# Reducing Financial Fragility by Ending Too Big to Fail

### Eighth Annual Finance Conference Boston College Carroll School of Management

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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

When Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act three years ago, one of the highest priorities was to ensure that never again would U.S. taxpayers need to bail out any bank or financial institution deemed too big to fail. The first two sections of Dodd-Frank attempted to address the issue. Title I focused on expanded oversight and regulation of systemically important financial institutions – known as SIFIs – and Title II called for establishing an orderly resolution authority to resolve a failing systemically important firm without threatening financial stability.

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. Having the government intervene to rescue a private firm is largely anathema to the idea of a free market economy. Just as reaping the rewards of success is an essential element of a market economy, bearing the costs of failure is equally important and necessary. The noted economist Allan Meltzer has said, "Capitalism without failure is like religion without sin. It doesn't work." A real or perceived guarantee that taxpayers will backstop losses distorts effective decision-making, encourages excessive risk-taking, and leads to financial fragility. Indeed, we often fail

<sup>&</sup>lt;sup>1</sup> See Allan Meltzer, "Asian Problems and the IMF," Cato Journal, 17:3 (Winter 1998) pp. 267-74.

to recognize that government policies or safety nets distort incentives in the financial sector in ways that can aggravate rather than diminish financial fragility.

Today, I will discuss why I think current efforts to eliminate the problem of too big to fail may not be sufficient. I will also propose how a simpler approach to capital requirements and a more rule-like resolution process can offer more effective and less complex solutions to ending too big to fail and thus reduce financial fragility. The first line of defense is to expect that all financial firms will maintain sufficient levels of capital to absorb losses arising from negative shocks, thus significantly reducing the risk of failure. It is striking to think of the number of financial firms that failed or were rescued during the crisis that were thought to be "well capitalized." Obviously, they were not. The second requirement for ending too big to fail is to establish a rule-based framework that permits a large financial institution to, in fact, fail without placing the financial system at risk. Large financial firms and their creditors should not be shielded by government guarantees or by regulatory discretion. Making it clear that creditors will face significant losses in bankruptcy and will not be rescued forces creditors to more studiously assess counterparty risk. It also provides greater incentives for them to enforce more discipline on the borrower's risk-taking activities.

Before I turn to specific proposals, permit me to reiterate some principles that help guide my thinking 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 or my colleagues on the Federal Open Market Committee.

#### The Value of Simple, Robust Regulations

In the context of monetary policy, I have long advocated simple, robust rules and transparent communications.<sup>2</sup> Robust rules are important because they are intended to work well in a variety of environments. This reflects our limited knowledge about the true determinants of

<sup>&</sup>lt;sup>2</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.

economic outcomes. Economists have also come to understand that using policies that are optimal in one specific economic model can often deliver very poor outcomes if that model proves incorrect. So a policy rule that operates well under a wide range of models is a better and more robust approach.

The same approach applies to the design of regulatory frameworks as well. Because 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. We want rules that regulators can enforce without having superhuman knowledge or foresight. However, we can predict with virtual certainty that private actors will seek to evade regulatory restrictions and taxes. This is often called "regulatory arbitrage." We also know that enforcement costs rise as firms' incentives to evade regulations increase.

In my view, simple mechanisms that are harder to evade – and even better, mechanisms that utilize market forces to discipline firm behavior – are superior to an elaborate list of rules that 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 the regulations in a consistent manner.

Yet regulators continue to write thousands of pages of rules. In many cases, they are rules that proscribe activities for financial institutions. Unfortunately, such rules quickly become out of date as financial markets and products evolve. For example, regulations were not well equipped to deal with the myriad of structured products that developed during the decade leading up to the crisis. Do we really believe that another thousand pages of regulations will prevent the next crisis? Rather than trying to create regulatory rules that govern activities and place ever-increasing burdens on regulators to get it exactly right, we should be insisting on simple frameworks that increase market incentives to monitor and discipline the behavior of firms.

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>3</sup> I whole-heartedly endorse this general approach.

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

The most effective preventive measure to reduce the probability that a financial firm will fail in the first place is adequate capital. In addition, higher levels of capital may permit regulatory or market intervention before a firm actually fails, thereby making bankruptcy or bailouts unnecessary. The recognition of the importance of capital is acknowledged in Title I of Dodd-Frank, which gives regulators the power to assign a capital surcharge for systemically important financial institutions. However, deciding on what level of capital to require is not trivial. Current Basel III proposals call for a SIFI surcharge of 1 to 2.5 percent, which I fear may simply be too low.

In addition to equity capital, requiring SIFIs to hold subordinated debt instruments, such as contingent capital, may be a simpler and less costly approach to increase capital requirements. The fact that market participants have already been adopting the use of contingent convertible bonds (CoCos) in various forms suggests that it might be more efficient to draw on reverse convertible debt instruments rather than to impose drastic increases in equity capital. The appeal of reverse convertible debt is that it automatically becomes equity when, for example, the firm's capital falls below some trigger. These instruments allow a firm's equity capital to increase automatically when the firm comes under sufficient stress.<sup>4</sup>

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<sup>&</sup>lt;sup>3</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.

<sup>&</sup>lt;sup>4</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 enters distress (according to some well-defined notion of distress, perhaps

There have been a number of proposals for the design of CoCos.<sup>5</sup> My preference is to use a market-based trigger — for example, a trigger linked to the market value of the bank's equity — and to set the trigger high enough so that the bank's true economic capital remains positive when conversion is triggered. A market-based trigger will react to the most current information, unlike triggers based on book values or regulatory decisions. Even more important, since the trigger does not depend on regulatory discretion, it is more transparent and less likely to lead to regulatory forbearance.<sup>6</sup> Setting the trigger high enough so that the bank's net worth is still substantially positive reduces the likelihood of the need for bankruptcy or resolution.

Economists have identified a number of potential complications with the use of CoCos having market-based triggers. Some critics have voiced concerns about the possibility of destabilizing bear runs and short-selling stocks of troubled banks as these firms approach the triggers. While these concerns should be taken seriously, I do not believe they are compelling showstoppers. For example, using average stock prices over a length of time and putting some restrictions on short-selling by holders of CoCos should reduce concerns about excessive noise in stock prices. These approaches would also reduce the possibility of bear runs to force conversion.<sup>7</sup>

Because these instruments would be treated as a form of debt until conversion, they could serve the same function as higher capital and, accordingly, satisfy capital requirements but may

the conversion of its reverse convertibles). Squam Lake Group, "Aligning Incentives at Systemically Important Financial Institutions," March 25, 2013.

<sup>&</sup>lt;sup>5</sup> Charles Calomiris and Richard Herring, "How to Design a Contingent Convertible Debt Requirement That Helps Solve Our Too-Big-to-Fail Problem," *Journal of Applied Corporate Finance*, Spring 2013, 25(2):21-44 (publication forthcoming) includes a table summarizing the main elements of most proposals. See also Charles I. Plosser, remarks to the Philadelphia Fed Policy Forum: Policy Lessons from the Economic and Financial Crisis, Philadelphia, PA, December 4, 2009, and Charles I. Plosser, "Convertible Securities and Bankruptcy Reforms: Addressing Too Big to Fail and Reducing the Fragility of the Financial System," remarks to the Conference on the Squam Lake Report: Fixing the Financial System, New York, NY, June 16, 2010, for more on the value of these instruments.

<sup>&</sup>lt;sup>6</sup> CoCos with market-based triggers set at high levels provide a form of prompt corrective action using market forces, rather than relying on regulatory forces alone. Of course, I expect that regulators would take heed when a firm nears conversion.

<sup>&</sup>lt;sup>7</sup> Some economists have pointed out the risk that CoCos can lead to multiple equilibria, but as shown in Calomiris and Herring (2013), there are ways to address such an issue.

be less costly than equity capital or long-term subordinated debt. More important, this approach provides the firm with choices about how and when to raise capital, with market prices functioning as an important signal. This gives firms and markets a key role in keeping financial institutions healthy, thus reducing the burden on regulators to monitor and prescribe remedial action on a real-time basis.

#### **Place Greater Weight on Simple Leverage Ratios**

Perhaps more important than how to measure capital is how to measure assets. Basel II and III emphasize risk-weighted assets as the primary measure of the asset base and focus on the ratio of Tier 1 capital to risk-weighted assets as the core measure of capital adequacy. There is probably no better example of rule writing that violates the basic principles of simple, robust regulation than risk-weighted capital calculations. Haldane and Maldouros provide a rough estimate of the increasing complexity of the Basel rules by using the number of pages of documentation for each successive Basel accord. Basel I had 30 pages of documentation on risk-weighting. Basel II increased that to 347 pages. And now Basel III requires 616 pages to provide guidance on risk-weighted capital. We have a wealth of examples in which risk-weighted capital rules have permitted very risky activities by institutions with little or no capital. In addition, there is evidence that even for relatively simple portfolios the measure of risk-weighted assets can vary significantly across banks.

The problems with risk-weighted capital requirements suggest that we should move to a simpler, more transparent approach. I would prefer more emphasis on the simple leverage

<sup>&</sup>lt;sup>8</sup> See Haldane and Madouros (2012).

<sup>&</sup>lt;sup>9</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>&</sup>lt;sup>10</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' home country regulators. "Regulatory Consistency Assessment Programme (RCAP) — Analysis of Risk-Weighted Assets for Market Risk," BIS (Jan 2013).

ratio — the ratio of capital to *unweighted* assets.<sup>11</sup> Specifically, we should adopt a framework that relies on simple but higher leverage ratios. We should also require these simple ratios to increase with the size, interconnectedness, and complexity of the institution. This means that required leverage ratios rise with the size and complexity of the institution. Regulators would worry less about what activities or products a firm could engage in but would impose a "tax" in the form of more capital for becoming more systemically important.

We should be aware that higher capital requirements may drive activities outside the regulated banking sector or that U.S. banks would become less competitive if capital requirements were higher here than in other countries. However, we should keep in mind that increasing capital requirements for SIFIs permits banks to engage in arbitrage by shrinking and becoming less interconnected, precisely the intention of the increased capital charges. But that will be the decision of the firm and the marketplace based on economies of scale and other efficiency considerations, not on regulatory dictates. Also, current analyses suggest that even significantly higher capital requirements are unlikely to be prohibitively costly. <sup>12</sup>

#### A New Bankruptcy Mechanism

Requiring SIFIs to hold significantly more capital can reduce the probability of failure, but it cannot and should not eliminate all risk of failure. When a troubled bank cannot recapitalize itself in private markets, we need a credible mechanism to resolve the failing firm without a

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<sup>&</sup>lt;sup>11</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>&</sup>lt;sup>12</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 to 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.

bailout. I believe that the orderly resolution authority of Dodd-Frank's Title II is a step forward but falls short.

I do not want to go into detail here, but let me outline some of the main elements of Dodd-Frank's approach. The orderly liquidation authority can be invoked only when the Federal Reserve and another regulator petition the Treasury (and ultimately the President) to take the firm into receivership because it poses systemic concerns. Under Title II, the FDIC is given expansive discretionary powers. Notably, the FDIC can draw on Treasury funds to pay off creditors if the FDIC believes that this is necessary to prevent systemic risk problems. <sup>13</sup>

While Title II improves our ability to wind down SIFIs, it is ultimately biased toward bailouts. Remember that Title II resolution is available <u>only</u> when there are concerns about systemic risk. Just imagine the highly political issue of determining whether a firm is systemically important, especially if it has not been designated so by the Financial Stability Oversight Committee beforehand. The delay in making this determination will make the firm harder to resolve and likely lead to some sort of bailout.

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, which could be influenced through political pressure rather than subject to the rule of law. This generates uncertainty, lacks transparency, and will ultimately undermine the effectiveness of market discipline.

A new bankruptcy mechanism customized for financial firms and applicable to <u>all</u> financial firms, whether systemically important or not, could alleviate most of the potential problems caused by the discretionary and targeted nature of Title II.<sup>14</sup> By being more systematic and

<sup>&</sup>lt;sup>13</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.

<sup>&</sup>lt;sup>14</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.

rule-like, a bankruptcy resolution framework would largely eliminate the potential for bailouts, thereby increasing the firm's incentives to avoid actions that might result in bankruptcy.

One proposed bankruptcy mechanism is to add a new Chapter 14 to the Bankruptcy Code. <sup>15</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, ultimate decision-making would rest with the judge. Judicial authority, rather than regulatory discretion, would determine any deviations from absolute priority. The opportunities for drawing on Treasury funds would be more limited and carefully circumscribed.

Let me be clear. I prefer that a specialized bankruptcy resolution mechanism like Chapter 14 supplant Title II, not supplement it. The coexistence of two separate resolution mechanisms presents 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, bankruptcy could be employed without raising the threat of systemic risk, which is necessary to invoke Title II. 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.

#### Conclusion

Can we reduce financial fragility by ending too big to fail? I think we can, but I believe the current efforts may come up short. Importantly, we should seek to increase capital buffers for financial institutions and to simplify capital regulation by reducing or eliminating the ever-increasing complexity of risk-weighted capital calculations. Furthermore, if we are to end

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<sup>&</sup>lt;sup>15</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.

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. Finally, we should design regulations that encourage rather than discourage markets to monitor risk-taking and reduce our reliance on regulators' discretion and judgment. Rules and regulations are inevitably backward-looking, while markets are forward-looking and a better judge of the financial fragility of an institution in real time. These mechanisms will change the incentives of firms, market participants, and regulators in ways that provide us with a better chance of ending too big to fail and promote a more stable financial system.