Source: Hester Peirce and Benjamin Klutsey, eds., *Reframing Financial Regulation: Enhancing Stability and Protecting Consumers*. Arlington, VA: Mercatus Center at George Mason University, 2016.

CHAPTER 4
Title II of Dodd-Frank

PETER J. WALLISON
American Enterprise Institute

Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), entitled the Orderly Liquidation Authority (OLA), was enacted as a reaction to the chaos that occurred after the bankruptcy of Lehman Brothers in September 2008. The sponsors of the Act, and many others at the time, believed that it was the Lehman bankruptcy filing that caused the enormous panic known as the financial crisis. In a sense, then, the OLA is really the heart of Dodd-Frank because it was designed to avoid another financial crisis by preventing the disruptive and disorderly failure of large financial firms.[1] That feature also allowed the act's sponsors to claim that it had solved the problem of financial firms that were too big to fail (TBTF) because the government—in fear of allowing them to fail—would inevitably bail them out.[2] With the OLA, said the act's proponents, the government had a way to liquidate or resolve these firms without disrupting the financial system.

Later analysis, however, has shown that it was incorrect to believe that the bankruptcies of large nonbank financial firms, such as Lehman, were inherently disorderly. The chaos that followed Lehman's bankruptcy did not occur because bankruptcy is an inherently disorderly process, but because of the government's unexplained and illogical reversal of a policy that it seemed to have established with the rescue of Bear Stearns, a much smaller investment bank, six months earlier. That rescue created significant moral hazard, persuading the managers of large financial firms that they would be rescued by the government if they encountered financial difficulties and thus did not have to raise much additional equity capital in order to reassure their creditors. This left the whole financial market vulnerable to a shock when the government—faced with the impending failure of Lehman—inexplicably reversed its policy and allowed Lehman to fail. It was this reversal that caused the ensuing panic, not Lehman's bankruptcy itself.

Far more important, however, is the fact that, while the Lehman failure caused losses throughout the financial system, no other large financial institution failed as a result of Lehman's sudden and unexpected bankruptcy filing.[3] What this shows is that Lehman, despite its size and its involvement in such sensitive activities as credit default swaps, was not so interconnected with other large firms that its bankruptcy caused those other firms to fail. American International Group (AIG), Wachovia, and Washington Mutual (WaMu) all had to be rescued after Lehman, but not because of their exposure to Lehman. They were brought down by the same factor that brought down Lehman—exposure to subprime and other risky mortgages when a massive housing bubble was collapsing. To be sure, one money market firm broke the buck, but in the end its investors received 99 cents on the dollar.[4] That no other large financial firm failed because of Lehman demonstrates something important: even when the market is in a weakened and fragile condition, the failure of a large nonbank financial firm will not drag down others.

In other words, nonbank financial firms are not so "interconnected" that the failure of one will cause a systemic event—or, in the words of Dodd-Frank's Title I, create "instability in the US financial system." This is probably because these large firms are highly diversified and are simply not exposed to one another to any significant extent. The government should have no interest in the failure of a company if that failure will not cause a systemic event. Accordingly, the OLA, which would permit the replacement of the private bankruptcy system with a government-run resolution system for large nonbank financial institutions, is unnecessary.

THE ORDERLY LIQUIDATION AUTHORITY

The OLA contemplates that when a large financial firm is in "material distress" the secretary of the Department of the Treasury can decide, with the approval of the Financial Stability Oversight Council (FSOC), to turn it over to the Federal Deposit Insurance Corporation (FDIC) for resolution.[5] The FDIC then has roughly the same powers it has under the Federal Deposit Insurance (FDI) Act to liquidate the failing firm.

The very existence of the secretary's power to direct a different form of resolution for large financial firms than for others has serious consequences, even if it is never exercised. It means that creditors of these firms cannot be sure of the outcome when firms that are eligible for this treatment are in material distress. Will the firm go through bankruptcy, which is a known process with disclosed rules that are followed by courts, or will it go through the FDIC's process, in which the agency has wide discretion and could prefer some classes of creditors over others?

This in itself will raise the costs of financing for the firms that are potentially within this charmed circle, and will be especially harmful when a weakening firm actually needs new financial support from the market. In that case, creditors will be reluctant to provide that support because there is no way of knowing what law will be applied if the firm ultimately fails. So, many more firms are likely to fail because of the uncertainty created by the OLA than would otherwise be the case.

Thus, in order to avoid unnecessary uncertainty and risk to the financial markets, the bankruptcy system should be the only method for resolving nonbank financial firms. There have been a number of reforms to the bankruptcy laws proposed by experts in the field that would tailor these bankruptcy procedures more effectively for financial firms.[6] These reforms are beyond the scope of this chapter but should be analyzed for their applicability to the bankruptcy of a large nonbank financial firm.

In Title I of Dodd-Frank, the FSOC was given the authority to designate certain nonbank financial firms as systemically important financial institutions (SIFIs). Firms so designated are then turned over to the Federal Reserve for what is called "stringent" regulation. This idea is founded on the assumption that more regulation will reduce their chance of failure and hence the possibility that these large firms will create systemic disruption through their alleged "interconnections" with one another.[7] The lesson of Lehman, however, is that interconnections, which certainly exist to some degree, are not so substantial as to create a danger of a systemic collapse.

What will cause a systemic collapse, however, as demonstrated in the 2008 turmoil, is the deterioration in the value of a widely held asset class; in 2008, this class was residential mortgages. When home and mortgage values deteriorated, beginning in 2007, all financial firms that held mortgages were weakened, and some of them—like Bear Stearns, Lehman, Wachovia, and WaMu—to the point of failure. So it is not the interconnections between financial firms that are important, but the *common shock* to which *all* similarly situated financial firms are subject when an asset class as large and significant as residential mortgages suddenly deteriorates in value. Other commentators, such as Professor Hal S. Scott of Harvard Law School, refer to the same concept as "contagion," but the point is that many firms are adversely affected by an external event and not by exposure to one another as they would be if they were significantly "interconnected."

Thus, to prevent another financial crisis like 2008, it makes no sense to designate one or more large financial firms as SIFIs; the additional regulation that SIFI designation invokes will not prevent the consequences of a collapse in value of a widely held asset class. If there is any useful prophylactic role for government, it is to recognize that an asset class is so large and widely held that it should be brought to the attention of regulators and the public. In the case of the financial crisis, it was government policy itself that created the widely held asset class—subprime and other low quality mortgages—that brought about the crisis.[8]

Indeed, the danger of a 2008-like systemic collapse may be made worse by subjecting more firms to greater regulation. Regulation tends to reduce diversification because regulators push firms into the activities or assets the regulators approve, increasing their vulnerability to unexpected economic changes. Two recent examples of this phenomenon are the collapse of the savings and loan (S&L) industry in the late 1980s and the failure of a large number of banks in the 2008 financial crisis. S&Ls were restricted to investing in housing and were severely weakened by the high interest rates in the late 1970s, leading to their eventual collapse in the late 1980s; risk-based capital incentives herded banks into private mortgage-backed securities based on risky subprime loans in the 2000s. Accordingly, the designation of large nonbank financial firms as SIFIs is unnecessary, and possibly harmful, as is the special FDIC resolution process for these large firms in the OLA.

THE SINGLE-POINT-OF-ENTRY (SPOE) STRATEGY

While the OLA adopted an unnecessary and counterproductive rule for nonbank financial firms, it failed to address the serious problem that very large insured banks may in fact be too big to fail. Large nonbank firms, as shown by Lehman's case, are not so interconnected with the rest of the financial system that their failure will produce a systemic event, but this is not true of the largest banks. Firms of all sizes keep their payrolls and other short-term ready cash resources and working capital in banks, and banks are the central nodes of the US and international payments system. Trillions of dollars flow daily through this system, and if any one of the largest banks should suddenly fail the entire US and international economic system would likely grind to a halt, with many firms of all sizes unable to meet their obligations. Dodd-Frank specifically exempted the insured banking system from the OLA, leaving the resolution of banks to the FDIC.

This is problematic because the FDIC has in the past simply merged failing banks with healthy ones, something that is no longer possible when there is already great concern that the largest banks are TBTF. Where mergers were not possible, the FDIC has resolved small banks by taking control of them, paying off depositors, and selling off their assets. This strategy can work for small banks, but not for the giant banks that created the TBTF problem. The FDIC simply does not have the financial resources to resolve the largest banks in this way.

The FDIC apparently recognizes this deficiency and has tried to adapt the OLA so that it could be used to recapitalize failing banks. This introduces some legal uncertainties, because two sections of Title II—201(a)(8)(B) and 201(a)(9)(A)—specifically forbid its use for banks. In addition, it is apparent that the OLA, which after all is named the Orderly *Liquidation* Authority, was not intended to be used to recapitalize *any* subsidiary, whether a bank or a nonbank. It was intended simply to provide for the liquidation of large nonbank financial firms, if necessary, outside of bankruptcy.[9]

Nevertheless, in December 2013, the FDIC announced what it called its single-point-of-entry strategy, which had an interesting and imaginative twist. It attempted to use the new OLA powers the FDIC had received for nonbank financial firms to take over the bank holding company (BHC) that controls a failing *bank* and to use the BHC's assets to recapitalize the bank and keep it operating. This would be good policy because, as noted previously, the failure of a large bank could be very disruptive for the US and global economy.

Thus, in its December 2013 public release on the SPOE strategy, the FDIC stated:

> The SPOE strategy is intended to minimize market disruption by isolating the failure and associated losses in a SIFI to the top-tier holding company while maintaining operations at the subsidiary level. In this manner, the resolution would be confined to one legal entity, the holding company, and would not trigger the need for resolution or bankruptcy across the operating subsidiaries, multiple business lines, or various sovereign jurisdictions.[10]

The FDIC has never explained how it would shoehorn the recapitalization of failing banks into the language of a law that was intended to provide for the liquidation of nonbanks, but its SPOE proposal nevertheless received a lot of praise from lawyers, academics, and lawmakers as a way to overcome the problem of TBTF banks. However, as I will discuss, even if the provisions of the OLA that exclude its use for banks are ignored, the SPOE strategy cannot work for the largest banks—the very institutions that pose the greatest danger to the financial system.

On the surface, if one ignores the obvious purpose of the OLA's language (to *liquidate* a nonbank financial firm), it is possible to use some of the OLA's language to support the SPOE strategy. For example, Section 203 of Dodd-Frank authorizes the secretary of the Treasury, with the approval of two-thirds of the voting members of the Board of Governors of the Federal Reserve System and two-thirds of the board of the FDIC, to begin the "orderly liquidation" of a covered financial company if, in the secretary's judgment, "the financial company is in default or in danger of default" and the failure of the company and its resolution under any other federal or state law "would have serious adverse effects on the financial stability of the United States."

When this test has been met, the Treasury secretary is authorized to take control of the financial company and appoint the FDIC as receiver with powers and duties enumerated under Section 204 of the Act. The secretary's authority to invoke the OLA is available for any covered financial company (the term "covered" refers to a firm that the secretary has designated under Section 203) and is not limited to BHCs with $50 billion in assets or more, or to firms that have been designated as SIFIs, so Section 203 can be invoked for any financial firm that the secretary believes would have serious adverse effects on financial stability if it were to default. If a BHC is treated as the covered failing company referred to in Section 203, the secretary can take over the BHC and appoint the FDIC as receiver.

Once appointed as receiver, the FDIC has considerable authority. Using the SPOE strategy, it can create a bridge company (Section 210 (h)) and transfer to it all the assets of the former BHC, subject only to the rights of secured creditors. The bridge company then becomes the new BHC for the bank. Left behind in the old BHC are all the unsecured liabilities and the old BHC's shareholders. Because the new BHC has assets (including the failing bank) and many fewer liabilities, it is then in theory able to raise debt and equity financing with which it will recapitalize its subsidiary bank and keep it operating. The idea is that this will be done so quickly and smoothly that there will be no market disruption and certainly no financial instability as a result.

However, there are a large number of legal and practical problems with this approach:

Threshold legal issues. As mentioned already, the language of the OLA says that it is not intended to be used to resolve banks, and the purpose of the OLA is to *liquidate* failing BHCs and other nonbank financial firms—not to use them as a source of recapitalization for their subsidiaries. OLA Section 204(a), for example, states clearly: "It is the purpose of this title to provide the necessary authority to *liquidate* failing financial companies that pose a significant risk to the financial stability of the United States in a manner that mitigates such risk and minimizes moral hazard" (emphasis added). If the OLA is ever invoked, the FDIC will argue that recapitalizing a subsidiary bank is within the powers of the FDIC after it becomes the receiver of the old BHC, and it is simply using the assets of the liquidated old BHC for a legitimate purpose under the law. This argument would appear to go well beyond anything the Supreme Court has yet treated with deference, but it is always possible that a court will be swayed by the argument that Dodd-Frank was emergency legislation and should be interpreted broadly in light of its purpose.

Meeting the statutory requirements. In order to take over the old BHC, the OLA provides that the Treasury secretary must find that it is "in default or in danger of default." This turns out to be an insurmountable obstacle for exactly the BHCs and banks that the SPOE strategy must cover. Most US banks are subsidiaries of BHCs, and in most cases the banks are by far a BHC's largest subsidiary. Accordingly, for most of the BHCs in the United States, if the largest bank controlled by a BHC is in danger of default the BHC itself is highly likely also to be in default or in danger of default. In that case, the secretary can easily point to the condition of the bank and say that the BHC is in danger of default, allowing the secretary to appoint the FDIC as the BHC's receiver. The SPOE strategy would work in that case, assuming it can pass the other legal tests outlined previously.

However, for the largest BHCs and banks—those in the high hundred billion or even the trillion-dollar category—it is not likely to be true that the failure of the BHC's largest subsidiary bank will also put the BHC in default or in danger of default. These BHCs have other bank and nonbank subsidiaries that are large enough so that the BHC will remain solvent even if it suffers the total loss of the investment in its largest subsidiary bank. In that case, then, the secretary would not have the legal authority to take over the BHC and appoint the FDIC as receiver. Table 1 lists the assets of the fifteen largest BHCs in relation to their investment in their largest subsidiary bank. It shows that for fourteen of the fifteen, the total loss of this investment would not leave the BHC insolvent or even close to insolvency. And this is particularly true for the largest four BHCs.

This has enormous implications for the usefulness of Title II in preventing any financial crisis in the future. While the SPOE strategy may work for nonbank financial firms and for small BHCs, neither of those entities is likely to cause a financial crisis if it fails. But for the largest BHCs—the firms that control the largest banks in the United States—the SPOE strategy cannot work because these BHCs will not be in default or in danger of default if their largest subsidiary bank should fail. Some may argue that the failure of a subsidiary bank will cause a run on the parent BHC or some other liquidity event at the parent that allows the secretary of the Treasury to declare the parent BHC in default or danger of default, but this is simply speculation. There is no way to know what financial resources a parent BHC may have in addition to its largest subsidiary bank. But as table 1 shows, with respect to the largest four banks, simply removing the parent BHC's investment in its subsidiary bank from the parent's balance sheet still leaves a firm with at least $40 billion in equity. Unless there is some reason to suspect enormously large losses at the parent BHC as a result of the subsidiary's failure, this concern is unfounded.

In other words, in the one area where it is most important—protecting the taxpayers and the economy against the failure of the largest banks—Dodd-Frank has failed. Despite the claims of its sponsors, there is still no way for the taxpayers to be sure that if one of the largest banks fails the government will not feel compelled to step in and rescue it with taxpayer funds.

The "source of strength" doctrine. Some proponents of the SPOE strategy may argue that BHCs have an obligation under the Fed's source-of-strength doctrine to recapitalize a failing subsidiary bank, and in some cases the recapitalization required could cause the parent BHC to become insolvent. That, in turn, would give the Treasury secretary some support for taking the position that the BHC is in default or in danger of default. Indeed, Section 616 of Dodd-Frank states:

> The appropriate Federal banking agency for a bank holding company or savings and loan holding company shall require the bank holding company or savings and loan holding company to serve as a source of financial strength for any subsidiary of the bank holding company or savings and loan holding company that is a depository institution.

Some commentators have described this as a "codification" of the source-of-strength doctrine,[11] and it may well be a codification of the idea, but that does not tell us what the source-of-strength doctrine actually requires, and hence what Congress actually codified. The doctrine as originally articulated by the Federal Reserve is that BHCs have an obligation to serve as sources of managerial and financial strength to their bank subsidiaries. This is a fairly general requirement, and its full meaning is not clear. In the most important case in which the scope of

Table 1. Parent BHC Capital after the Loss of Its Equity Investment in Its Largest Bank

Rank by Consolidated Asset Size	Holding Company	Consolidated BHC Assets	Parent Assets	Parent Equity	Equity in Bank Subsidiaries	Total Equity in Subsidiary Banks and Holding Companies	Book Equity of Largest Subsidiary Bank	Parent Equity Less Equity of Largest Bank Subsidiary
1	JPMorgan Chase	$2,476,986,000	$474,646,000	$227,314,000	$179,630,000	$209,059,000	$173,854,000	$53,460,000
2	Bank of America	$2,152,533,000	$466,366,000	$237,411,000	$0	$269,335,000	$180,119,000	$57,292,000
3	Citi Group	$1,894,736,000	$407,893,000	$211,362,000	$0	$150,325,000	$148,373,000	$62,989,000
4	Wells Fargo	$1,546,707,000	$302,139,000	$180,859,000	$0	$161,535,000	$139,286,000	$41,573,000
5	Goldman Sachs Group Inc	$915,705,000	$280,651,000	$81,629,000	$20,685,000	$20,685,000	$20,426,000	$61,203,000
6	Morgan Stanley	$831,381,000	$256,801,902	$70,755,318	$0	$24,948,264	$10,809,000	$59,946,318
7	American International Group	$547,111,000	$143,344,000	$103,833,000	$0	$0	$0	$103,833,000

8	General Electric	$516,971,228	$570,279,066	$85,809,299	$0	$14,033,659	$6,076,598	$79,732,701
9	US Bancorp	$371,289,000	$56,302,362	$42,700,000	$39,470,686	$39,470,686	$40,948,948	$1,751,052
10	Bank of New York Mellon	$368,241,000	$63,275,000	$38,326,000	$26,061,000	$26,337,000	$20,587,000	$17,739,000
11	PNC Financial	$323,586,973	$47,352,194	$44,204,590	$550,000	$41,548,462	$39,051,066	$5,153,524
12	HSBC North American Holding	$308,847,926	$37,043,283	$31,344,044	$0	$27,851,471	$18,458,031	$12,886,013
13	Capital One Financial	$290,886,180	$56,264,022	$43,814,768	$42,913,895	$42,913,895	$34,128,786	$9,685,982
14	State Street Corporation	$256,672,720	$30,806,288	$21,699,811	$21,102,481	$21,102,481	$20,254,266	$1,445,545
15	TD Bank US Holding Company	$237,493,754	$34,425,136	$25,153,278	$30,256,097	$30,256,097	$28,672,839	($3,519,561)

Source: Bank holding company data based on March 2014 regulatory reports publically available from the Federal Reserve National Information Center. Data on equity of the holding companies' banks subsidiaries is from the March 2014 FDIC Statistics on Depository Institutions.

> the doctrine was tested, M Corp *v.* Board of Governors, 9 F.2d 852 (5th Cir. 1991), the court held that a BHC had no obligation to recapitalize a subsidiary bank, but the Supreme Court reversed the decision on other grounds and the issue was not litigated further. Thus, it is not at all clear what Congress actually codified.
>
> Those who contend that the doctrine and its codification would require a BHC to become insolvent in order to recapitalize a subsidiary bank would have a difficult time convincing a court of this proposition, in the face of long-standing principles of corporate law that place no obligations on shareholders to pay the creditors of a corporation they control, or the similar principles of corporate separateness and a BHC's obligations to its own shareholders. Accordingly, the source-of-strength doctrine is unlikely to provide a basis for the Treasury secretary to argue that a BHC's obligations under the doctrine or its codification in Dodd-Frank would place it in default or danger of default.

So it is highly likely that the only government resources that will be available to address the failure of a very large bank will be the FDIC's powers under the FDI Act. As noted earlier, however, those powers may have reached the end of their useful life for the largest and most systemically important banks because policymakers have come to realize that the merger of large banks has created such large financial institutions that many observers consider them TBTF. There is no clear solution to the TBTF problem at the moment—breaking up these banks could create more problems than it will solve—and allowing the FDIC to follow its usual practice of merging weak or failing banks with strong ones will only make the TBTF problem worse.

The only alternative to merger is what is known as "open bank assistance," in which the FDIC provides financing to a bank while looking for a buyer, but this frequently allows the uninsured depositors to run, increasing the bank's losses, and the FDIC itself does not have sufficient funds to sustain the continuing losses that will occur as a trillion-dollar bank spirals down. It is also possible for the FDIC to take control of a failing bank, close it down to stanch its losses, and sell it off in pieces but, as discussed previously, for the largest banks this would be highly disruptive to the financial system and possibly bring about the kind of financial crisis that Dodd-Frank sought to avoid.

THE PERSISTENCE OF THE TBTF PROBLEM

Thus, the OLA in Title II of Dodd-Frank has not cured the TBTF problem for the largest systemic banks. There is still no way at this point to ensure that if such a bank fails it will not cause instability in the US financial system, requiring the government to step in with taxpayer funds. If it is still the objective of Congress to address the TBTF problem, it will be necessary to open up the Act for amendment and replace Title II with a resolution system that is adequate for resolving the largest banks.

How would this resolution system be structured? The FDIC's SPOE strategy is based on one important insight—if an operating bank can be kept operating through recapitalization, there would be no danger of a financial crisis. The FDIC attempted to implement this strategy in a way that did not fit within the language of the OLA, but making sure that the largest banks are always adequately capitalized may be the key to solving the TBTF problem.

This strategy would require the largest banks to have considerably more capital than they hold today, and it would require an adjustment in the prompt corrective action rules[12] so that these banks would never fall below this high level of capitalization. Prompt corrective action, which was instituted in the Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991, has not been effective, probably because the capital positions of thousands of small banks could deteriorate too quickly for examiners to stop the risky practices that are causing the losses. In addition, the moral hazard implicit in insured deposits, and the FDIC's history of saving all depositors and creditors when banks are sold or merged, has eroded the usual effectiveness of market discipline. This has allowed banks that are losing money to "gamble for resurrection," suffering losses from risky loans that impair their capital positions before that information comes to the attention of their regulators.

But if large systemic banks were required to maintain, say, 16 or 20 percent capital, and prompt corrective actions were to take effect when their capital had declined to, say, 8 or 10 percent, taxpayers could have greater confidence that these banks are highly unlikely to fail. For the small number of banks to which these requirements would apply, it would be possible for regulators to keep accurate and current tabs on their capital positions.

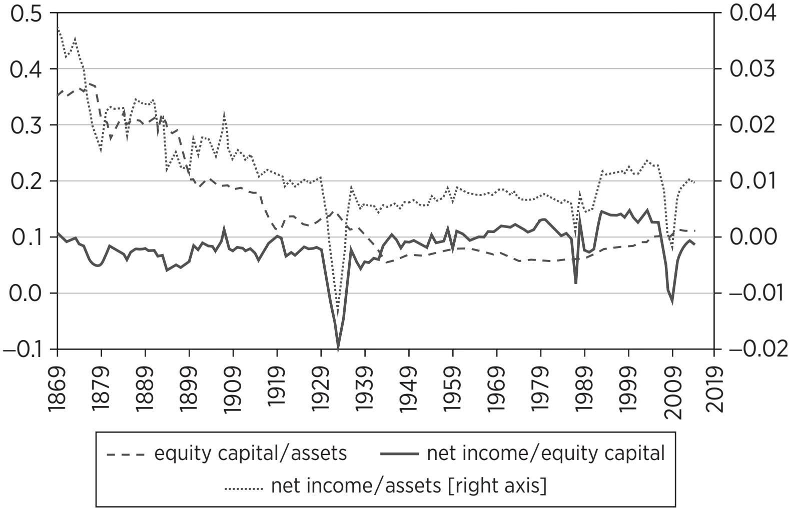
In other words, rather than rely on parent holding companies to serve as sources of strength for their bank subsidiaries, the capital positions of the largest banks should be strengthened directly with infusions of capital from their holding companies before they become weak or insolvent. The BHC would borrow the necessary sums. The funds invested in the equity of subsidiary banks would still appear as equity on the consolidated balance sheets of the BHCs. This would also provide a basis for eliminating the Fed's capital and other regulation of BHCs, which is another source of the widely held view—supplementing TBTF—that the Fed is willing to assist the BHCs it regulates in order to prevent them and their subsidiaries from failing.

But the strengthening of capital requirements for subsidiary banks should not be extended to nonbank firms such as insurance companies, broker-dealers, and finance companies, let alone mutual funds, hedge funds, and other members of the capital markets. As Lehman's failure showed, these firms will not cause a financial crisis if they fail, and subjecting them to government capital requirements will inevitably lead to government prudential regulation that will stifle the competitiveness in the capital markets.

Requiring higher capital will undoubtedly be unpopular with the banks that will have to adopt this burden, and they will argue that higher capital will mean more costly loans and will reduce economic growth. Others may argue that higher capital requirements will only encourage banks to take more risks in order to attain the same return on equity. In February 2013, Douglas J. Elliott, then of the Brookings Institution, published a paper that argued that the effect on bank lending would not be costless. He pointed out that although in the ideal conditions posited by Modigliani and Miller, the greater the amount of a bank's capital the lower its borrowing rates, there are many elements in the real world that might interfere with this conclusion, including tax effects, the presence of government guarantees, the cost of raising capital, market perceptions of a bank's safety, and transitional effects. All these items make the ultimate result uncertain. Elliott's conclusion is that while the costs are unknown, there will still be costs.[13]

The alternatives, however, are not many. If it is true that the collapse of a large bank would have major disruptive effects on the US economy, which certainly seems plausible, and if it is also true that—as outlined in this chapter—Dodd-Frank does not provide a realistic basis for resolving the largest banks, then what remains are some unattractive choices. Breaking up these large banks would also have enormous disruptive consequences, and no one really knows what size would solve the TBTF problem anyway, or what would happen if a ceiling were placed on the growth of banks after they were broken up. There could be many more bank failures.[14]

Figure 1. US Commercial Banks, 1869–2015



Source: Greenspan Associates LLC, using Federal Deposit Insurance Corporation and US Comptroller of the Currency data.

Alan Greenspan, for one, has long argued that raising bank capital is the answer, and his research has cut through a lot of debate about the issue by showing the consistency of bank returns on equity over an extended period during which capital requirements have declined precipitously. Figure 1 shows that despite aberrations during particularly disrupted times—and despite changes in capital requirements, taxes, regulatory policies, interest rates, the introduction of deposit insurance, altered perceptions of the government's role, and the rise of competition from the securities markets—bank managements have been able to adjust to all these challenges without substantial changes in banks' overall return on equity. This gives some hope that a gradual increase in capital requirements, allowing banks to adjust over time, will not cause an abrupt change in the financing costs.

CONCLUSION

If Congress is really interested in eliminating TBTF, there appears to be only one way to do it for the largest banks—ensure that their capital positions never erode to a point where they are in default or in danger of default. The simplest and most effective way to do this is to require a level of capitalization that can be watched continuously by regulators, with the regulators having authority to apply prompt corrective action when the banks' losses or potential losses reach a point where they have lost, say, half their required capital. This would not put a large bank in danger of default, but it would allow regulators and bank managements to take corrective steps that would eventually restore the bank to its required capitalization level. In this way, the taxpayers could be assured that they will never be called upon to rescue the largest banks.

NOTES

1. According to S. Rep. 111-176, 11th Cong. 2d Sess. (April 30, 2010), "[w]hen Lehman Brothers declared bankruptcy, the markets panicked and the crisis escalated. With no other means to resolve large, complex and interconnected financial firms, the government was left with few options other than to provide massive assistance to prop up failing companies in an effort to prevent the crisis from spiraling into a great depression. Despite initial efforts of the government, credit markets froze and the [US] problem spread across the globe. The crisis on Wall Street soon spilled over onto Main Street, touching the lives of most Americans and devastating many" (43–44).
2. Ibid., 4–6.
3. Scott, "Interconnectedness and Contagion," 2: "Evidence suggests the direct impact of Lehman's collapse on these counterparties was not as problematic or destabilizing as many feared it would be. In fact, no major financial institution failed as a result of its direct exposure to Lehman Brothers. Analyzing the potential impact of the AIG insolvency is also informative, as a similar conclusion follows: had AIG not been bailed out, direct losses imposed upon its counterparties would not have been a major problem either. The conclusion of each of these analyses is that given the relatively modest levels of losses involved, asset interconnectedness on its own was not a primary cause of the global financial crisis."
4. "Running from the Shadows."
5. See Federal Deposit Insurance Act §§ 203 and 204(b).
6. See, for example, Scott, Jackson, and Taylor, *Making Failure Feasible*.
7. Title I prescribes a number of elements that the FSOC should consider in designating a nonbank financial firm as a SIFI, including size, assets, liabilities, leverage, and interconnectedness, but none of these factors is important for determining the effect of a company's failure—that is, its likelihood to result in instability in the financial system—other than its interconnectedness with other firms.
8. See Wallison, *Hidden in Plain Sight*.
9. S. Rep. 111-176, 11th Cong. 2d Sess. at 4 (2010): "Once a failing financial company is placed under this authority, liquidation is the only option; the failing financial company may not be kept open or rehabilitated. The financial company's business operations and assets will be sold off or liquidated, the culpable management of the company will be discharged, shareholders will have their investments wiped out, and unsecured creditors and counterparties will bear losses."

10. 78 Fed. Reg. (December 18, 2013): 76623.
11. Lee, "Source-of-Strength Doctrine," 867, 868.
12. These rules were issued by the FDIC, under authority conferred by the Federal Deposit Insurance Corporation Improvement Act of 1991, and require that the FDIC impose increasingly strict limits on banks as their capital level declines.
13. Elliott, "Higher Bank Capital Requirements."
14. See, for example, Wallison, "Warren's Wall Street Reforms."

REFERENCES

Elliott, Douglas J. "Higher Bank Capital Requirements Would Come at a Price." Brookings Institution Paper, Washington, DC, February 20, 2013.

Lee, Paul L. "The Source-of-Strength Doctrine: Revered and Revisited—Part II." *Banking Law Journal* 129, no. 10 (November/December 2012): 867–68.

"Running from the Shadows." *The Economist*, November 24, 2012. http://www.economist.com/news/finance-and-economics/21567078-regulators-seek-shore-up-money-market-funds-against-runs-running.

Scott, Hal S. "Interconnectedness and Contagion." Committee on Capital Markets Regulation Paper, Cambridge, MA, November 20, 2012.

Scott, Kenneth E., Thomas H. Jackson, and John B. Taylor, eds. *Making Failure Feasible*: *How Bankruptcy Reform Can End "Too Big to Fail.* Stanford, CA: Hoover Institution Press, 2015.

Wallison, Peter J. *Hidden in Plain Sight: What Caused the World's Worst Financial Crisis and Why It Could Happen Again.* New York: Encounter Books, 2015.

———. "Warren's Wall Street Reforms Would Just Make Banks Riskier." *American Banker*, April 27, 2015. http://www.americanbanker.com/bankthink/warrens-wall-street-reforms-would-just-make-banks-riskier-1074013-1.html.

Wallison, Peter J., and Paul H. Kupiec. "Can the 'Single Point of Entry' Strategy Be Used to Recapitalize a Systemically Important Failing Bank?" *Journal of Financial Stability* 20 (October 2015): 184–97.