CHAPTER 11

Strengthening Financial Regulations

In the spring of 2009 I received a prescient message from Philip Wellons, who had recently retired from Harvard Law School, where he had been deputy director at the Program on International Financial Systems. He correctly saw that new legislation would be required to facilitate an orderly resolution of insolvent but interconnected financial firms other than commercial banks:

On financial regulation: we need to improve the regulatory structure. I would like to see a comprehensive approach across financial markets, including insurance. We can't simply go back to reliance on capital adequacy regulation. Too many of us can't gauge risk well—Basel II was a complex mess built on rating agencies. But I don't see shifting to general principles as the alternative—they only work with homogeneous populations (think Bank of England and London 40 years ago), and world finance is diverse. I don't see us going back to the 1980s' idea of segregating (and thoroughly regulating) the deposit takers, while freeing all other financial activities. Now nondeposit takers, and relations among all financial entities, are too large and complex. I end up thinking we need to address the "too big" part of "too big to fail." Go after the big guys with scalpels and cleavers. Insure deposits and some other liabilities, but let the weak fail.

People who accept the need for deposit insurance and special regulation and supervision for banks have a conceptual disconnect now. They said in the past that we treat deposit-taking banks as special because politics will force the government to bail the banks out to forestall runs. Now it looks as though the collapse of certain non-banks could also bring the financial system to its knees. It was the complexity of Lehman's counterparty relationships that scared people, raising the worries about systemic effects . . . The threat last fall was not the same as a run on banks because last fall no one knew what each contract gave counterparties in a default. The fear is that the consequences would be at least as devastating as a bank run.

The game changed when U.S. government bailed out non-banks. Now that we all know politicians will step in, financial regulators better anticipate and try to reduce the potential exposure over non-banks, as regulators now do with deposit takers . . . The genie is out of the bottle. S/he ran off with the cow as it left the barn.¹

Comparing the Report Creating the Fed with the Report on the Financial Crisis

This chapter opens by comparing the final report of the National Monetary Commission published in early 1912 with the report of the Financial Crisis Inquiry Commission published in early 2011.² As summarized in the introductory chapter, the first commission was a bipartisan study group formed in response to the panic of 1907. It was created by the Aldrich-Vreeland Act of 1908, named for Senator Nelson W. Aldrich (Republican, Rhode Island) and Representative Edward Vreeland (Republican, New York). In the spring of 2008 Aldrich led a team of experts on a fact-finding tour of major European capitals. The National Monetary Commission thoroughly and objectively investigated the US and foreign history of commercial and central banking, financial crises, and banking panics. The commission hired a large staff of economists and published a shelf-full of background studies in 1910 and 1911.

But in Aldrich's mind the results weren't coalescing into a coherent set of proposals. So he sponsored intense deliberations in a secret ten-day conference of experts on Jekyll Island off coastal Georgia in November 1910. For the ostensible "duck hunt,"

Aldrich invited men he knew and trusted, or at least men of influence who he felt could work together. They included Abram Piatt Andrew, assistant secretary of the Treasury; Henry P. Davison, a business partner of Morgan's; Charles D. Norton, president of the First National Bank of New York; Benjamin Strong, another Morgan friend and the head of Bankers Trust; Frank A. Vanderlip, president of the National City Bank; and Paul M. Warburg, a partner in Kuhn, Loeb & Co. and a German citizen.³

Only after the National Monetary Commission assimilated the results of those deliberations could the so-called Aldrich Plan be designed and released as its final report containing the specifics of a bill to create a central bank. "Announced in January of 1912 after four years of formulation, the Aldrich plan was the end product of a monetary inquiry to end all monetary inquiries."⁴

But the Aldrich Plan wouldn't end up being legislated because the election that fall gave Democrats a majority in the Senate to go along with an existing one in the House. That party also took over the White House. The newly elected president, Woodrow Wilson, consulted extensively during 1913 with Representative Carter Glass and Senator Robert Owen Jr., among many others. Considerable further reflection and debate, including full-scale Senate hearings, also transpired. President Wilson finally got the Christmas present he had sought. On December 23, 1913, he signed into law the official act creating the Federal Reserve.⁵

The report of the Financial Crisis Inquiry Commission (FCIC) stands in notable contrast. The Congress created the commission in May 2009, mandating its report by December 2010. California Democrat Phil Angelides, who was appointed by Speaker of the House Nancy Pelosi (Democrat, California), directed the commission. It did not want for status, resources, time, and effort, being "a prestigious bipartisan committee of 10 experts with subpoena power who deliberated for 18 months, interviewed some 700 witnesses, and held 19 days of public hearings."⁶ The report's conclusions are worth quoting in two parts, with my ordering (emphasis in the original):

[T]o pin this crisis on mortal flaws like greed and hubris would be simplistic. It was the failure to account for human weakness that is relevant to this crisis. (pp. xxvi and xxvii.)

We conclude dramatic failures of corporate governance and risk management at many systematically important financial institutions were a key cause of this crisis. (p. xviii.)

We conclude widespread failures in regulation and supervision proved devastating to the stability of the nation's financial markets. (p. xviii.)

The report thus attacked the system's failure to "account for human weaknesses" (as though market arrangements upon entering the new millennium suddenly became more indulging than constraining of human frailty). Central among such weaknesses was Gordon Gekko-type "greed" (as though that feature of behavior was not more of a given of human nature than a consequence of financial market competition).⁷ Also central was the "hubris" of Wall Street financial institutions (as though their behavior was not more a symptom than a cause of the fundamental problem). The conclusions further fault lax supervision and regulation (as though such oversight, though well intentioned, is not often more harmful than helpful reflecting suboptimal bureaucratic incentives).

The report's conclusions continued by turning to housing policy, including the roles of Fannie Mae and Freddie Mac, government-sponsored enterprises (GSEs) (emphasis in the original):

We conclude that these two entities contributed to the crisis, but were not a primary cause. (p. xxvi.)

We also studied at length how the Department of Housing and Urban Development's (HUD's) affordable housing goals for the GSEs affected their investments in risky mortgages. Based on the evidence and interviews with dozens of individuals involved with this subject area, we determined these goals only contributed marginally to Fannie's and Freddie's participation in these mortgages. (pp. xxvi and xxvii.)

We conclude collapsing mortgage-lending standards and the mortgage securitization pipeline lit and spread the flame of contagion and crisis. (p. xxiii.)

The report thus got the causation exactly backwards (as though the problem was a kind of perverse Say's law—supply creates its own demand—in which malfunctioning mortgage supply chains induced the demand for defective housing finance more than the opposite). The report minimized the role of government-mandated affordable housing requirements in creating the demand, especially by Fannie Mae and Freddie Mac, for securitized mortgage products based on subprime-type loans. It was this demand that fostered the severe relaxation of lending standards in the first place, which in turn augmented the granting of such credit and inflated the bubble. The report in effect contained an apologia for the previous governmental housing policy (as though the ever enlarging mandates for low-income accommodation did not more distort than foster rational outcomes.)⁸ Fortunately, Peter J. Wallison, Arthur F. Burns Fellow in Financial Policy Studies at the American Enterprise Institute, was a member of the FCIC. He filed a dissent that correctly identified the actual forces at work.⁹ Arguably even worse than hewing to an excessively rigid ideological line that misidentified the sources of the crisis and minimized the role of the housing mandates, the FCIC report was published in January 2011, six months after the Dodd-Frank Act became law.

Evaluating the Dodd-Frank Act

In his recent book on the financial meltdown, Alan Blinder astutely saw Treasury impatience, which first surfaced in its issuing a recommended framework for regulatory reform on March 26, 2009, as what lay behind that peculiar order:

[T]he U.S. Treasury could not wait for the FCIC report. Just one month *after* the FCIC was authorized by law, long before the commission could do anything substantive, the Treasury was out with its blueprint for financial reform—a document that kicked the policy debate into high gear.

The order seemed fundamentally illogical. The cure was being prescribed long before the diagnosis was in. But the Treasury believed it had a good idea about what had caused the debacle. More important, Treasury Secretary Geithner, Federal Reserve Chairman Bernanke, and others perceived an urgent need to get at least some aspects of financial reform in place promptly—especially new resolution authority. What would happen, they worried, if we faced another Lehman-like situation with no more legal authority than the Fed and the Treasury had in September 2008? With the scars sill fresh, neither Geithner nor Bernanke wanted to find out.¹⁰

The Treasury's follow-up 88-page white paper set the boundaries for deliberation of financial reform.¹¹ Ironically, however, the Treasury did not in fact have, in Blinder's words, "a good idea about what had caused the debacle." It failed to recognize that because the real cause was governmental housing policy that boosted Fannie and Freddie's demand for squirrely subprime and similar mortgages and induced a collapse of standards for home loans, the solution logically had to address the fundamental problems of housing finance as related to the ultimate fate of the government sponsored enterprises. Instead, the Treasury's report minimized these most crucial issues, and the eventual legislation did not solve the basic housing problem at all.¹²

Blinder well describes how the ensuing process of evaluating, refining, lobbying, and compromising transformed the Treasury's report into the final law. On July 21, 2010, President Obama signed the "Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010," named after the chairmen of the Senate Banking Committee and the House Financial Services Committee, Chris Dodd and Barney Frank. It was the most far-reaching financial reform since the Great Depression. Its main planks: (1) created in the FDIC an "Orderly Liquidation Authority" for large nonbanks outside of bankruptcy to forestall the bailout of a "too-big-to-fail" institution after the fact of its insolvency; (2) required large banking or systemically important nonbanking institutions to provide "living wills" with a road map for how each can be quickly liquidated in bankruptcy proceedings; (3) formed a "systemic risk" panel of regulators, headed by the Treasury, that would address threats to the financial system as a whole not only by setting capital and liquidity standards for big banks but also by recommending an orderly liquidation of any large, very troubled financial firm before the fact of its bankruptcy, which otherwise could infect other creditors, perhaps starting a cascade of failures; (4) established a consumer protection bureau within the Federal Reserve but with independent powers to prohibit, among other things, unfair mortgage and credit-card products and other predatory lending; (5) routed standard "derivatives"—a security whose value depends on a specified event or an external price of something else, such as a set of mortgages, a commodity, or a currency—through supervised clearinghouses and required trading them on safer and more transparent organized exchanges; (6) required banks to spin off their riskiest trading of non-traditional derivative "swaps" to separately capitalized affiliates; (7) set new fee ceilings on the public's debit card transactions, to prevent banks from price gouging; (8) implemented the Volcker rule, by outlawing most speculative "proprietary" trading by banks using their own capital, as opposed to employing the funds of their customers, as well as significant ownership of hedge and private-equity funds; (9) made permanent a \$250 thousand limit on deposit insurance after the prevailing \$100 thousand cap had been suspended during the worst of the financial disruption; (10) eliminated the Office of Thrift Supervision by transferring oversight of thrift institutions to the Comptroller of the Currency, and (11) imposed a "risk retention" rule on issuers of asset-backed securities to retain at least 5 percent of the credit risk except for "qualified residential mortgages."

At Jackson Hole in August 2012 Andrew G. Haldane and Vasileios Madouros wrote:

Contrast the legislative responses in the US to the two largest financial crises of the past century—the Great Depression and the Great Recession. The single most important legislative response to the Great Depression was the Glass-Steagall Act of 1933. Indeed, this may have been the single most influential piece of financial legislation of the 20th century. Yet it ran to a mere 37 pages.

The legislative response to this time's crisis, culminating in the Dodd-Frank Act of 2010, could not have been more different. On its own, the Act runs to 848 pages more than 20 Glass-Steagalls. That is just the starting point. For implementation, Dodd-Frank requires an additional almost 400 pieces of detailed rule-making by a variety of US regulatory agencies...

[O]nce completed Dodd-Frank could comprise 30,000 pages of rulemaking. That is roughly a thousand times larger than its closest legislative cousin, Glass-Steagall. Dodd-Frank makes Glass-Steagall look like throat clearing.¹³

On the day the bill passed the conference committee, Senator Dodd remarked that "no one will know until this is actually in place how it works."¹⁴ After its passage, the legislation received decidedly mixed reviews. Chairman Bernanke was favorably disposed:

The financial reform legislation approved by the Congress today represents a welcome and far-reaching step toward preventing a replay of the recent financial crisis. It strengthens the consolidated supervision of systemically important financial institutions, gives the government an important additional tool to safely wind down failing financial firms, creates an interagency council to detect and deter emerging threats to the financial system, and enhances the transparency of the Federal Reserve while preserving the political independence that is crucial to monetary policymaking.¹⁵

Sheila Bair, the experienced former chair of the Federal Deposit Insurance Corporation, also had a favorable overall take on the legislation in her later book.¹⁶ On the other side, a representative of the legal interests of the big banks was less complementary: "Ernie Patrikis, a partner in the banking-advisory practice at White & Case LLP and a former general counsel for the Federal Reserve Bank of New York, said, 'I view the legislation as starting out being horrendous. Now it's merely very horrible.'"¹⁷

Law professor David Skeel offered a more balanced appraisal. He lauded the consumer protection bureau as potentially offsetting some of the power of the big banks.¹⁸ Skeel added, "If bank regulators monitor the new clearinghouses effectively and if they implement the new bank capital requirements vigorously, the financial system will be much less risky and crisis prone than it was before the financial crisis." But he also contended that:

[T]he new approach has very pronounced dark sides. The largest financial institutions will be able to borrow money more cheaply than their smaller competitors . . . The government-bank partnership also depends heavily on regulatory competence. But . . . regulatory competence is a serious issue.¹⁹

As noted, the law had charged the regulatory agencies with writing the detailed regulations to realize the intents of the act. But from a public policy perspective, Chairman Bernanke's comment before the House Banking Committee in early February 2011 was rather bizarre. He reported that the number of Fed staff members that were drafting regulations called for by the Dodd-Frank bill amounted to more than 300! Bernanke explained to Representative Shelly Moore Capito (Republican, West Virginia) that he wanted to do it "right" but also "quickly!" A year later, the Fed still had "250 separate rule-writing projects underway."²⁰

The implementation of the Dodd-Frank bill obviously was imposing intrusive and expensive financial regulations. Lobbyists have had a field day! William Cohen reported this:

In June [2011], Jamie Dimon, chief executive officer of JPMorgan Chase & Co., expressed his concerns to Federal Reserve Chairman Ben S. Bernanke: "I have this great fear that someone's going to write a book in 10 or 20 years, and the book is going to talk about all the things that we did in the middle of a crisis that actually slowed down recovery," he said.²¹

Dimon expressed is frustration about the overall social cost of the coming rules to Bernanke in September 2011. "Has anyone bothered to study the cumulative effect of all these things?"²² Dimon later asked whether Bernanke "has a fear like I do" that overzealous regulation "will be the reason it took so long that our banks, our credit, our businesses and most importantly job creation to start going again."²³

At Chairman Bernanke's Monetary Policy Testimony before the House Financial Services Committee on February 29, 2012, Representative Randy Neugebauer (Republican, Texas) said that the committee had estimated that for the private sector to comply with only the first 140 regulations out of the 400 specified by the Dodd-Frank Act would require 22 million person-hours.²⁴ That seemed to him like an excessive burden. Chairman Bernanke replied that the Fed was trying to "minimize those costs" but that the new regulations were trying to prevent the recurrence of the 2008 financial disaster, which itself was incredibly expensive.

With the prolonged implementation delays, Obama finally appeared to have reached the end of his tether.

On Monday, President Obama summoned top financial regulators to the White house and told them to get busy finishing implementation of the 2010 Dodd-Frank financial reform law. Mr. Obama's impatience is understandable. Dodd-Frank is the centerpiece of his efforts to prevent another financial meltdown like the one in 2008. Yet as of July 15, regulators have finalized only 158 of 398 rules called for in the legislation . . . Regulators have missed 172 of 279 rule-making deadlines.²⁵

While the Dodd-Frank Act represented the Democratic Party's attempt to address the sources of the financial meltdown, unfortunately much of the bill erroneously assumed that the prime mover originated in inadequate restraints on the excesses both of the greed induced by financial market competition and the risky behavior of large financial institutions. Moreover, the Obama administration articulated this position. And, as just noted, the narrative of the FCIC report also would be based in part on that faulty premise.

In stark contrast, the more recent opinions of Michael Bloomberg, Paul Volcker, David Brooks, and Edward Pinto followed up on Peter Wallison's dissent to the FCIC report:

Mayor Michael Bloomberg said this morning that if there is anyone to blame for the mortgage crisis that led the collapse of the financial industry, it's not the "big banks," but Congress.

Mayor Bloomberg was asked what he thought of the Occupy Wall Street protesters.

"I hear your complaints," Bloomberg said. "Some of them are totally unfounded. It was not the banks that created the mortgage crisis. It was, plain and simple, Congress who forced everybody to go and give mortgages to people who were on the cusp."²⁶

Paul Volcker observed,

One very large part of American capital markets—indeed the dominant part—is the market for residential mortgages. The financial breakdown was directly related to, and abetted by, lax, government-tolerated underwriting standards for those mortgages. The origination and huge volume of so-called "sub-prime" mortgages, typically securitized in large CMOs and CDOs (collateralized mortgage and debt obligations), supported the unsustainable rise in prices of homes and the housing bubble. So far the calls for large-scale structural change have not resulted in legislation, but the need for reform and the direction of change is clear.²⁷

And David Brooks in reviewing Reckless Endangerment wrote that:

[T]he Fannie Mae scandal is the most important political scandal since Watergate. It helped sink the American economy. It has cost taxpayers about \$153 billion, so far. It indicts patterns of behavior that are considered normal and respectable in Washington . . .

Only two of the characters in this tale come off as egregiously immoral. [James] Johnson made \$100 million while supposedly helping the poor. Representative Barney Frank, whose partner at the time worked for Fannie, was arrogantly dismissive when anybody raised doubts about the stability of the whole arrangement. Most of the people were simply doing what reputable figures do in service to a supposedly good cause. Johnson roped in some of the most respected establishment names: Bill Daley, Tom Donilon, Joseph Stiglitz, Dianne Feinstein, Kit Bond, Franklin Raines, Larry Summers, Robert Zoellick, Ken Starr, and so on. Of course, it all came undone. Underneath, Fannie was a cancer that helped spread risky behavior and low standards across the housing industry. We all know what happened next.²⁸

What set Brooks off about Frank? Consider what Elizabeth MacDonald has written:

It was Rep. Frank who famously said in 2003: "I do not want the same kind of focus on safety and soundness [in the regulation of Fannie Mae and Freddie Mac] that we have in the Office of the Comptroller of the Currency and the Office of Thrift Supervision. I want to roll the dice a little bit more in this situation towards subsidized housing."²⁹

Edward Pinto, former chief credit officer of Fannie Mae and then Resident Fellow at the American Enterprise Institute, well summed it up: "Government housing policies and the toxic mortgages they spawned were the sine qua non of the financial crisis."³⁰ He later elaborated,

[L]enders, following Fannie and Freddie's aggressive and convincing loosening of their "narrow" underwriting standards, responded by loosening their formerly conservative standards. This premeditated assault on the prime mortgage led to the largest housing bubble in our history followed by the largest bust. The perpetrators were Fannie, Freddie, community groups, Congress, and HUD.³¹

The United States is the only developed economy with a major government role in housing. Today nine out of ten mortgages are guaranteed by federal government agencies, including not only Fannie and Freddie but also the Federal Housing Administration. It insures the lenders against losses on one in five residential homes—with down payments as low as 3-1/2 percent. In late-September 2013 the agency was forced to draw \$1.7 billion from the Treasury.³²

The only permanent fix is to remove the state completely from housing finance, including eliminating government guarantees and affordable housing requirements, in contrast to the stopgap measures in the Board's white paper to be discussed in Chapter 12.33 The fees charged by Fannie and Freddie as well as the Federal Housing Administration to insure mortgage loans gradually but inexorably should be raised to prohibitive levels. The process of raising those GSE fees already has begun, so much so that by early September 2013 the interest rate on conforming mortgages briefly exceeded the rate on "jumbo" mortgages larger than the \$417,000 limit for agency backing.³⁴ Another proposed change also should be carried gradually to extremes: That limit for the size of home mortgage loans eligible for backing by Fannie and Freddie should be lowered inexorably to zero.³⁵ And all the mortgage-backed securities held as assets by the housing agencies should be sold on a fixed schedule, perhaps by establishing an agency like the Resolution Trust Corporation.³⁶ The Fed similarly should slowly sell all its existing holdings of MBS.³⁷ Those policies would allow equilibrating forces in the private housing market to bring about a rational allocation of resources in the sector. As the housing market evolves over time, the participants themselves would be able to evaluate the appropriate scope for securitizing home loans, as a government role there would have ended. Similarly, free-market forces should be left alone to determine themselves, unencumbered by misguided governmental pressure, whether the continuation of 30-year fixed-rate mortgages that is subject to refinancing only if rates decline even makes sense. Certainly around the world such contracts are exceedingly rare.

This general approach is the vision pursued by Representative Jeb Hensarling (Republican, Texas), chairman of the House Committee on Financial Services, in a bill introduced on July 11, 2013. Another vision was embodied in comprehensive legislation on June 25, 2013 by Senators Mark Warner (Democrat, Virginia) and Bob Corker (Republican, Tennessee), as refined on March 11, 2014, in legislation authored by Senators Tim Johnson (Democrat, South Dakota) and Mike Crapo (Republican, Idaho). The last two bills would wind down the Federal Housing Finance Agency (the regulator and conservator of Fannie and Freddie) along with Fannie and Freddie themselves, while the third bill, like its predecessor, but unlike the first one, would preserve a back-stop role for federal mortgage guarantees (to be financed by private fees) but only once private lenders have lost a maximum 10-percent amount. This approach gained administration support. On March 27, Representative Maxine Waters (Democrat, California) sponsored legislation with an explicit government guarantee and flexible credit-risk sharing.³⁸

In mid-December 2011 the Securities and Exchange Commission (SEC) announced that it was bringing a civil lawsuit against ex-Fannie Mae and Freddie Mac defendants that, if successful in court, would certainly place them among the primary perpetrators of the financial crisis. The case, which had been in preparation for three years, alleged that two former CEOs and four other top executives at the government sponsored enterprises had committed securities fraud. The agency charged them with deceiving investors by underreporting the quantity of risky sub-prime or Alt-A mortgage securities in their credit guarantee portfolio by a factor of more than 50. For example, as of June 30, 2008, Fannie and Freddie together had disclosed to investors only \$14 billion in subprime-like mortgage-related securities when the actual figure exceeded \$750 billion. But since the two companies were willing to cooperate in the prosecution, the SEC was not pursuing charges against them.³⁹ The SEC's evidence about actual substandard mortgages verified a succession of published findings starting three years earlier by Pinto.⁴⁰

In contrast to these attributions of the housing bubble to government housing policies that created the demand from Fannie and Freddie for low-quality mortgages, any root explanation for the emergence of the bubble early in this century in Alan Blinder's book is conspicuous by its absence. Blinder seemed in effect to fall back on the observation that "It just happened." Still, he referred to the opposing case as flimsy: "I mentioned earlier the attempts by some arch-conservatives to lay blame for the financial crisis at the doorsteps of Fannie Mae and Freddie Mac. Though a thin case, it was made often."⁴¹ Exemplifying Blinder's point about frequency, another voice recently affirmed this notorious arch-conservative position:

[Former chairman of the House Financial Services Committee Barney] Frank dropped several unexpected bombshells in response to questioning by the moderator, CNBC anchor Steve Liesman.

Asked about the government's affordable housing goals compelling Fannie Mae and Freddie Mac before the crisis to devote more than half their portfolios to riskier nonprime mortgages for low-income borrowers, Frank blurted out: "No more goals, no more telling the private sector" how to invest in the housing market. "Barney," Liesman asked, "are you suggesting that the goals of Fannie Mae and Freddie Mac, the concept of promoting homeownership, was something that contributed to the crisis?" "Yes, it

was, very much so—and Bill Clinton did it, and George Bush did it, everybody did it," Frank said. 42

Shortly after the *New York Times* selected Blinder's volume as one of the top five nonfiction books of 2013, similar positions found expression in the arch-conservative outlet the *New York Review of Books* in an article by a US District Court Judge Jed S. Rakoff. (Keep his important name in mind as we'll come in Chapter 12 to a crucial ruling of his in 2011.)

[T]he government, writ large, had a part in creating the conditions that encouraged the approval of dubious mortgages. Even before the start of the housing boom, it was the government, in the form of Congress, that repealed the Glass-Steagall Act, thus allowing certain banks that had previously viewed mortgages as a source of interest income to become instead deeply involved in securitizing pools of mortgages in order to obtain the much greater profits available from trading. It was the government, in the form of both the executive and the legislature, that encouraged deregulation, thus weakening the power and oversight not only of the SEC but also of such diverse banking overseers as the Office of Thrift Supervision and the Office of the Comptroller of the Currency, both in the Treasury Department. It was the government, in the form of the Federal Reserve, that kept interest rates low, in part to encourage mortgages. It was the government, in the form of the executive, that strongly encouraged banks to make loans to individuals with low incomes who might have previously been regarded as too risky to warrant a mortgage.

Thus, in the year 2000, HUD Secretary Andrew Cuomo increased to 50 percent the percentage of low-income mortgages that the government-sponsored entities known as Fannie Mae and Freddie Mac were required to purchase, helping to create the conditions that resulted in over half of all mortgages being subprime at the time the housing market began to collapse in 2007.

It was the government, pretty much across the board, that acquiesced in the evergreater tendency not to require meaningful documentation as a condition of obtaining a mortgage, often preempting in this regard state regulations designed to assure greater mortgage quality and a borrower's ability to repay. Indeed, in the year 2000, the Office of Thrift Supervision, having just finished a successful campaign to preempt state regulation of thrift underwriting, terminated its own underwriting regulations entirely.

The result of all this was the mortgages that later became known as "liars' loans." They were increasingly risky; but what did the banks care, since they were making their money from the securitizations. And what did the government care, since it was helping to create a boom in the economy and helping voters to realize their dream of owning a home?⁴³

To his credit, Greenspan during his chairmanship had warned in speeches and testimony about the dangers that Fannie and Freddie posed to the financial system, but to no avail.⁴⁴ To add further irony, Senator Chris Dodd joined Representative Barney Frank among the prominent supporters of the ill-considered housing policies affecting Fannie Mae and Freddie Mac that was the fundamental source of the financial meltdown.

The Treasury, the Dodd-Frank bill, and the FCIC, in contrast to misdiagnosing the basic source of the crisis, as well as underemphasizing the moral hazard that helped foster the bankruptcy of Lehman Brothers, were correct to stress the potential knock-on effects of that sudden event. Indeed, some critics of that analysis incorrectly played down the significance of potential systemic effects of Lehman's bankruptcy.⁴⁵ Still, whether the Dodd-Frank Act's effort to counter systemic risk in advance will actually work as intended is another matter. It empowered the US Financial Stability Oversight Council (FSOC), a panel of regulators headed by the Treasury, to monitor "Systemically Important Financial Institutions" and recommend "heightened prudential supervision" by the Federal Reserve to counter potential systemic risk. In early April 2012 it approved a final rule establishing the criteria identifying which nonbanks may be systemically important:

Under the rule, regulators will evaluate non-bank financial companies with more than \$50 billion in assets if they meet one or more of the following thresholds: a 15-to-1 leverage ratio; \$3.5 billion in liabilities on derivatives contracts; \$20 billion of loans borrowed and bonds issued; \$30 billion in notional credit default swaps outstanding; or a 10 percent ratio of short-term debt to assets.⁴⁶

The FSOC surely will have comprehensive, up-to-date data to accompany the best of intentions, and I sure hope that it will be able to peer into the future with some accuracy, but I must admit the persistence of nagging doubt. Chairman Bernanke has discussed "some ways in which the Federal Reserve, since the crisis, has reoriented itself from being (in its financial regulatory capacity) primarily a supervisor of a specific set of financial institutions toward being an agency with a broader focus on systemic stability as well."47 But the related track records of even the more limited practice of supervising individual institutions don't always inspire much confidence. Paul Volcker noted, "I can't remember any banks that didn't have a clean auditing statement, sometimes as little as two weeks before they failed."48 The Squam Lake Report, though supporting the establishment of a systemic risk regulator, provided a more extreme recent example. "The Securities and Exchange Commission, Bear Stearns' main regulator, was not up to the task of supervising the firm. The SEC Chairman infamously announced that all was fine with the company just 48 hours before it failed."49 The Office of Thrift Supervision, AIG's primary supervisor then housed within the Treasury, completely missed the mammoth problems brewing at the London office of the insurance company until the necessity of a bailout became evident in September 2008.⁵⁰ And HUD's affordable housing standards didn't pan out too well.

As for the post-crisis attempt to apply several "macroprudential" regulations to big entities in an effort to control systemic risk, a paper at a conference to honor former Vice Chairman Donald Kohn made the arresting claim that "it is easy to produce combinations of regulation that look sensible but when combined have adverse effects on the economy."⁵¹ And several Board staffers noted in their influential paper on monetary policy and housing that "research on macroprudential regulation and its potential macroeconomic impact remains at a very early stage, and it would be premature to conclude that such policies will prove as effective or as well targeted as desired in limiting the business cycle implications of asset price bubbles."⁵² Furthermore, Hester Peirce, echoing David Skeel, has raised some profound publicchoice-type issues about the Dodd-Frank regime: "[R]ather than giving us a more resilient financial system, Dodd-Frank, once it is fully implemented, will give us a financial system more dependent than ever on Washington regulators, and thus vulnerable to their whims and weaknesses."⁵³

In view of all these and other considerations, I think that only the seeds of a far sounder approach were contained in the Volcker rule, because the ideal legal restrictions would be even more radical. In principle the Volcker rule would establish stricter guidelines for commercial banks, because they benefit from insured deposits, the safety net, and detailed supervision and regulation, than for other financial institutions, which would be allowed to be more fully subject to the market forces of profit and loss. Paul Volcker has explained:

Financial institutions not undertaking commercial banking should be able to continue a full range of trading and investment banking activities, and even could continue links with commercial or industrial firms. When deemed "systemically significant," they will be subject to capital requirements and greater surveillance than in the past. However, for such institutions there should be no presumption of official support—access to the Federal Reserve, to deposit insurance, or otherwise. Presumably, for them, failure will be more likely than in the case of regulated commercial banks protected by the government safety net. Therefore, it is important that a new process for resolving the problems of risk and failure be available and promptly brought into play.⁵⁴

Although Dimon had argued against the ban on proprietary trading under the Volcker rule, the bank's own loans to European companies came back to haunt it. In fact, I thought on August 10, 2011, that Dimon was whistling past the graveyard when he told a CNBC interviewer, "We're not going to cut and run where Europe is concerned."⁵⁵ But later he must have changed his mind. At his direction, the firm acted to protect itself against losses on the commercial loans it had extended through 2011 by buying securities to insure against defaults by European, US, and other corporations, thereby establishing a net short position. Then the bank, like most, erroneously came to think that Europe's improved prospects would be sustained into 2012. In the first quarter, the bank loaded up on more-than-offsetting long credit derivatives. The Frenchman Bruno Iksil made such massive trades that he was called the "London Whale."

When the Euro-zone's problems resurfaced in April and May, JPMorgan's huge purchases were proving to have been significantly misguided. But although the cost to JPMorgan was soaring, it was slow to cut its losses by unwinding the positions. Early on, Dimon even famously referred to growing public alarm about potential losses from the bets gone wrong on synthetic derivative securities as "a tempest in a teapot." But later, as the extent of the problem sunk in, Dimon was forced to admit, "The portfolio has proved to be riskier, more volatile and less effective as an economic hedge than we thought."⁵⁶ Todd Petzel, Chief Investment Officer at Offit Capital, put the general point succinctly: "[H]edging is an important, but imprecise, market activity. If you are lucky enough to be in London this month for the Olympics, take some extra time and visit the countryside. You will only find a perfect hedge in an English garden."⁵⁷

By March 2013 the loss had cumulated to \$6.2 billion. The Senate Permanent Subcommittee on Investigations under Carl Levin (Democrat, Michigan) released on March 14 a damning 300-page report, which Matt Levine thought well described what had developed,⁵⁸ and held a riveting hearing with bank and OCC staff the next day:

[T]he report raises questions about whether it will ever be possible to keep a big bank from committing foolish mistakes as long as the people working for the bank—starting with the CEO—are determined to do things their way. The panel makes six serious accusations against JPMorgan, saying it increased risk without notice to regulators, mischaracterized high-risk trading as hedging, hid massive losses, disregarded risk, dodged OCC oversight, and mischaracterized the portfolio.⁵⁹

Sheila Bair was quite critical of the bank's behavior two weeks later in an op-ed column:

The recent Senate report on the J.P. Morgan Chase "London Whale" trading debacle revealed emails, telephone conversations and other evidence of how Chase managers manipulated their internal risk models to boost the bank's regulatory capital ratios. Risk models are common and certainly not illegal. Nevertheless, their use in bolstering a bank's capital ratios can give the public a false sense of security about the stability of the nation's largest financial institutions.⁶⁰

Later evidence suggested that three traders allegedly had falsified information to hide the extent of the losses on the plummeting market value of the bank's sales of these derivatives. Because the erroneous estimates were used internally as well as externally, the bank's tardy reaction to signs of trouble became somewhat more explicable. To avoid being charged himself, Iksil cooperated with prosecutors. In mid-August 2013 criminal charges were brought against two of his former coworkers.

Unfortunately, the London Whale episode didn't lend support to defenders of the Volcker rule as first written. The trading activity at JPMorgan Chase was related to "portfolio hedging," which actually would have been permissible under the Volcker rule that was embodied in the Dodd-Frank Act. Still, the JPMorgan hedging disaster raised a valid question about the inherent impossibility of drawing a line distinguishing hedging from proprietary trading. I perceive that the same problem arises with market making and customer trading as well. No wonder the specific proposals for implementing the Volcker rule by the financial agencies induced such massive lobbying efforts, ended up adding so much complexity, and induced such prolonged delays. "It's ridiculous,' said Paul Volcker, the former Federal Reserve chairman for whom the rule is named. He said there is 'no reason why the Volcker rule should take three years' to write."⁶¹ Actually, Volcker was wrong here, as the task is impossible. I'd have gone much further than Volcker.

According to his original idea in the Volcker rule, the prohibition of proprietary trading with a commercial bank's own capital, combined with deposit insurance, the safety net, and detailed supervision and regulation, should apply only to narrow banks because of their direct taxpayer exposure. (Of course, the restrictions of the Volcker rule logically shouldn't apply to Goldman Sachs, which as *de facto* investment bank does not accept retail deposits. Still, having acquired a commercial bank charter during the crisis, it would have been covered *de jure* anyway.⁶² And now given that the regulators would judge it to be systemically important in any event, the Volcker rule still would be applicable.) Volcker thought that the orderly resolution of big and interconnected nonbanks would allow them to go belly up if they got in serious trouble. But drawing appropriate lines to distinguish proprietary trading from other activity has proven to be impossible.

I think this problem can be solved only by more rigorous exclusions to simplify narrow banking further by severely delimiting the market making, customer trading, and hedging activity permitted narrow banks. In fact, I'd advocate restoring most of the original Glass-Steagall Act, which would have the desirable side-effect of reducing the size of the largest banks, but doing indirectly in a far superior manner to imposing a direct, but arbitrary, size constraint on the currently permitted structure. True, less financial market liquidity would accompany this re-imposition of the old Glass-Steagall constraints, but so be it. If the world were appropriately designed, that's how it would work. Vladimir Lenin contended, "If you want to make an omelet, you have to be willing to break a few eggs." I'm instead all for unscrambling today's omelet.⁶³

Despite being unaware of my reasoned arguments, the five regulatory agencies on December 10, 2013, traveled partway there. They agreed on a revised specification of the Volcker rule that then outlawed broad portfolio hedging so as to try to prevent episodes like the London Whale while still allowing hedges against specific documentable risks.

Before the crisis, mortgage companies, including fly-by-night ones, increasingly had extended loans without adequate down payments, and then bank sellers of structured mortgage-backed securities were able to unload to the unwary buyers all risk of default on the newly created products. The *Washington Post* editorialized about certain features of Dodd-Frank:

To the bill's authors, a key cause of the financial crisis was that Wall Street packaged and sold securities backed by subprime, "no-doc" and other questionable mortgages. Not having to retain any of the default risk themselves, the banks fobbed off the bonds onto investors and went off in search of more loans, any loans, to package and sell. Dodd-Frank tried to discourage this business model by requiring future mortgage securitizers to put their own capital at risk . . . The legislation's co- author, former Rep. Barney Frank (D-Mass.), said this was his bill's "most important" provision.⁶⁴

"But when the final rule was adopted this week," wrote Floyd Norris more than a year later in the *New York Times*, "that idea was dropped." He continued:

"The loophole has eaten the rule, and there is no residential mortgage risk retention," said Barney Frank, the former chairman of the House Financial Services Committee and the Frank in Dodd-Frank.⁶⁵

Alan Blinder had explained that the effectiveness of the Dodd-Frank Act was being eviscerated because it contained an exception, which the regulators were turning into a generalized out:

The 5% requirement does not apply to "qualified residential mortgages" (QRMs)—a term left to regulators to define, but intended to exempt safe, plain-vanilla mortgages with negligible default risk . . .

Just days ago, the regulators issued yet another notice of proposed rulemaking, soliciting comments on (among many other things) two ways to define QRMs. The lighter-touch option would exempt almost 95% of all mortgages from the skin-in-the-game requirement. The "tougher" option would exempt almost 75%. Does anyone doubt which option will be favored by interested commentators? After that, what will be left of the Dodd-Frank requirement?⁶⁶

The *Post's* editorial also had gone on to decry a related relaxation:

Two years ago, federal banking regulators proposed to require a 20 percent down payment as one of the criteria of qualified loans. This was consistent with the intent of Dodd-Frank, and with the economic literature, much of which identifies low equity as a reliable predictor of homeowner default. But the requirement was quite inconsistent with the interests of a wide range of lobbies—from real estate agents to lowincome-housing advocates—which protested that the rule would unduly limit access to credit and kill the housing recovery. The groups swarmed the regulators; hundreds of members of Congress from both parties wrote in support of them. And so, in the dog days of August . . . the regulators backed down, offering a revised rule that requires no down payment at all.⁶⁷

The false narrative of the meltdown, liberal but bipartisan ideology, misguided housing activists, and excessive policymaker concern about short-run cyclical weakness as opposed to rational resource allocation over time all had combined to help provide a public-spirited cover for the shocking triumph of a lobbying effort by housing-related special interests engaged in "rent-seeking" that was recreating the very fundamental flaws that had spawned the financial crisis in the first place. A story in the *Wall Street Journal* in mid-2014 captured only some aspects of what had happened:

The original proposal three years ago sparked a backlash housing-industry, affordablehousing, and civil-rights groups, who banded together over shared concerns that a 20% down-payment requirement would end the dream of home-ownership for many Americans.⁶⁸

The Basel II rules on capital adequacy also have been singled out by some analysts as a source of the crisis.⁶⁹ Sheila Bair explained some drawbacks to the Basel rules.

Capital ratios (also called capital adequacy ratios) reflect the percentage of a bank's assets that are funded with equity and are a key barometer of the institution's financial strength—they measure the bank's ability to absorb losses and still remain solvent. This should be a simple measure, but it isn't. That's because regulators allow banks to use a process called "risk weighting," which allows them to raise their capital ratios by characterizing the assets they hold as "low risk."

As we learned during the financial crisis that financial models can be unreliable: their assumptions about the low risk of steep declines in housing prices were fatally flawed, causing catastrophic drops in the value of mortgage-backed securities. And now the London Whale episode has shown how capital regulations create incentives for even legitimate models to be manipulated.⁷⁰

But by then the Fed long before (in late 2011) had released for comment the first round of draft regulations implementing that part of the Dodd-Frank Act in rough conformity with the formal release of full-blown international capital standards under the recent package of reforms developed by the Basel Committee on Financial Regulation (Basel III).⁷¹ Jamie Dimon had been particularly incensed about the new capital standards the Fed was planning to apply to JPMorgan Chase, which he called "anti-US."⁷² Much to Dimon's expressed chagrin, the final rule in July 2013 proposed

a surcharge of 2-1/2 percentage points on the regulatory minimum ratio of capital to risk-weighted assets on systemically important banking organizations with assets greater than \$50 billion.

Notice that the Fed's all-or-nothing variant less closely followed Gary Becker's original recommendation that minimum capital standards as a percent of assets rise with the size of the banking entity than did the graduated capital surcharge of 1–2.5 percent under Basel III. But under the Fed's proposal the surcharge in principle would be just large enough to offset the expected cost imposed by systemic risk. That is, it did attempt to approximate the "equal impact" rationale that the enhanced capital standards on a systemically important banking organization should be just high enough to lower the expected costs associated with systemic contagion plus those arising from its individual failure into equality with the expected costs of individual failure alone of an institution just below the size at which it becomes systemically important.⁷³

True, both the Dodd-Frank Act and Basel III standards also mandated that a simple minimal "leverage" ratio of capital to unweighted total assets supplement the other, more complicated capital standards. In his aforementioned speech at Jackson Hole in August 2012, Andrew Haldane defended with theory and evidence a constant leverage ratio alone as a better regulatory approach for large, interconnected banking institutions than augmenting it with the vast array of complicated capital requirements embodied in the new law and revised international standards.⁷⁴ But his simple approach ignored the documented externalities of a collapse of one large systemically important institution. It is precisely an attempt to address the possibility of a cascade of interrelated failures (in part through capital surcharges for large banking institutions) that underlies much of the complexity of the Dodd-Frank Act and Basel III.

Of course, other factors contributed to the financial disaster as well. "Ben Bernanke... told the Commission 'a "perfect storm" had occurred."⁷⁵ Another observer made a similar claim, "I think what caused the last collapse was a convergence, almost akin to a perfect storm, of many elements in our economy and regulatory structure."⁷⁶ A third analyst, this one on the opposite side of the political spectrum, also used the same analogy, "The U.S. financial system, which had grown far too complex and far too fragile for its own good—and had far too little regulation for the public good experienced a perfect storm during the years 2007–2009."⁷⁷

Despite all the new rules and regulations, MF Global, a small futures broker that the New York Fed had recently made a counterparty as a primary dealer, bit the dust in late October 2011. The customers providing financing panicked upon learning that it had bet more than \$6 billion on the health of European sovereign securities. As its funding dried up,

the firm "borrowed" money from the accounts of its customers to try and salvage its own losses. Most of the blame for those trades fell on its CEO (and ex-New Jersey governor) Jon Corzine, and while his reputation and firm are ruined, it seems he will escape any legal sanction. He could still face massive civil lawsuits or fines from regulators who have a lower standard than a criminal prosecution, but jail isn't in the cards.⁷⁸

Some \$1.6 billion in customer funds disappeared in the chaotic days before the firm collapsed, presumably because the US regulations of customer accounts, which are much looser than those of the UK and Canada, proved completely inadequate.

But as of this writing, even though many of its creditors had pulled the plug, none of the enterprise's European investments themselves in fact had gone bad.⁷⁹

A scandal involving the legitimacy of the reported London Interbank Offered Rate erupted on June 26, 2012.⁸⁰ The Commodity Futures Trading Commission, the Justice Department, and the UK's Financial Services Authority imposed a \$450 million fine on the UK bank Barclays for dishonest submissions to the British Bankers Association of its estimated borrowing costs from 2005 to 2009. Beyond civil and criminal charges for the Libor fiasco, related official fines ultimately could cost global banks almost \$50 billion (with unrelated fees for currency manipulation adding another \$25 billion).⁸¹ Even apart from the evident skullduggery, the behavior meant that Libor calculations for unsecured (uncollateralized) lending longer than overnight maturities, such as the widely used 3-month maturity, had been constructed entirely from whole cloth.⁸² In the New York Fed's dry words, during the crisis Libor had become "increasingly hypothetical."⁸³ A considerably more colorful description originated across the pond. In November 2008, Governor Mervyn King had testified that Libor was "the rate at which banks do not lend to each other, and it is not clear that it either should or does have significant operational content."⁸⁴

The Bank of England's Deputy Governor, Paul Tucker, had engaged in a conversation with Barclays's CEO Robert B. Diamond Jr. on October 29, 2008. Diamond's typed notes raised a possibility that Tucker had instructed the bank to avoid contributing to the impression of a weakened condition by not continuing to submit well above-average, and thus persistently discarded estimates of its borrowing costs. Only non-extreme submissions were included in the Libor average and made public. Tucker vociferously denied any such intent on his part, and Diamond denied that he inferred any such suggestion. To be sure, Diamond's subordinate did interpret the notes and associated conversations as instructions from the Bank or England, and the rate that Barclays submitted went down the next day.⁸⁵ At the time the scandal broke, Tucker was a leading contender to replace Sir Mervyn King as governor, but ultimately the job instead went to the sitting Governor of the Bank of Canada, Mark Carney.

In mid-March 2012, as mandated by the Dodd-Frank Act, the banking regulators conducted the third annual stress test of the large bank holding companies using very severe counterfactual assumptions. Although four of the 19 were not allowed to pay dividends or buy back shares, in another sense, at the time of the test, all of them passed:

No banks were forced to immediately raise capital, suggesting that banks in the U.S. are generally healthier than those in Europe, which have been shedding assets and pulling back from key business to shore up their balance sheets . . . [In] the first round of tests in 2009 . . . giant lenders were required to raise \$75 billion.⁸⁶

But the following assessment of the content of the stress test can only be described as critical of at least part of the approach embodied in the Dodd-Frank Act.

A day before the results were released, Neil Barofsky, former special inspector general for the Troubled Asset Relief Program, said the size of the banks was still a problem.

"We haven't dealt with the too-big-to-fail problem, and the one way to mitigate that is to have really thick capital barriers," said Barofsky.⁸⁷

The Obama administration, as well as its congressional supporters, certainly intended the Dodd-Frank Act to end the too-big-to-fail problem. As Andrew Ross Sorkin observed:

Here's Timothy Geithner, the former Treasury secretary, with the administration's official line at a hearing in 2010 right before the Dodd-Frank bill passed: "The reforms will end too-big-to-fail," he said unequivocally. "The federal government will have the authority to close large failing financial firms in an orderly and fair way, without putting taxpayers and the economy at risk."⁸⁸

On July 3, 2012, nine of the largest global banks implicitly endorsed an aspect of the Dodd-Frank's approach to ending the too-big-to-fail problem. Their living wills provided plans for a possible orderly wind down in bankruptcy. The American Bankers Association later went even further by arguing that the Dodd-Frank law ought to be given a chance to avoid a government bailout in an emergency. ABA President and CEO Frank Keating wrote the following defense of current law in a letter.

"Before we add another layer of new restrictions and corporate restructurings, it's important to consider what Dodd-Frank actually instructs regulators—including the Fed—to do," Keating said.

He listed several changes mandated by the reform law that target too-big-to-fail, including more stringent capital and liquidity rules, annual stress tests, living wills and creation of the Financial Stability Oversight Council . . . Let's implement the mandates Congress enacted to end too-big-to-fail and enhance our financial system—not destroy it.⁸⁹

In July 2013 the Fed, along with the FDIC and Comptroller of the Currency, took another in a series of steps to attenuate the too-big-to-fail problem through implementing the Basel III capital standards. They approved a final rule with strengthened minimum requirements for the "quantity and quality" of capital held by banking organizations. In addition, for the eight largest, internationally active banking organizations, the final rule proposed a "new minimum supplementary leverage ratio that takes into account off-balance sheet exposures."⁹⁰ For them it proposed a minimum leverage ratio of 5 percent for the holding company and 6 percent for their banking subsidiaries, as opposed to 3 percent for smaller entities. The Fed augmented the capital standards in late October with a new proposal to require the biggest banks to hold 30-days-worth of liquid assets to tide them over an episode of distressed financial conditions.⁹¹ Some smaller banks would have to cover 21 days of turmoil. The rules were mandated by the Dodd-Frank Act.

In Bernanke's monetary policy testimony of February 26, 2013, he interestingly claimed in response to a forceful question from Senator Elizabeth Warren (Democrat, Massachusetts) that financial markets were "wrong" to provide a funding subsidy for big banks because Dodd-Frank really had ended "too big to fail." Three weeks later, though, he expressed second thoughts. In his press conference on March 20, he soft-ened his claim that Dodd-Frank had rendered future bailouts of large financial firms impossible. But he did reiterate that reforms to lessen its chances were ongoing. In this regard, the higher capital, leverage, and liquidly standards implied by Dodd-Frank realistically can't always prevent the rare instance when a big institution runs into serious financial trouble. And former Chairman Greenspan asserted at Brookings in the

spring of 2010 that "the notion of an effective 'systemic regulator' as part of a regulatory reform package is ill-advised."92 He didn't think even a collection of informed regulators always could tell reliably whether a financial institution really posed systemic risk that would call for remedial actions, despite the provisions of the Dodd-Frank Act to the contrary. This feature contrasts with the act's Orderly Liquidation Authority for large nonbank as well as bank institutions upon insolvency, which makes sense. But here too, Greenspan sounded a cautionary note: "[T]he notion that risks can be identified in a sufficiently timely manner to enable the liquidation of a large failing bank with minimum loss proved untenable during this crisis, and I suspect will prove untenable in future crises as well."93 Whether the FDIC always can arrange a resolution, especially of a global organization whose liquidation would require international cooperation, even when the host country takes control of the holding company of the failing entity under the FDIC's "single-point-of-entry" approach, in time by tapping fees on other institutions, stock and bond investors, and uninsured depositors without the infusion of taxpayer funds is unclear. Financial reforms also will be implemented in the real political world, not in the minds of theorists. At an earlier Brookings conference in late March 2009, Vince Reinhart pointed out the difficulty of aligning the incentives of financial supervisors with the interests of society. He coined the phrase "the tyranny of the event study," in which a supervisor naturally would judge that the noticeable short-term costs of a financial panic would outweigh the hidden long-run costs of "bailouts." The latter costs include "moral hazard" effects, in which institutions assume more risk if someone else pays the price if things don't pan out. These four observations raise legitimate doubts about whether the Dodd-Frank Act, despite the greater role for the Fed, actually will end too big to fail.

In sum, at least these four questions can be advanced that leave room for skepticism that too big to fail will never reoccur: (1) Can any realistic new capital, leverage, and liquidity requirements ever be high enough to always prevent the kind of mistakes in extremis that would cause financial disaster for at least one entity? (2) Can even a collection of regulators always predict in advance the individual financial woes of every single big guy let alone systemic risks regarding all future shocks to the whole system? (3) Can orderly liquidation, especially the resolution of a global organization that would involve international cooperation, always occur before mounting losses require an infusion of taxpayer funds to supplement those of stock and bond investors, uninsured depositors, and fees on other institutions? And (4) Can the new law always eliminate the political incentives to use a bailout to avoid the financial disruption induced even by an orderly liquidation?

Now Chapter 12 first explains the remarkable lack of criminal prosecutions associated with the financial meltdown. Then it judges the revelation by *Bloomberg News* of the individual borrowers' identity in the Fed's huge emergency lending during that crisis. Finally, it warns that a political reaction to the Fed actions during the crisis, many of which proved to be effective in warding off disaster, as well as the episodic but less efficacious later quantitative easings, together with the mandate under the Dodd-Frank Act to engage in newly conceived macroprudential policies even for certain nonbanks, may turn out to have endangered the Fed's future independence in conducting orthodox monetary policy per se.