Volcker Rule” and the name has stuck, even though the “rule” as variously articulated is little more than a set of objectives.

In its original formulation, the Volcker Rule had two parts. First, Chairman Volcker proposed an absolute size limitation for banks. This rule would prohibit banks from gaining more than a ten percent market share in loans or deposits. The second part of the rule was a ban on banks’ proprietary trading, trading for their own accounts, or investing in or owning hedge funds, private equity funds, or proprietary trading operations for their own profit. We refer to the first part of the Volcker Rule as the “original” Volcker Rule. In its original incarnation, the second part of the Volcker rule barring proprietary trading was tantamount to a reinstatement of the Glass-Steagall Act, at least in


87. See Douglas J. Elliott, The Volcker Rule: Still Problematic, BROOKINGS INST. (Mar. 4, 2010), available at http://www.brookings.edu/opinions/2010/0304_volcker_elliott.aspx (“The ‘Volcker Rule’ should really be expressed in the plural form, because its two aspects are essentially unrelated . . . . The first part is a . . . size limitation for banks . . . [that] would prohibit banks from exceeding . . . [a] 10% market share . . . . The second part of the rule is a ban on ‘proprietary’ trading and investments.”).
part.\textsuperscript{88} Underwriting, investing, hedging, and trading were allowed if they were for clients of the bank, so Volcker was not proposing a complete return to Glass-Steagall.

Paul Volcker offered his own interpretation of the Volcker Rule in an opinion piece published in the \textit{New York Times}. Volcker began by noting that "President Obama 10 days ago set out one important element in the needed structural reform."\textsuperscript{89} Then, after highlighting that Too Big To Fail had come to mean that "really large, complex and highly interconnected financial institutions can count on public support at critical times,"\textsuperscript{90} Volcker went on to argue that "limit[ing]" ownership or sponsorship of hedge funds, private equity funds, and other proprietary trading operations would complement existing capital and regulatory efforts to limit taxpayer exposure. Ironically, Volcker rejects Adam Smith's advice that banks should be small to limit risk, only to justify the adoption of his rule on the basis that the risky activities that he wants to ban "are actively engaged in by only a handful of American mega-commercial banks, perhaps four or five."\textsuperscript{91}

When Volcker later considers the risks of pure capital markets firms, his underlying concerns about Too Big To Fail once again rise to the surface:

What we do need is protection against the outliers. There are a limited number of investment banks (or perhaps insurance companies or other firms) the failure of which would be so disturbing as to raise concern about a broader market disruption. In such cases, authority by a relevant supervisory agency to limit their capital and leverage would be important, as the president has proposed.

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To put it simply, in no sense would these capital market institutions be deemed "too big to fail."\textsuperscript{92}

At bottom, the Volcker Rule is an attempt to rein in a subset of financial companies that are Too Big To Fail. Without questioning why regulators of capital markets firms can set adequate capital requirements and manage the potential liquidation of these businesses and bank regulators cannot, the Volcker Rule was intended to limit the risk that "four or five megabanks" will get into trouble through investing in alternative assets. The bothersome

\begin{flushright}
\textsuperscript{90} Id.
\textsuperscript{91} Id.
\textsuperscript{92} Id.
\end{flushright}
presumption underlying the Volcker Rule remains, however, that we are worried about these four or five megabanks because they are Too Big To Fail.

On March 3, 2010, the Treasury Department provided language to the Senate Finance Committee to define the limitation on banks’ market share—the core of the “original” Volcker rule—more precisely. This limitation survived various attempts to excise it from the statute and is now reflected in section 622 of the Dodd-Frank Act. In that version of the Volcker Rule, “too big” was defined as having more than ten percent of the aggregate risk-adjusted liabilities of all financial institutions. Conceptually, the idea is not wholly without merit.

It might appear that this definition provides a limit on bank size that is easy to ascertain and monitor. And this limit might appear to be a financially intelligent standard because it focuses on risk-adjusted liabilities rather than simply on liabilities. But the rule is neither easy to implement nor financially sensible. Rather, on closer examination, it is clear that this original version of the Volcker Rule still failed to do much of what was expected. First, there is no easy way or standard procedure used to measure aggregate risk-adjusted liabilities. Banks report risk-based assets and risk-adjusted capital in accordance with the Basel guidelines. However, determining risk-adjusted liabilities requires calculating, for each of the roughly 8000 banks in the United States, total risk capital (Tier 1 capital plus qualifying Tier 2 capital) and

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96. Tier 1 capital, as set forth in the FDIC Statistics on Depository Institutions (SDI), is identified as Tier 1 (core) capital and coded as rbct1j. In the SDI, Tier 1 (core) capital includes: common equity plus noncumulative perpetual preferred stock plus minority interests in consolidated subsidiaries less goodwill and other ineligible intangible assets. The amount of eligible intangibles (including mortgage servicing rights) included in core capital is limited in accordance with supervisory capital regulations. Tier 2 capital in the SDI is coded as rbct2 and is based on the risk-based capital definitions for prompt corrective action (PCA). Inducible Tier 2 capital components consist of, but are not limited to, limited subordinated debt, cumulative perpetual preferred stock, allowance for loan and lease losses, total mandatory convertible debt, and a portion of unrealized gains on available-for-sale equity securities. The maximum amount of supplementary capital elements that qualifies as Tier 2 capital is limited to one hundred percent of Tier 1 capital. In addition, the combined
then subtracting that from total risk-adjusted assets. The risk-adjusted liabilities of other nonbanking financial institutions, like insurance companies and specialty lenders (as determined by the Financial Stability Oversight Council created by the Dodd-Frank Act), would also have to be determined and added into the aggregate number. The risk adjustments required for these institutions are to be determined by their various regulators, which are yet to be determined and (in the case of insurance companies) may vary state by state. Compounding this problem is the fact that there is currently no single source for the data of these nonbank financial institutions as there is for the FDIC-insured depository institutions.

Of course, the lack of data for these other financial institutions may be moot. Using the data for banks as of December 31, 2009, only two banks, JPMorgan Chase and Bank of America, are over the ten percent risk-based limit—and just barely at that—when the denominator is based solely on banks. If one were to add into the aggregate just ten other nonbank financial companies—AIG, MetLife, Prudential, TIAA-CREF, Berkshire Hathaway, New York Life, Lincoln National, MassMutual, Northwestern Mutual, and State Farm—then no company would be Too Big To Fail under the Dodd-Frank Act’s new rule. In other words, upon closer look, this rule is neither easy to use nor effective in its application.

maximum amount of subordinated debt and intermediate-term preferred stock that qualifies as Tier 2 capital is limited to fifty percent of Tier 1 capital. To calculate Total Risk Capital, Tier-2-eligible Tier 2 capital up to the amount of Tier 1 capital is added to Tier 1 capital. FDIC, Statistics on Depository Institutions, http://www2.fdic.gov/sdi/index.asp (last visited Oct. 26, 2010) [hereinafter SDI].

97. Total risk-adjusted assets as defined in the SDI is based on the risk-based capital definitions for prompt corrective action (PCA) and includes Call Reporters (gross risk-weighted assets minus disallowed loan and loss allowance minus allocated transfer risk reserve plus unrealized loss on equity securities) and Thrift Financial Reporters (total risk-based capital plus fully capitalized items times 12.5 minus unrealized holding gains or losses on available-for-sale securities adjusted according to FASB 115). Id.

98. Dodd-Frank Act §§ 111, 113, 622.

99. It should be noted that the Dodd-Frank Act does not envision the inclusion of either Fannie Mae or Freddie Mac, two of the largest nonbanking financial institutions, in the set of institutions that would factor into the calculation of risk-based liabilities.

100. Data used herein were sourced from the FDIC Statistics on Depository Institutions. SDI, supra note 96.

101. Using the Dodd-Frank Act’s definitions for risk-adjusted liabilities and the December 31, 2009 data published by the FDIC, the largest bank, Bank of America, had $936 billion in risk-adjusted liabilities, representing approximately 10.7% of total risk-adjusted liabilities for all banks of $8145 billion. Accordingly, an additional $1219 billion in liabilities in other financial institutions would push Bank of America’s percentage of the total below the 10% limit. The aggregate liabilities of AIG ($778 billion), MetLife ($506 billion), Prudential
While the inefficacy of the Volcker Rule could, in theory, be remedied by adjusting the risk-based threshold to a more reasonable number (say eight percent instead of ten percent), making the Volcker Rule less challenging to apply will not be done easily. Here, the problem is that the complexity of the rule requires numerous subjective decisions and interpretations by regulators.\(^\text{102}\) When compared with the simple, nondiscretionary DIF-based threshold advocated below, the Volcker Rule’s risk-adjusted liability threshold appears highly malleable. In particular, the many discrete decisions required to calculate precisely how much to adjust various liabilities, and how those adjustments should change over time, require financial institutions and their regulators to make very difficult judgments precisely at moments when their incentives to make such judgments are at their most perverse. It does not make sense to require that subjective judgments that likely will result in the breakup of a major financial institution be made precisely when it has been determined that the institution’s liabilities may be riskier than previously thought. And, importantly, it should not be lost in the discussion of risk-based liabilities that, in accordance with Basel II guidelines currently in effect for U.S. banks, the initial and presumptively accurate determination of risk is made by the management of each institution.

As the Dodd-Frank Act made its way through the legislative process and initial ideas and language gave way to compromise and modification, Paul

\(^{102}\) In contrast, while the elaborate disclosure regimes mandated by the Securities Act of 1933 and the Securities and Exchange Act of 1934 are complex, the sort of complexity embedded in these statutes is fundamentally different from the sort of complexity embedded in the original Volcker Rule for two reasons. First, the provisions of the Securities Acts apply in the same way to all companies. In contrast, the Volcker Rule must be customized to fit the particular liabilities of each financial institution. This increases the number of calculations as well as the amount of discretion embedded in the rule. Second, because the provisions of the Securities Acts require disclosure, it is easy to determine whether the terms of the Acts are being applied in a uniform way to all companies. This transparency forces regulators to treat similarly situated financial institutions in the same way. In contrast, the risk adjustments made under the Volcker Rule generally are quite opaque. For example, as we saw during the financial crisis of 2007 and 2008, different companies valued similar investments in mortgage-backed securities (MBS) and collateralized debt obligations (CDOs) quite differently. This appears to be something of which regulators were not aware until very late in the crisis. See John Carney, *Lehman Brothers Was Dramatically Over Valuing Its CDOs*, *BUS. INSIDER* (Mar. 17, 2010, 12:47 PM), http://www.businessinsider.com/lehman-brothers-was-dramatically-over-valuing-its-cdos-2010-3.
Volcker reflected on the Volcker Rule as it evolved, saying that it “went from what is best to what could be passed.”

According to the New York Times, Chairman Volcker was not alone in his assessment of the political process and his notion of how to prevent the next financial crisis: “Representative Barney Frank, the Massachusetts Democrat who is chairman of the House Financial Services Committee, subscribes to that view. He says that there are stronger measures he would have preferred to see in the bill, including the original version of the Volcker rule, but that political reality dictated otherwise.”

With the benefit of several decades of study and experience, Paul Volcker summed up his assessment of the Dodd-Frank Act and the Volcker Rule as finally incorporated with an observation that we wholly endorse. “There is a certain circularity in all of this business,” he concedes. “You have a crisis, followed by some kind of reform, for better or worse, and things go well for a while, and then you have another crisis.” We agree with Mr. Volcker’s assessment as far as it goes but think that a more accurate statement of the circularity would be: you have a crisis, followed by a bailout and some kind of reform, for better or worse, and things go well for a while, and then you have another crisis—and another bailout.

In its original formulation, the Volcker Rule addressed Too Big To Fail both directly, with a size limitation, and indirectly, through the logic that only a “handful of megabanks” had significant proprietary operations in derivatives and alternative investments. To be sure, this second aspect of the original Volcker Rule was also an attempt to address the more current “too interconnected” and “too significant” extensions of Too Big To Fail. Ironically, by trying to fine-tune the Volcker Rule to address the latest interpretations and extensions of Too Big To Fail, the Volcker Rule became more vulnerable to the political process. In concept, a simple prohibition on proprietary trading in asset classes that were seen as both risky and at the center of the financial crisis would seem to have merit. However, for the same reasons that Paul Volcker saw this rule as tied to Too Big To Fail (that is, only a handful of megabanks were involved), it was clear from the beginning that this indirect attempt to limit big banks was not going to survive the political process. In the end, the Dodd-Frank Act limitation that no bank could invest more than three percent of its Tier 1 capital in proprietary trading in derivatives or be invested in hedge funds and other alternative investments (without limiting management and incentive fees) poses little meaningful limitation on the riskiness of big banks.

103. Uchitelle, supra note 88.
104. Id.
105. Id.
or their interconnectedness or systemic importance. More importantly, from our perspective, is that the focus on this “hot” issue distracted and confused the discussion of the core issue of Too Big To Fail so much that many have forgotten that there was an original Volcker Rule at all. And with that loss of focus, as we have argued, the real Too Big To Fail limitation of the Dodd-Frank Act (in section 622) ended up failing to place limits on becoming too big.

B. Our Proposal: The Bright-Line Limit

As an alternative to the original Volcker Rule, one of us has articulated a different way of avoiding the problem of Too Big To Fail. The goal of the rule is to provide a more credible approach that is a simple-to-understand, simple-to-implement, and simple-to-monitor method to limit bailouts.

The bright-line rule would limit the total liabilities of any bank, bank holding company, or other financial institution to 5% of the targeted level of FDIC deposit insurance fund.

106. See Jonathan Macey, Financial Reform: It’s the Politics, POLITICO, Feb. 3, 2010, http://www.politico.com/news/stories/0210/32397.html. As originally formulated, the bright-line rule we are proposing had two parts. First, no financial institution would be permitted to have total liabilities that were in excess of 5% of the FDIC deposit insurance fund. The second part of the rule that Macey proposed in Politico provided that no financial institution would be permitted to have debt that was more than 80% of its equity capital, that is, a 20% capital-to-asset ratio. The bright-line rule presented here is a significant modification of the original rule proposed by Macey. It involves a more objective and nuanced limitation on bank size and drops the requirement that banks maintain equity levels of 20%. The rule here is even simpler and easier to implement than the original. Like the original idea, we favor this approach on the grounds that “only one structural change could work: We need to break up the banks into sufficiently small pieces that are no longer too big to fail, and instead are too small to rescue. Banks’ liabilities are easiest to deal with when limited to a reasonable size.” Id. For other articles developing the basic ideas suggested in this Feature, see Jonathan Macey, Break Up the Wall Street Banks. Now., REALCLEARPOLITICS (Apr. 20, 2010), http://www.realclearpolitics.com/articles/2010/04/20/break_up_the_wall_street_banks_now_105228.html; Jonathan Macey, Obama’s Financial Reform Falls Short, POLITICO, Jan. 22, 2010, http://www.politico.com/news/stories/0110/31855.html.

107. Of course, by including all financial institutions as well as banks and bank holding companies within our plan, we recognize that the term “financial institution” must be defined. We would embrace a variation of the definition of the term “financial institution” contained in the Dodd-Frank Act. That statute defines a financial institution to mean any broker or dealer, depository institution, futures commission merchant, bridge financial company, or any other institution determined by the FDIC to be a financial institution. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 210(c)(9)(D)(i), 124 Stat. 1376, 1491 (2010). We would add insurance companies, hedge funds, and private equity firms to this definition, keeping in mind that our proposed rule does not apply to any company of any kind, financial or otherwise, unless the institution’s total liabilities exceed 0.575% of the targeted value of the Deposit Insurance Fund.
the FDIC’s Deposit Insurance Fund for the current year as reported by the FDIC. For 2010, the targeted level of the DIF is 1.15% of total deposits insured by the FDIC. Accordingly, under the test proposed here, the limit on total liabilities would be set at 0.0575% of total insured deposits. As of December 31, 2009, the most recent date for which detailed deposit information is available, total deposits equaled $9.23 trillion and estimated total insured deposits equaled $5.38 trillion. Thus, under our approach, maximum total liabilities for a financial institution in 2010 would be $3.096 billion.

Also, we point out that nothing in our proposal envisions, or even suggests, any need to reimpose regulations on banks’ physical locations and types of activities. Rather, our proposed approach does not require any restrictions on activities of banks or on the location of those activities of any kind. Our only restriction is on the size of financial institutions.

Before considering how this rule would affect existing financial institutions, it is worth considering the merits of a bright-line rule. It can be objectively verified by nonregulators and can be applied evenhandedly and in advance of trouble. The bright-line test that we propose treats all parties equally. It does not chase risky business across the financial landscape as the Volcker Rule would and Glass-Steagall did. It makes resolution reasonable and a certainty. It is easy to implement and monitor. There are no complex computer models, risk-based calculations, or Value at Risk measures to debate with armies of lawyers, accountants, and financial engineers.

Undoubtedly, the bright-line rule that we propose will be subject to criticism that it would not allow the United States to have the big financial institutions that are necessary to compete with the big banks of Europe and Asia or to provide the big balance sheets that large companies want. Some of this criticism is, of course, valid. Some business will be lost. On the other hand, much of the criticism of the proposed rule is really just an articulation of the reasons that brought us Too Big To Fail and the Great Recession.

To determine how our bright-line rule might work in practice, we used the Statistics on Depository Institutions (SDI) database of the FDIC as of December 31, 2009.\textsuperscript{109} Initially, we sorted all banks and bank holding companies in order of aggregate liabilities. Then, using the calculated aggregate liabilities limit of $3.096 billion, we segmented the population into two groups: (1) those with aggregate liabilities in excess of the pro forma limit ("Big Banks") and (2) those with aggregate liabilities equal to or below the pro forma limit ("Small Banks").

As of December 31, 2009, there were a total of 8022 banking institutions whose deposits were insured by the FDIC.\textsuperscript{110} Of these, 233, or roughly 3%, were Big Banks, and 7788, or roughly 97%, were Small Banks.

A comparison of these two groups across several balance sheet criteria provides considerable insight into how we came to the Great Recession and Too Big To Fail. Figure 1, below, sets forth these measures for Big Banks as a percentage of all insured banking institutions as of December 31, 2009.\textsuperscript{111} Putting the Pareto Principle to shame, the Big Banks, which account for only 3% of the banks by number, represent approximately 83% of total bank assets, 82% of total bank liabilities, 80% of total deposits, and 84% of total bank equity. In short, a few Big Banks represent the vast majority of the U.S. banking business.

These few key statistics tell us significantly more than that, however. The ratio of total bank equity to total assets and the ratio of total bank equity to total liabilities are not any better for Big Banks (11.37% and 12.83% respectively) than they are for Small Banks (10.24% and 11.41%, respectively). In other words, if there is an advantage in having very large financial institutions, that advantage is not reflected in creating financial institutions that are stronger than financial institutions that are significantly smaller—at least without the generosity of Uncle Sam. If big financial institutions do in fact provide services and products to large corporate clients that only very large financial institutions can provide, or if big financial institutions enjoy an efficiency advantage due to superior scale, then it is reasonable to assume that they should be able to capture above-normal fees or profits from these activities. That, in turn, should lead to either a stronger balance sheet and capital position or higher compensation and higher dividends. The data show that, if these advantages exist, Big Banks have not used this advantage to build stronger capital positions. In other words, just as the government-sponsored

\textsuperscript{109} SDI, supra note 96.
\textsuperscript{110} Id.
\textsuperscript{111} See id.
entities, Fannie Mae and Freddie Mac, have done, the Big Banks have privatized the gains and socialized the risks of their businesses. To the extent that these advantages do not make a meaningful difference in the performance or financial strength of the Big Banks, claiming that these advantages justify the increased risk associated with these very large banks is similarly questionable.

The other data set forth in Figure 1 illustrate that, on several other measures, the Big Banks do not fare as well as their smaller counterparts. For instance, note that Big Banks have virtually all of the banking sector’s trading liabilities. Trading liabilities, as reported by the FDIC, include liability for short positions and revaluation losses on interest rate, foreign exchange rate, and other commodity and equity contracts. In the context of an ever-expanding Too Big To Fail policy, these trading obligations, whether for clients or for the house, would be backstopped by taxpayer money.

Figure 1.
BIG BANKS VS. SMALL BANKS: ON SELECTED BALANCE SHEET ITEMS, AS OF DECEMBER 31, 2009
Clearly, these trading liabilities are not necessary for conducting a normal or profitable banking business. Otherwise, we would see Small Banks having at least their pro rata share of these products. Similarly, the Big Banks represent virtually all of the derivatives on bank balance sheets, yet Small Banks have somehow found a way to survive and prosper without derivatives.

The last category of statistics set forth in Figure 1 focuses on uninsured deposits. Prior to the enactment of the Emergency Economic Stabilization Act of 2008 (EESA) on October 3, 2008, FDIC insurance was limited to $100,000 per account per bank (with some exceptions regarding co-ownership). After enactment of EESA, that limit was raised to $250,000. Logically, a depositor would not keep money in a bank in excess of the deposit limit unless he or she thought that there was little risk that the bank would fail or that, if the bank failed, the government would pay off his or her claim notwithstanding the formal limitations of FDIC insurance. That is, the depositer was betting on Too Big to Fail.

The FDIC has a couple of measures that are helpful in assessing uninsured deposits. One, identified by the FDIC as iddepsam, denotes the aggregate dollar amount of deposits in insured domestic accounts (other than retirement accounts). Iddepsam is set forth in Figure 1 simply as “Insured Deposits.” At the opposite end of this spectrum are accounts that are not expressly insured by the FDIC, although it is the support of these large deposits that gave rise to the Too Big to Fail policy in the first place. The FDIC identifies these as iddeplam. In Figure 1, “Deposits 250K or more” identifies all deposits at the institution with a balance of $250,000 or more regardless of type, location, or application of insurance rules.

These measures collectively provide a consistent message. First, Big Banks have, in aggregate, about 80% of all deposits but only about 72% of the accounts that the FDIC estimates are covered by the new $250,000 limit. These concentrations are both large, to be sure, particularly when Big Banks represent only 3% of all banks. However, they represent proportionately less than the overall market share for Big Banks. In other words, those who are potentially eligible for deposit insurance have proportionately more of their money in Small Banks. A Too Big To Fail resolution of these Big Banks would accordingly provide a rescue to a disproportionately large number of uninsured depositors. In contrast, Big Banks have approximately 83% of the deposits of $250,000 or more. These deposits include large institutional and corporate accounts, as well as the accounts of wealthy individuals who can afford to

diversify and seek safety elsewhere. These are sophisticated people who well understand that their accounts are not formally insured. These are also people who know how to read a balance sheet and assess the capital structure and financial strength of the banks with which they do business. They know that Big Banks have engineered more leverage into their structures and are positioned to pay out proportionately more to shareholders and executives. They also are well aware of Too Big To Fail, particularly after the Capital Purchase Program’s infusions of capital and declarations of the importance of Big Banks to the U.S. economy.

C. Criticisms of the Bright-Line Rule

The application of our bright-line rule would, no doubt, send a shock wave through the banking establishment. We fully acknowledge that implementing our rule not only would be disruptive but also would introduce operating inefficiencies into the world of finance because breaking up large financial institutions might lead to higher costs if economies of scale are diminished in these breakups. Despite these risks, however, the breakups that we advocate may make U.S. banks more competitive globally and return the United States to the local banking model that existed prior to the 1980s when financial institutions offered only a limited range of financial products.\footnote{See Philip E. Strahan, The Real Effects of U.S. Banking Deregulation, FED. RES. BANK ST. LOUIS REV., July-Aug. 2003, at 111, available at http://research.stlouisfed.org/publications/review/03/07/Strahan.pdf.}

We have a number of responses to potential criticisms of our proposed breakup plan. First, we acknowledge that the transition will not be easy. However, a reasonable transition period of perhaps eighteen months to two years would allow for an orderly restructuring of the Big Banks. These Big Banks could be reorganized into as many Small Banks as necessary to meet our proposed test. These banks could be spun out to existing shareholders, sold to others, or sold in public offerings. These banks could enter into operating and service agreements with each other or with newly created operating service companies. Such strategies would address most of the issues associated with the supposed efficiencies of Big Banks. Similarly, smaller banks could work together to underwrite and syndicate large loans for large corporate clients.

One can easily envision a reversal of the mergers and acquisitions activity of the past thirty years bringing back the local and regional bank. The reversal of prior consolidations may, in fact, retain much of the value that those strategies envisioned. A Chase New Haven or a Bank of America (Greenwich) may allow
FAILURE IS AN OPTION

shareholders to retain the benefits of branding. Best practices and pooled processing and technologies may similarly preserve many of the synergies of consolidation, without the risks of having Big Banks that cannot be liquidated.

Second, as mentioned above, we fully acknowledge that breaking up the nation’s largest financial institutions likely will create costly inefficiencies. Legislation will be required to implement a breakup plan. Litigation may result. However, the relatively simple metric used in our proposal to determine the outer size of financial institutions will reduce the transaction costs associated with implementing our proposal. And, at the end of the day, the relevant policy question is not whether our plan has costs; rather, the relevant issue is whether the benefits of implementing our proposal are greater than the costs. Moreover, the truly enormous, immediate, direct, long-lasting out-of-pocket expenses associated with bailouts of financial institutions are clear. The potential costs of our plan, which come in the form of forgone efficiencies of an unspecified kind, are ephemeral and can be reduced by innovation and competition.

Furthermore, while there is a consensus among economists that limitations on banks’ activities are highly inefficient, there is no similar consensus regarding the existence of economies of scale in banking. The term “economy of scale” refers to the concept that producers sometimes can lower the average cost of producing a unit of output by increasing their size. The issue of whether there are significant economies of scale in banking has been a subject of great interest to economists, to regulators, and, of course, to managers and owners of financial institutions. In fact, an entire generation of studies has found that large banks do not have inherent operating cost advantages relative to smaller banks. Other, more recent studies suggest that there may be economies of scale in banking; however, it is far from clear that these efficiencies come from merging the largest banks. Rather, it appears that small- and medium-sized banks may enjoy significant cost savings from expansion and mergers, while larger banks do not. Recent research finds that “the largest sized banks are generally the least efficient banks and the smallest sized banks are the most

115. See James Kolari & Asghar Zardkoohi, Further Evidence on Economies of Scale and Scope in Commercial Banking, Q.J. BUS. & ECON., Autumn 1991, at 82, 82-83 (citing other studies that conclude that larger banks lack economies of scale).
efficient.”\textsuperscript{117} Importantly, while two prominent scholars, Allen Berger and David Humphrey, found large inefficiencies in the banking system, they concluded that such inefficiencies were generated by operational factors, rather than a lack of sufficient economies of scale or scope.\textsuperscript{118} In fact, many cost studies find diseconomies of scale in larger banks.\textsuperscript{119}

Those who disfavor our approach might well point to the merger activity during recent years as proof that the market prefers larger banks. We do recognize that banks and bank holding companies have been engaged in significant merger and acquisition activities over the past several decades. During the period from 1994 to 2003, there were 3517 mergers among commercial banks, savings banks, savings and loan associations, and industrial banks alone.\textsuperscript{120} These mergers involved the acquisition of approximately $3.1 trillion in assets, $2.1 trillion in deposits, and 47,300 offices during a ten-year period.\textsuperscript{121} However, this consolidation in the banking market cannot automatically be attributed to a drive for efficiencies. As we point out in this Feature, larger banks have advantages over smaller banks that have nothing to do with efficiency: because large banks are more likely to be bailed out than small banks, large banks enjoy lower costs of funds because large depositors inevitably prefer to deal with institutions whose liabilities are implicitly guaranteed by the government.

Among the numerous ideas proposed to reform financial regulation are several alternative measures designed to avoid bailouts. Two that seem to garner the most support are enhanced authority to manage a resolution of a large institution and “living wills” for financial institutions, and indeed both of these ideas made it into the final version of the Dodd-Frank Act.\textsuperscript{122} Both of these ideas involve breaking up large institutions, including Big Banks, in

\textsuperscript{117} Simeon Papadopoulos, \textit{New Evidence on Efficiency in Scandinavian Banking}, INT’L RES. J. FIN. & ECON., Sept. 2008, at 34, 34. Papadopoulos finds that in Denmark, Finland, Norway, and Sweden the largest banks were the least efficient during the time period studied. \textit{Id}.


\textsuperscript{119} See Papadopoulos, supra note 117, at 35-37.


\textsuperscript{121} Pilloff, supra note 120, at 1.

\textsuperscript{122} Titles I and II, respectively, of the Dodd-Frank Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).
times of financial distress and difficult markets. These would be liquidations under duress and with considerable time pressure, as depositors and creditors would be worried about their money. One can also only imagine the debates over “mark-to-liquidation” values in these living wills after the furor over “mark-to-market” in the heat of the Great Recession.\textsuperscript{123}

Our bright-line rule would allow for this restructuring to take place gradually over time. This would allow individual financial institutions to find the solutions that work best for them. Innovation and creative solutions would take place to transform Big Banks into Small Banks in the best ways. One bank’s experience would become another bank’s education. By contrast, a single agency put in charge of bank liquidation will not lead to innovation. Secret living wills in constant need of update and revision will not spread knowledge. One can almost see the frustration, as innovation is stifled waiting for manuals and procedures that are being finalized on how to reverse that innovation, should the bank fail. In short, if we cannot break up the Big Banks in times of tranquility and over time, we would never succeed when we are “staring into the abyss.”

Another alternative to the approach that we propose involves attempting to prevent financial institutions from taking excessive risks by enacting and enforcing bright-line rules such as “all financial institutions must maintain a tangible common equity ratio of at least 10%” or “banks cannot lend to borrowers whose FICO score is below 700.”\textsuperscript{124} There are at least two problems with this alternative approach. First, there is no guarantee that these restrictions would work to reduce risk. Limiting banks’ activities could make banks more risky by reducing their ability to diversify their activities and by reducing their ability to innovate. In addition, there is no assurance that banks could not create ways to leverage or otherwise increase the traditional risk

\textsuperscript{123} In the end, for many asset classes, including collateralized mortgage obligations, real estate mortgage investment conduits, and collateralized debt obligations, the Federal Reserve became the sole or largest purchaser. For these and other similar assets, the Financial Accounting Standards Board, pursuant to its statements 115-2 and 124-2, provided relief from mark-to-market accounting rules that would otherwise apply. See \textit{FIN. ACCOUNTING STANDARDS BD., RECOGNITION AND PRESENTATION OF OTHER-TIMPEORARY IMPAIRMENTS} (2009), http://www.fasb.org/cs/ContentServer?pagename=FASB%2FDocument_C%2FDocumentPage&cid=1176154545419. It is difficult to understand how banks could maintain living wills with valuations that would be useful in a real liquidation.

\textsuperscript{124} \textit{Cf.} Paul Krugman, Op-Ed., \textit{Making Banking Boring}, \textit{N.Y. TIMES}, Apr. 10, 2009, at A23 (“[Policy makers are] not at all ready to do what needs to be done—which is to make banking boring again.”).
levels associated with the supposedly safe alternatives left open to them under such an approach.\textsuperscript{125}

Of course, at an extreme level, such regulation might work. For example, if banks were limited to investing in government-guaranteed debt instruments such as U.S. Treasury bills, then the banks would become quite safe, but they would cease to play any role in providing capital to the economy. Such a regulation would be analogous to the government providing everyone with auto insurance, then enacting a national speed limit of fifteen miles per hour. This approach would fix the moral hazard problem, but the costs would be much greater than the benefits. As Alan Greenspan once observed, "A perfectly safe bank, holding a portfolio of Treasury bills, is not doing the economy or its shareholders any good."\textsuperscript{126}

Application of the bright-line rule proposed here would do much to advance our collective understanding of the role of banks in our financial system. Much has changed in the past few decades. Treasury Secretary Paulson’s financial reform proposals, as well as the proposals of President Obama, the Senate Finance Committee, and the House Financial Services Committee, have all emphasized that it is time to restructure our financial regulatory system to address the changes that have occurred in the industry itself.

Deposit insurance has long been justified on the basis that it protects the savings of small savers. This basis and the perverse history described in Part I gave rise to Too Big To Fail and the expansion of financial protection to all manner of claimants. As of December 31, 2009, total deposits in all banks amounted to $9.2 trillion with about 58% of that, or approximately $5.3 trillion, benefitting from deposit insurance. As of February 12, 2010, uninsured money-market mutual funds, a common short-term bank deposit substitute, amounted to $3.2 trillion. This is after the extraordinary temporary guarantee measures of the EESA and the Gold Reserve Act had lapsed. If function should determine regulatory treatment, one can only hope that Too Big To Fail does not migrate to the mutual fund and investment securities industry as a whole. To be clear, we are not advocating either that or the elimination of deposit

125. For example, banks that could only lend to borrowers with high FICO scores could simply lend more to such borrowers than they would otherwise. And rules requiring certain minimum capital levels are notoriously easy to manipulate through accounting gimmicks. Furthermore, they do not limit the risks that banks take on the asset side of the balance sheet by buying risky assets and lending to risky borrowers.

insurance. We are merely pointing out that there are many opportunities for expansion of an investor-saver safety net, and as a result there will be many who will argue in favor of this and against any efforts to limit its potential application.

Finally, we think that a downsizing of Big Banks will not mean that U.S. banks will be disadvantaged in the international banking market. First, syndication remains a viable option. In fact, it is the collective power of taxpayers that bailed out the financial system in the Great Recession. Second, during the 1980s and early 1990s, many U.S. banks were much more heavily regulated—and the scope of their activities more highly constrained—than the much larger “universal banks” in Europe and Asia;\(^\text{127}\) this was viewed as a dire threat to the competitiveness of U.S. banks.\(^\text{128}\) Nevertheless, the U.S. economy and financial markets, though volatile, prospered during this period.\(^\text{129}\) Lastly, we note that there is no way to distinguish the hypothesis that the very largest financial institutions have competitive advantages over their smaller rivals.

\(^\text{127}\) See Hearing Before the S. Comm. on Banking, Hous., and Urban Affairs, 100th Cong. (1987), reprinted in 74 FED. RES. BULL. 91, 93 (1988), where Alan Greenspan argued that the Glass-Steagall Act, which separated commercial banking from securities trading and underwriting, should be repealed because developments in computer and communications technology have reduced the economic role of commercial banks and enhanced the function of investment banking. These permanent and fundamental changes in the environment for conducting financial business cannot be halted . . . and the longer the law refuses to recognize that fundamental and permanent changes have occurred, the less relevant it will be.

\(^\text{128}\) As a consequence, regulators, particularly Alan Greenspan, favored expanding the powers of U.S. banks, particularly in the area of underwriting corporate securities, because the international competitiveness of large U.S. banks was threatened. See Charles W. Calomiris, The Regulatory Record of the Greenspan Fed, 96 AM. ECON. REV. 170, 171 tbl.1 (2006) (listing regulatory reforms advocated by the Federal Reserve during Greenspan’s tenure as Chairman); see also Thomas F. Cargill & Thomas Mayer, U.S. Deposit Insurance Reform, CONTEMP. POL’Y ISSUES, July 1992, at 95, 95 (“Early in 1991, the U.S. Treasury proposed to reform deposit insurance, expand bank powers, establish interstate banking, and reorganize the regulatory structure. The Treasury rationalized the expanded bank powers as necessary to give U.S. banks a firmer financial foundation and the means to remain internationally competitive in an environment of rapidly growing Japanese banks and the economic unification of Europe.”).

because they enjoy certain operational efficiencies from the hypothesis that the very largest banks have competitive advantages because they are directly or indirectly being supported by the government and the taxpayers in the form of contingent guarantees of their liabilities. If there were a way for the largest banks credibly to commit to not being bailed out, we would have no objection to banks growing to any size. The problem is that no such precommitment device is available.130

To put the potential costs of our plan in perspective, consider the massive cost of the last federal bailout. While it is difficult to quantify precisely the total cost of the complex panoply of bailout programs put into place in the wake of the crisis, all agree that the costs were massive and unprecedented.131 By one estimate, the U.S. government and the Federal Reserve “spent, lent or committed $12.8 trillion, an amount that approaches the value of everything produced in the country last year, to stem the longest recession since the 1930s.”132 In per capita terms, the cost of the bailout amounts to $42,105 for every person of any age in the United States and is fourteen times greater than the total value of all U.S. currency in circulation.133

While it is impossible to estimate with precision how much the bailout ultimately will cost, and while we acknowledge that there are many estimates, some of which are substantially lower than $12.8 trillion, it is clear that, no matter the cost of the bright-line breakup rule that we propose, the costs of the bailouts that inevitably follow giant bank failures in today’s regulatory environment are far higher.134

130. For a discussion of the inability of governments in democracies to make credible commitments to refrain from bailing out depositors and an argument that deposit insurance represents an attempt to limit the government’s potential exposure to loss in the case of bank failure, see generally Macey, supra note 40.

131. Among the largest of these programs is the $1 trillion Public-Private Investment Program (designed to help investors buy distressed loans and other assets from U.S. banks) and $500 billion in government guarantees to the FDIC (to enable the agency to guarantee up to $2 trillion worth of debt for participants in the Term Asset-Backed Lending Facility and the Public-Private Investment Program). See Mark Pittman & Bob Ivry, Financial Rescue Nears GDP as Pledges Top $12.8 Trillion (Updates), BLOOMBERG, Mar. 31, 2009, http://preview.bloomberg.com/apps/news?pid=newsarchive_en10&sid=armOzfkwrCA4.

132. Id.

133. Id. The total value of U.S. currency in circulation is $899.8 billion. Id.

134. $4.72 trillion has been disbursed under various programs, but with some funds repaid, $2.01 trillion remains outstanding. $13.86 trillion represents the maximum level of taxpayer funds that were ever at risk, though this figure is lower now because current government commitments to certain programs have been reduced since the crisis. Mary Bottari, Bailout Not Over, Taxpayers Still Owed $2 Trillion in Federal Reserve Loans and TARP Program Funds,
Table 1.
FEDERAL RESERVE AND GOVERNMENT BAILOUT COMMITMENTS (IN BILLIONS)\textsuperscript{135}

<table>
<thead>
<tr>
<th></th>
<th>LIMIT</th>
<th>MARCH 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Reserve</td>
<td>$7,765.64</td>
<td>$1,678.71</td>
</tr>
<tr>
<td>FDIC</td>
<td>$2,038.50*</td>
<td>$357.50</td>
</tr>
<tr>
<td>Treasury</td>
<td>$2,694.00</td>
<td>$1,833.50</td>
</tr>
<tr>
<td>HUD</td>
<td>$300.00</td>
<td>$300.00</td>
</tr>
<tr>
<td>Total</td>
<td>$12,798.14</td>
<td>$4,169.71</td>
</tr>
</tbody>
</table>

* The FDIC’s commitment to guarantee lending under the Legacy Loan Program and the Legacy Asset Program includes a $500 billion line of credit from the U.S. Treasury

Moreover, to the direct costs of the bailouts we also must add the indirect economic costs of the bailout. These costs, which come in the form of decreased credit availability, the distraction of banking and government officials involved in the crisis, and the off-balance-sheet costs of the monetary policy put in place to contain the crisis, are incalculable.\textsuperscript{136}

Finally, we note that, while the final price tag for the bailout will be massive, it likely will not be out of line with the bailouts that have accompanied other financial crises around the world. An IMF study of forty financial crises estimated that the average cost of resolving a financial crisis was an astonishing 13.3\% of GDP.\textsuperscript{137}

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\textsuperscript{135} See Joseph Ramelli, The Biggest Cost of the Bailout, SEEKING ALPHA (May 4, 2010), http://seekingalpha.com/article/202708-the-biggest-cost-of-the-bailout. As one journalist has observed, “[T]he direct costs of the bailout are dwarfed by the broader political and economic impact . . . . It likely will take many years for the U.S. to recover from the economic misery, ballooning U.S. debt, lost tax revenue and political tumult fueled by the financial crisis.” Deborah Solomon, Bailout Looking Much Less Pricy, WALL ST. J., Apr. 12, 2010, at C1.

D. The Dodd-Frank Act

Among the intended results of the Dodd-Frank Act, according to the official release of the House Committee on Financial Services, was the end of Too Big To Fail:

Highlights of the Legislation

. . . .

Ends Too Big to Fail Bailouts: Ends the possibility that taxpayers will be asked to write a check to bail out financial firms that threaten the economy by: creating a safe way to liquidate failed financial firms; imposing tough new capital and leverage requirements that make it undesirable to get too big; updating the Fed’s authority to allow system-wide support but no longer prop up individual firms; and establishing rigorous standards and supervision to protect the economy and American consumers, investors and businesses.\(^\text{138}\)

What is missing is a simple, clear statement of what is “too big.” Study of the roughly 2000 pages of the final version of the Dodd-Frank Act reveals that what constitutes “big” for a bank or financial institution in the minds of the legislators is far from clear. For example, in section 115 of the Dodd-Frank Act, a bank holding company or a nonbank financial institution supervised by the Board of Governors of the Federal Reserve is defined as being big enough to merit “more stringent” capital requirements if it has aggregate assets of $50 billion or more, subject to further consideration by the council.\(^\text{139}\) Similarly, when defining “big” for the purposes of limiting the ability of bank holding companies to acquire banks without prior notice, the Dodd-Frank Act uses the measure of $50 billion in assets.\(^\text{140}\) “Big” is defined in the Act as much smaller (only $10 billion in assets) when mandating that publicly traded bank holding companies have a risk committee.\(^\text{141}\)

As noted above, however, the Dodd-Frank Act shifts to a very different measure when articulating bigness as a limitation as it does in section 171 of the Act. In this instance, the underlying measure is the hard-to-determine and never-used total risk-based liabilities for some but not all financial institutions, and the limit is ten percent—unless the council determines after study that

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\(^\text{138}\) SUMMARY OF DODD-FRANK, supra note 61, at 1.


\(^\text{140}\) Id. § 163. Based on the FDIC data as of December 31, 2009, thirty-six banking institutions had assets of $50 billion or more. See SDI, supra note 96.

\(^\text{141}\) Dodd-Frank Act § 165(h)(2)(A).
FAILURE IS AN OPTION

some other percentage is appropriate. In no place in the Dodd-Frank Act is there any explanation for the use of risk-based liabilities. One can easily imagine that the idea is to estimate more accurately the potential exposure of the government were an institution to fail. A more relevant measure might well be the net market value of assets and liabilities. The main point here, however, is that after many months of study, analysis, and debate, Congress could not decide on a single measure of what is “big.” That failure will haunt regulators who, when next peering into the abyss, will be hard-pressed to determine what is “too big.”

CONCLUSION

Everybody agrees that systemic risk is a significant problem. But it has been generally mischaracterized as a technical problem that requires a technical solution. Implicitly, there is widespread acceptance of the view that if only we had better regulations, or better regulators, the problem would disappear. In fact, the problem is not only technical; it is structural and political. The problem is not just with the structure of bank regulation; it is with the structure of the political system. Politicians must intervene in times of banking crisis, regardless of the costs and regardless of the consequences of such intervention.

We have argued that acceptance of this political fact of life provides strong support for our proposed solution to the problem of Too Big To Fail, which is to break up the banks until they are sufficiently small that they no longer present political risks to politicians and regulators. In our view, the way to accomplish this goal is to dismantle the largest banks using a methodology that specifies that no bank’s liabilities can be permitted to grow to become greater than five percent of the targeted value of the FDIC Deposit Insurance Fund for the current year. This rule is simple and objective and can be implemented in a straightforward way without providing regulators with too much discretion.

Most importantly, our proposed standard is insulated from political influence; the benchmark that we propose is not subject to tinkering. The FDIC must select a target value of not less than 1.15% of aggregate insured deposits but no greater than 1.50% of aggregate insured deposits. Our standard has a very practical protection against tinkering because if regulators or politicians increase the target value of the DIF in order to prevent one or more banks from being dismantled, banks will have to pay the higher

142. Id. § 171.
assessments into the DIF that will be necessary in order to permit the FDIC insurance fund to reach the new targeted size. We also should not lose sight of the fact that the DIF is set at a level to self-insure against reasonably possible losses. Setting the bright-line limit on financial institutions' size at five percent of the target DIF is similarly designed to limit the risk that any one failure could significantly impair the insurance fund or, for noninsured financial institutions, present an unmanageable loss. The still-unresolved problems of Fannie Mae and Freddie Mac well illustrate the problems of unregulated size. As of the summer of 2010, Fannie and Freddie had received over $145 billion in direct investment from the U.S. Treasury and, according to the Dodd-Frank Act, represent a potential risk to the government of $5.3 trillion.\footnote{Dodd-Frank Act, Pub. L. No. 111-203, § 1491(a)(9), 124 Stat. 1376, 2206 (2010).}

We observe that, if implemented, our plan would result in the breakup of 233 banks, which represent just three percent of the nation's banks. While this may appear to be a radical restructuring, we emphasize that the cost of our proposal is likely to be quite modest. Regardless of whether one selects estimates of the transaction and efficiency costs associated with bailouts that are on the high end of the scale or on the low end of the scale, these costs are dwarfed by the massive costs of financial bailouts.

If voters took the time to compare the costs of our proposal with the savings that would come with ending bank bailouts, our proposal would be implemented swiftly. The structure of the U.S. banking industry would change if the largest financial institutions were dismantled as we propose. But the structure that emerged would not be entirely new. It would resemble the traditional, highly disaggregated structure that characterized the financial industry for most of the country's history. It may be the case that this structure is somehow less efficient than our current structure. But it also is far more stable. Most importantly, the disaggregated structure that we advocate would shift the costs associated with banks' occasional forays into risky activities to the investors who benefit from them.

\footnote{Dodd-Frank Act, Pub. L. No. 111-203, § 1491(a)(9), 124 Stat. 1376, 2206 (2010).}