

# Can We End Too Big to Fail?

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4<sup>th</sup> Annual Simon New York City Conference

Reform at a Crossroads: Economic Transformation in the Year Ahead

New York, NY

May 9, 2013

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Charles I. Plosser

President and CEO  
Federal Reserve Bank of Philadelphia



FEDERAL RESERVE BANK  
OF PHILADELPHIA

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The views expressed today are my own and not necessarily those of the Federal Reserve System or the FOMC.

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### **Introduction**

It has been nearly three years since the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act, which called for significant reforms of financial system regulation and supervision. As regulators continue to write thousands of pages of rules to implement the various provisions of the act, it seems like a good time to ask if we are adequately addressing the issues in most urgent need of reform. Today, I want to focus on one of the most significant issues: too big to fail.

Ending too big to fail was one of the highest priorities of regulatory reform and one of the most difficult to achieve. The idea that a failing financial firm must be rescued to prevent risks to overall financial stability is at the heart of the most controversial aspects of the recent financial crisis. Of course, having the government intervene to rescue a private firm is largely anathema to the idea of a free market. Just as reaping the rewards of success is an essential incentive that makes a market economy so highly productive, bearing the costs of failure is equally important and necessary. A real or perceived guarantee that taxpayers would backstop losses distorts effective decision-making, encourages excessive risk-taking, and leads to financial fragility.

Today, I will highlight why I think current efforts may not be sufficient and discuss a two-pronged approach to ending the problem of too big to fail. The first aspect of this approach is establishing a framework that permits a large financial institution to, in fact, fail without placing

the financial system at risk. Large financial firms, and particularly their creditors, should not be rescued or protected by government guarantees or supports or by regulatory discretion. The second line of defense that I will discuss is to expect all financial firms to maintain sufficient levels of capital to significantly reduce the ex-ante risk of failure. Increased capital requirements can lower the incentive for financial institutions to become systemically important and lower the probability that such firms will fail in the first place.

But before I turn to specific proposals, I want to step back and reiterate some principles that help to guide my judgments about the right approach to regulatory reform. I should point out that these are my own views and are not necessarily those of the Federal Reserve System.

### **The Value of Simple, Robust Regulations**

In the context of monetary policy, I have long been an advocate of simple, robust rules and transparent communications.<sup>1</sup> Robust rules are important because they are intended to work well in a variety of environments, reflecting our limited knowledge about the true model that guides economic outcomes. Economists have also come to understand that using policies that are optimal in one specific model can deliver very poor outcomes if that model proves incorrect.

This cautionary tale applies to the design of regulatory frameworks as well. Although the financial world is very complex, there is merit in simple, transparent regulatory solutions designed to work reasonably well in a wide range of situations that are hard to predict. We want rules that regulators can enforce without having superhuman knowledge or foresight. However, regulators can predict with certainty that private actors will seek to evade regulatory taxes. They also know that enforcement costs rise with firms' incentives to evade regulatory taxes. In my view, simple mechanisms that are harder to evade – and even better, mechanisms that utilize market forces as an enforcement tool – are superior to an elaborate list of rules that

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<sup>1</sup> See, for example, Charles I. Plosser, "Transparency and Monetary Policy," University of California, Santa Barbara Economic Forecast Project, May 3, 2012, and Charles I. Plosser, "Output Gaps and Robust Policy Rules," 2010 European Banking & Financial Forum, Czech National Bank, March 23, 2010.

seeks to cover every possible outcome. Simple and transparent regulatory mechanisms make it easier for market participants to predict how regulators are likely to behave. This, in turn, makes it easier for regulators to credibly commit to implementing these regulations.

I would also note that as regulation becomes ever more complex, compliance and enforcement costs rise significantly. Andrew Haldane of the Bank of England has argued that regulation of the financial sector is exploding with the cost of compliance and supervision following suit. He argues that we could be more effective and more efficient by simplifying our approach to regulatory reform.<sup>2</sup> I whole-heartedly endorse this general approach.

### **The Problem of Too Big to Fail**

So let me elaborate on the problem of too big to fail. During the financial crisis, we learned that regulators did not have adequate tools for handling the failure of seriously troubled financial firms that were perceived to be systemically important. Our responses to the failures of such firms were inconsistent, to say the least. With Bear Stearns, regulators brokered a sale to JPMorgan Chase and provided guarantees to the buyer against losses. While Bear Stearns' shareholders were largely wiped out, its creditors were made whole. With Lehman Brothers, no sale was brokered, the firm entered bankruptcy, and bondholders suffered significant losses. At nearly the same time, regulators intervened to take over AIG, many of whose creditors and large derivatives counterparties were made whole.

There are many conflicting narratives about this sequence of events, but I think we can all agree that our tools for resolving what we now refer to as systemically important financial institutions – or SIFIs – were inadequate. Going forward, without a credible resolution mechanism, the creditors of SIFIs will continue to believe that there is a significant probability that they will be bailed out if their firms get into trouble. And the bigger or more central a role the firm plays in the financial markets, the higher the chances of a rescue. Consequently, the creditors of these institutions have little incentive to exert discipline on the SIFIs' risk-taking activities, which is, of

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<sup>2</sup> Andrew Haldane and Vasileios Madouros, "The Dog and the Frisbee," the Federal Reserve Bank of Kansas City's 36th Economic Policy Symposium, "The Changing Policy Landscape," Jackson Hole, Wyoming, August 31, 2012.

course, a traditional role for debt. Thus, an important source of market discipline on these firms is eliminated. Moreover, as long as regulators believe that creditors expect a bailout, they are likely to want to satisfy these creditors' expectations because not doing so could entail significant risk to the financial system. This is the essence of the too-big-to-fail dilemma. How do we break this cycle of expectations and get out of this trap?

### **Dodd-Frank's Solution to Too Big to Fail**

Dodd-Frank's solution to this problem was embodied in Title II of the legislation. In particular, Dodd-Frank created a new type of resolution mechanism, the Orderly Liquidation Authority. Title II expands the existing authority of the Federal Deposit Insurance Corporation (FDIC) to resolve failing banks to include SIFIs. While there are some merits to Title II, I believe that a more standard bankruptcy mechanism, specialized for financial institutions, would be more effective in addressing the too-big-to-fail problem.

Before a firm can be resolved under the Title II framework, a majority of the Board of Governors and another regulator (the FDIC, the Commodity Futures Trading Corporation, or the Office of the Comptroller of the Currency) must petition the Treasury, in consultation with the President of the U.S., to exercise the Title II authority. In order to invoke Title II, the institution must be in or close to default and its failure must present serious adverse effects on U.S. financial stability.

At this point, the FDIC may take the firm, or parts of the firm, into receivership. As the receiver, the FDIC has expansive discretionary powers, including the ability to use Treasury funds to make advances to particular creditors in a manner that may be inconsistent with the legal priorities specified in their debt contracts if it believes that this is necessary to prevent systemic problems.<sup>3</sup>

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<sup>3</sup> To be clear, these powers are not unlimited. Indeed, by law, the FDIC must claw back the money for any privileged creditors who receive more than they would have received in a straight liquidation if the resolution leads to losses for the Treasury.

While Title II improves our ability to wind down SIFIs, it affords substantial discretion to regulators, which I see as a serious drawback. Remember that Title II resolution is triggered only when there are concerns about systemic problems. On the one hand, by unleashing the FDIC's wide range of discretionary powers, the mechanism may lead to bailouts that are unnecessary or to rewarding certain creditors at the expense of others. Worse, these decisions might be made in an arbitrary manner that is inconsistent with the rules of priority. On the other hand, the complicated procedure for invoking the FDIC's Title II authority may lead to excessive delay. Just think about the highly politically charged issue of determining whether a firm is systemically important, especially if it has not been designated as such by the Financial Stability Oversight Committee – known as FSOC. The longer the delay, the harder it will be to ultimately resolve the firm without a bailout. In either case, Title II resolution is likely to be biased toward bailouts.

The discretionary aspect of Title II also makes it subject to other political pressures. Creditors will perceive that their payoffs will be determined through a regulatory resolution process in which political pressure can be brought to bear, independent of the rule of law.

Finally, the discretion entailed in Title II also makes decisions and subsequent outcomes less predictable. Thus, the mechanism could induce firms to game the system by taking actions that would place them in the category of firms that would receive a bailout.

### **Should We Supplement or Supplant Title II?**

A new bankruptcy mechanism, specialized for financial firms and applicable to all financial firms, whether systemically important or not, could alleviate most of the potential problems caused by the discretionary nature of Title II.<sup>4</sup> By being more systematic and rule-like, a bankruptcy resolution would largely eliminate the potential for bailouts. Rather than providing firms with incentives to take actions that might increase their systemic-risk potential, a

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<sup>4</sup> This partially addresses another dilemma for macroprudential regulation. Economists and regulators have yet to come up with a clear definition of what “systemically important” really means.

bankruptcy resolution mechanism would likely increase the firm's incentives to avoid actions that might result in bankruptcy.

One such bankruptcy mechanism proposed is to add a new Chapter 14.<sup>5</sup> Under this system, a specialized federal judge, who could call upon the expertise of a special master, would oversee the resolution process. While the FDIC, or another regulator, could trigger a bankruptcy filing and would be one of the participants in the procedure, ultimate decision-making would rest with the judge. Deviations from absolute priority would be cleared through a judicial authority, not through regulatory discretion that is negotiated behind closed doors. The opportunities for drawing on Treasury funds would be more limited and carefully circumscribed.

Chapter 14 would also modify the bankruptcy treatment of repurchase agreements and derivatives, which would be treated more like other claims. Counterparties with claims collateralized by illiquid securities would have to petition the bankruptcy judge to take their collateral when a firm goes bankrupt, unlike the treatment under current bankruptcy law or Title II. Furthermore, any extra collateral taken by counterparties within 90 days of the bankruptcy would have to be returned to the bankruptcy court, just as collateral is treated for other secured claimants.<sup>6</sup> Such changes have the potential to reduce the cost to the taxpayers of a financial firm bankruptcy by changing the incentives of financial institutions.

These changes would reduce the incentives for stressed firms to take on highly unstable liability structures as a means of forestalling bankruptcy. Counterparties would be wary about providing short-term wholesale funding, for example, or making derivatives trades with a stressed firm with illiquid securities as collateral. The sooner a troubled firm enters bankruptcy, the more likely that it can be reorganized or wound down without a bailout. This is a good

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<sup>5</sup> See Thomas H. Jackson, "Bankruptcy Code Chapter 14: A Proposal," February 2012 and Thomas H. Jackson and David A. Skeel, Jr., "Dynamic Resolution of Large Financial Institutions," Institute for Law and Economics, Research Paper, No. 13-03.

<sup>6</sup> Under current law, repos and derivatives are exempted from the automatic stay. While all other secured creditors (for example, secured bondholders) must wait until the bankruptcy court has made a judgment so that they may take their collateral, a dealer with a repo agreement can simply net all of its agreements and take any collateral the debtor has put up as margin. Furthermore, the court cannot demand that counterparties return additional collateral taken in the 90 days preceding bankruptcy under current law.

example of a regulatory mechanism that uses market discipline and the firm's own private incentives to reduce taxpayer losses.

### **Some Caveats**

Let me be clear. I believe that specialized bankruptcy resolution mechanisms like Chapter 14 should supplant Title II, not supplement it. The coexistence of two separate resolution mechanisms creates some difficulties. Most notably, once a firm has entered bankruptcy, regulators might nonetheless invoke Title II. This possibility will certainly complicate managers' and claimants' expectations and incentives. That said, if a bankruptcy resolution mechanism for financial firms were offered, I believe that both regulators and firms may prefer to avoid Title II in most circumstances. In particular, regulators could avoid raising the threat of systemic risk, which might follow a petition to the President of the U.S. So, while I believe that a resolution regime with Chapter 14 could fully supplant Title II, a regime with Chapter 14 supplementing Title II is a significant improvement over one with Title II alone.

Another important issue that I have not discussed is the problem of international coordination when a global firm fails. This is a complicated issue that arises whether resolution occurs through Title II or through a specialized bankruptcy alternative. While progress is being made, more work needs to be done.<sup>7</sup>

I should also recognize that Dodd-Frank requires bank holding companies with more than \$50 billion in assets and nonbank financial firms supervised by the Fed to prepare living wills. The living will is a detailed plan for the orderly resolution of the firm under the U.S. bankruptcy code in the event of serious distress or failure. The largest financial firms have already submitted the first round of living wills to the Fed. While requiring firms to plan ahead for their potential resolution should simplify the bankruptcy process and enhance the credibility of resolution without bailouts, I believe that we should be realistic about the limits of living wills. In particular, I have doubts that regulators can realistically expect firms to significantly reorganize

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<sup>7</sup> See the Federal Deposit Insurance Corporation and the Bank of England, "Resolving Globally Active, Systemically Important, Financial Institutions," December 10, 2012.



their internal structure to facilitate their own demise, certainly not in normal times. I do believe that preparing a living will may open some firms' eyes to needless complexity in their internal organization. Indeed, we have seen this in the first round of submissions. In addition, the living will should become a part of our prompt corrective program when firms are under stress, in effect mimicking the use of prepackaged bankruptcies for nonfinancial firms.

### **Bank Capital and Too Big to Fail**

Let me turn now to the second prong of eliminating too big to fail – preventive measures that reduce the probability that a financial firm will fail in the first place. The most effective preventive measure is adequate capital. Requiring financial firms to hold more capital can reduce the probability that Title II or Chapter 14 would have to be invoked. It cannot and should not eliminate all risk of failure, which is why higher capital should not be seen as a complete substitute for a having a well-articulated bankruptcy mechanism.

One accomplishment of Dodd-Frank is that it gives regulators the power to assign a capital surcharge for systemically important institutions. In the final analysis, the best protection against a bailout is for a bank to have sufficient capital to cover its own losses. In addition, higher levels of capital may permit regulatory or market interventions before a firm actually fails, thereby making bankruptcy or bailouts unnecessary. However, deciding on what level of capital is required is not trivial. Current Basel III proposals for a SIFI surcharge of 1 to 2.5 percent may simply be too low.

In addition to equity capital, requiring SIFIs to hold subordinated debt instruments, like contingent capital, can provide benefits. The fact that market participants have already been adopting contingent convertible bonds (COCOs) in various forms suggests that it might simply be easier to increase capital requirements by reverse convertible debt instruments rather than through large increases in equity capital. Reverse convertible debt automatically becomes an

equity claim when, for example, the firm's capital falls below some trigger. The idea is that the firm's equity capital automatically increases when it comes under sufficient stress.<sup>8</sup>

More important than the details of the numerator of the capital asset ratio is the denominator. The Basel II and III emphasis on risk-weighted capital as the primary measure of capital adequacy should be seriously reconsidered, with more emphasis on the simple leverage ratio — the ratio of capital to *unweighted* assets.<sup>9</sup> The primary arguments in favor of leverage ratios are straightforward. If we were looking for a regulatory tool that violated the basic principles I outlined at the beginning of this talk, i.e., that regulations should be simple and robust, you could hardly find a better example than the risk-weighted capital calculation. Haldane provides a rough estimate of the increasing complexity of the Basel risk weights using the number of pages of documentation for each successive Basel accord. The 30 pages of documentation in Basel I increased to 347 pages of documentation in Basel II and now to 616 pages in Basel III.<sup>10</sup> We have a wealth of examples in which risk weighting has permitted very risky activities by institutions with little or no capital.<sup>11</sup> In addition, there is evidence that even for relatively simple portfolios the measure of risk-weighted assets can vary significantly across banks.<sup>12</sup>

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<sup>8</sup> The Squam Lake Group has proposed another interesting form of capital, deferred compensation for managers. They suggest that perhaps 20 percent of managers' compensation be deferred for five years and that this compensation is forfeited if the firm fails (according to some well-defined notion of failure, perhaps the conversion of its reverse convertibles). Squam Lake Group, "Aligning Incentives at Systemically Important Financial Institutions," March 25, 2013.

<sup>9</sup> See Thomas M. Hoenig, "Basel III Capital: A Well-Intended Illusion," speech to the International Association of Deposit Insurers, April 9, 2013, and William Poole, "Banking Reform: A Free Market Perspective," speech to the 31<sup>st</sup> Annual Monetary and Trade Conference, Federal Reserve Bank of Philadelphia, April 17, 2013. Hoenig has argued that the simple leverage ratio be the primary measure of capital adequacy and that risk-weighted assets be used as a supplementary regulatory tool, precisely reversing the Basel ordering.

<sup>10</sup> See Haldane and Madouros (2012).

<sup>11</sup> See, for example, Acharya, Schnabl, and Suarez's account of the collapse of the asset-backed commercial paper market. Viral V. Acharya, Philipp Schnabl, and Gustavo Suarez, "Securitization Without Risk Transfer," *Journal of Financial Economics*, March 2013.

<sup>12</sup> Researchers at the Bank of International Settlements conducted an experiment to see how a relatively simple portfolio of long and short positions would be treated for calculating risk-weighted capital at 16 global banks. They found wide variations, even for these simple portfolios. Interestingly, although the banks' own models were a significant source of variation, the largest source of variation was different regulatory treatments by the banks'

The measurement issue and complexity of risk-weighted capital requirements suggest to me that we should move to a simpler, more transparent approach. Specifically, we could adopt a framework that relies on simple but higher leverage ratios and require them to increase with the size, interconnectedness, and complexity of the institution.

Some policymakers and commentators have argued that designing mechanisms to resolve financial organizations without bailouts is largely beside the point. If some financial organizations are simply too big to fail, why not break them up into smaller organizations or require that each of the organization's entities that is above some critical size, for example, \$50 billion, be separately capitalized at a relatively high level. On the face of it, these proposals meet the requirements of simplicity and transparency. In addition, I am sympathetic to the view that higher capital levels can protect taxpayers and that higher capital requirements would change organizations' incentives. Nonetheless, I have serious doubts about this particular approach.

For example, I don't think that regulators know enough to break these firms apart. I would rather see us pursue higher capital requirements. If that gives firms the incentive to reorganize, then let the firms and the marketplace determine the most efficient structure. This in combination with enforcing bankruptcy would be a better solution in my view.

### **Some Remaining Challenges**

Let me end with a few remaining challenges. We should be aware of the risk that activities may move outside the regulated banking sector in response to higher capital charges or that U.S. banks would become less competitive if capital requirements were higher here than in other countries. This is a real concern that is worth considerable thought.

But there are reasons that requiring more capital need not lead to an increase in the size of the shadow banking system. First, we should keep in mind that increasing capital requirements for

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home country regulators. "Regulatory Consistency Assessment Programme (RCAP) – Analysis of Risk-Weighted Assets for Market Risk," BIS (Jan 2013).

SIFIs permits banks to engage in arbitrage by shrinking and becoming less interconnected, precisely the intention of the increased capital charges. Also, current estimates of an increase in capital requirements do not suggest that that even significantly higher capital requirements would be prohibitively costly.<sup>13</sup>

Recent Fed proposals to require foreign banking organizations to organize their U.S. subsidiaries under a unified, separately capitalized bank holding company in the U.S. would remove the most obvious path to shift regulated activities if capital requirements for U.S. SIFIs were to increase. Greater international cooperation in raising capital requirements will limit opportunities for arbitrage.

## **Conclusion**

Can we end too big to fail? I think we can, but I believe the current efforts may come up short. If we are to end discretionary bailouts and the associated moral hazard problems that they create, we should seek more rule-like methods to resolve failing firms, such as a new Chapter 14 bankruptcy mechanism. But we also should accept the idea that more capital is an important buffer against financial distress. Importantly, we should seek to simplify capital regulation and reduce or eliminate the ever-increasing complexity of risk-weighted capital calculations. Finally, we should design regulations that encourage rather than discourage markets to monitor risk-taking. These steps will provide us with a better chance of ending too big to fail and promote a more stable financial system.

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<sup>13</sup> Hanson, Kashyap, and Stein estimate that a 10-percentage-point increase in a bank's tier-1-to-risk-weighted-capital ratio would raise its weighted average cost of capital by 25 to 45 basis points. Baker and Wurgler arrive at the somewhat higher range of 60-90 basis points. See Samuel Hanson, Anil Kashyap, and Jeremy Stein, "A Macroprudential Approach to Financial Regulation," *Journal of Economic Perspectives*, 25, 1, Winter 2011, and Malcolm Baker and Jeffrey Wurgler, "Would Stricter Capital Requirements Raise the Cost of Capital? Bank Capital Regulation and the Low Risk Anomaly," Working paper, New York University, March 15, 2013.