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# Improving Resolution Options for Systemically Relevant Financial Institutions

Squam Lake Working Group on Financial Regulation  
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## Squam Lake Working Group on Financial Regulation

The Squam Lake Working Group on Financial Regulation is a nonpartisan, nonaffiliated group of fifteen academics who have come together to offer guidance on the reform of financial regulation.

The group first convened in fall 2008, amid the deepening capital markets crisis. Although informed by this crisis—its events and the ongoing policy responses—the group is intentionally focused on longer-term issues. It aspires to help guide reform of capital markets—their structure, function, and regulation. This guidance is based on the group’s collective academic, private sector, and public policy experience.

To achieve its goal, the Squam Lake Working Group is developing a set of principles and their implications that are aimed at different parts of the financial system: at individual firms, at financial firms collectively, and at the linkages that connect financial firms to the broader economy.

The members of the group are

Martin N. Baily  
*Brookings Institution*

Frederic S. Mishkin  
*Columbia University*

Andrew B. Bernard  
*Dartmouth College*

Raghuram G. Rajan  
*University of Chicago*

John Y. Campbell  
*Harvard University*

David S. Scharfstein\*  
*Harvard University*

John H. Cochrane  
*University of Chicago*

Robert J. Shiller  
*Yale University*

Douglas W. Diamond  
*University of Chicago*

Hyun Song Shin  
*Princeton University*

Darrell Duffie  
*Stanford University*

Matthew J. Slaughter  
*Dartmouth College*

Kenneth R. French  
*Dartmouth College*

Jeremy C. Stein  
*Harvard University*

Anil K Kashyap  
*University of Chicago*

René M. Stulz  
*Ohio State University*

\* David Scharfstein withdrew from the group when he accepted a position at the Treasury Department in September 2009.

## *INTRODUCTION*

There are critical holes in the existing regulatory framework for handling large complex financial institutions that become impaired. First, regulators may not have the legal authority to do what is necessary to resolve a distressed institution's problems, including selling some divisions, closing or liquidating others, renegotiating or abrogating some contracts, and finding parties to manage what is left. Second, even if regulators have the necessary authority over part of the institution, they may not have authority over the whole firm. Holding companies, for example, often have subsidiaries that are incorporated in multiple countries and therefore governed by different legal codes. Third, regulators are unlikely to be aware of all the interconnections within the institution, and between the institution's various subsidiaries and other firms. This uncertainty makes it difficult for regulators to know the best way to restructure a financial institution or, indeed, whether restructuring is even feasible without enormous disruption.

We endorse legislation that would give authorities the necessary powers to effect an orderly resolution. As part of this authority, every large complex financial institution should be required to create its own rapid resolution plans, which would be subject to periodic regulatory scrutiny. These "living wills" would help authorities anticipate and address the difficulties that might arise in a resolution. Required levels of capital should depend in part on what the living wills imply about the time required to close an institution. This will create an incentive for financial institutions to make their organizational and contractual structures simpler and easier to dismantle.

## *RESTRUCTURING RATHER THAN BAILING OUT A DISTRESSED INSTITUTION: PRINCIPLES*

Our recommendations are intended to allow regulators to deal with an impaired institution without necessarily having to provide additional assistance. Restructuring a distressed firm that is undercapitalized but solvent involves many complicated trade-offs and potential strategies. But once an institution is insolvent it is usually better to unwind it, salvaging the parts that have value and closing the rest, rather than prop the firm up with taxpayer funds.

Regulators typically face huge legal impediments, however, that prevent them from unwinding large complex and interconnected institutions. The connections between bank and nonbank subsidiaries of a single holding company, for example, make it difficult to identify all the bank's liabilities. The bank may depend on other subsidiaries of its holding company for critical services. If the holding company is declared bankrupt, the contracts governing the provision of these services may become invalid. The problems are magnified if the holding company has subsidiaries in different countries, with legal systems that differ in the way creditors are treated in the event of a failure and in the tools that can be used by authorities. As a result, the tried and tested resolution procedures that are used to wind down traditional deposit-taking banks cannot easily be adapted to resolve large and complex financial institutions.

Many authorities support changes that would allow governments to shut down a bank holding company or other financial entity that has multiple subsidiaries operating in different lines of business and possibly in different countries. Harmonizing resolution procedures across international jurisdictions will be challenging, however, and the problem is made even more difficult if the burden of losses will be shared by multiple governments. Paraphrasing Mervyn King, governor of the Bank of England, international banks are global in life, but national in death.

As we have explained in our previous proposals, the standard bankruptcy process does not work well for financial institutions because creditors and clients can flee at the first sign of trouble.<sup>1</sup> Non-financial companies rarely lose their main customers and suppliers as soon as rumors of trouble surface. But as seen in the current crisis, even hundred-year-old financial institutions are vulnerable to debilitating bank runs. As a result, the measured pace of normal bankruptcy procedures make them inappropriate for financial institutions.

The government should, instead, have a resolution procedure that would allow it to intervene quickly, to honor some contracts and invoke contingencies in others.<sup>2</sup> This would lead to improved contract design that addresses these possible outcomes at the time the contracts are written.<sup>3</sup> The process should be transparent, objective, and well understood by the private sector. It should allow regulators to liquidate an entity in an orderly fashion if that is necessary, or to rehabilitate part of an institution while winding down the rest. Like the bankruptcy rules that apply in most situations around the world, regulators would be required to make sure that no party whose contracts are adjusted would receive less than they would be entitled to if the institution were liquidated. Thus, the regulator's authority to adjust contracts would be like that of a bankruptcy judge, but under specialized rules and with much less delay.

The absence of this authority costs taxpayers in several ways. First, it forces the government to bail out some institutions that would be closed or restructured if regulators had the authority. Second, the fact that it is difficult for regulators to close large complex institutions creates incentives for banks to become large and complex. This, in turn, increases the frequency of bailouts and the cost when they do occur. Third, when negotiating with regulators about the size of a potential bailout, a distressed bank can hold out for more taxpayer support because the government cannot credibly threaten to restructure the bank involuntarily. All of these problems raise the exposure of taxpayers and make the financial system less stable. This leads to our first two recommendations:

**Recommendation 1.** *We endorse efforts to create a better resolution procedure for systemically relevant institutions. Moreover, because of the importance of this issue, regulators should be granted the authority to restructure financial institutions as soon as possible.*

**Recommendation 2.** *Negotiations to create a unified cross-country resolution process should begin immediately. These negotiations should not, however, delay the implementation of interim regulations in each country that are as effective as possible given existing cross-country differences.*

Standard qualifying financial contracts (notably swaps and repurchase agreements) fall outside normal bankruptcy procedures and are typically given priority over other claimants. This priority treatment contributes to the smooth functioning of the markets for these contracts, but it can also lead to substantial costs in bankruptcy. As we explain in the appendix, removing the priority treatment and replacing it with a discretionary system in bankruptcy could seriously impair the normal functioning of the swap and repo markets. This leads to our third recommendation:

**Recommendation 3.** *The treatment of qualifying financial contracts in resolution should be specified precisely and should not be left to the discretion of regulators. The priority treatment currently given to these contracts should be reevaluated to determine if it unnecessarily adds to systemic risk.*

## *PLANNING FOR THE DEMISE OF A MAJOR FINANCIAL INSTITUTION*

Creation of a new cross-country process for restructuring complex and possibly multinational financial institutions will take time. There is one valuable tool, however, that can be deployed now. Every major bank holding company should be required to regularly file a “living will” detailing how the bank should be legally resolved in the event of distress. Other systemically important institutions monitored by the systemic regulator should also file these plans.

If the living will is invoked, the authorities will be trying to decide whether to close the institution or provide support. This could involve selling some parts of the institution, shuttering others, and preserving the rest. Uncertainty about 1) how the institution is connected to other institutions and 2) how the creditors and counterparties of the organization will react to these changes is one of the biggest factors that lead to bailouts. A living will would reduce this uncertainty.

The plan should include several components. The central element should be an assessment by management of the number of days necessary to resolve the firm without using regulatory intervention. This assessment represents an estimate of the time the firm would be in various bankruptcy courts around the world, including delays for potential pitfalls. The plan should describe the steps that would be required to restructure the firm and highlight possible difficulties that could slow down the process. The description of how an unwinding could take place will help regulators in at least two ways. First, it will highlight solutions that do not require regulatory intervention. Currently these possibilities are based on considerable guesswork that makes panics more likely. Second, if regulators do step in, the plan will show them where they should focus their attention.

The estimates of the days required to resolve the firm, especially the initial estimates, will be rough. But the risk managers of major financial institutions should already have some idea about the main bottlenecks they face. Also, the plans should be revised and updated regularly in conjunction with ongoing discussions between the institutions and the systemic regulator. The regulator must have the right to fine an institution if its plan is not properly prepared and documented. Thus, over time the estimates should become more meaningful and comparable across firms. The plan should also include the following elements:

- detailed and full descriptions of the institution’s ownership structure, assets, liabilities, contractual obligations, and the legal code that governs each major contract
- descriptions of the cross-guarantees tied to different securities, a list of major counterparties, and a process for determining where the firm’s collateral is pledged<sup>4</sup>
- a few major distress scenarios, and the likely resolution processes under each scenario
- a list of potential parties that could take over the institution’s contractual obligations at low cost

The plans should be updated and reviewed by the systemic regulator at least once a quarter. Crucial parts of the plan (at a minimum, the number of days needed for resolution and the main impediments to or uncertainties associated with promptly dismantling the institution) should be summarized in public disclosures; this information would fit naturally in the risk management disclosures that are already standard items made available to the public. Most of the other information, however, should remain private, shared only with the regulators.

Over the medium term, the plans could be integrated with other parts of the regulatory architecture to deliver additional benefits. Longer periods for a standard resolution increase the cost of the resolution—both for the institution and for the economy—and increase the incentive for a govern-

ment bailout. Thus, capital requirements should be higher for banks that require more time to restructure and close.<sup>5</sup> This would give management a strong incentive to streamline its plans. We expect that the information about living wills in public disclosures would be valuable to equity analysts and external corporate governance advisers, allowing them to compare banks on the speed of their plans and on the main bottlenecks that would impede restructuring.

The first set of filings may uncover legal nightmares that would be impossible for regulators to anticipate. Many of the largest interventions during the current crisis have occurred with little warning, under very tight deadlines. Living wills would have allowed regulators to anticipate the steps needed in these interventions. Other market participants might have more confidence in the entire financial system if they understood that a carefully designed plan would be the starting point for handling failing institutions.

We do not, of course, want to suggest that the actual resolution of a troubled institution will proceed exactly as envisioned in its living will. Many new issues and unanticipated problems are sure to crop up. The process of bargaining with the firm's creditors, counterparties, and potential acquirers cannot be scripted. But by offering a well-documented starting point, as well as some alternative paths devised in calmer times, the living will can simplify the process.

Many of the Squam Lake Working Group's earlier proposals are aimed at making bank failures less likely and less costly to the taxpayer. Living wills would complement these proposals. We suggest, for example, that capital requirements should depend on the size of an institution, the liquidity of its assets, and the degree to which it is funded with short-term debt. Higher capital requirements for organizations whose living wills suggest that their dismantling will be difficult are based on the same logic.

Similarly, the goal of the regulatory hybrid securities we advocate is to shift the cost of recapitalizing a struggling institution from taxpayers to the institution's owners. We expect the securities to convert to equity well before regulators intervene to close an institution and begin implementing the living will. After a conversion, the regulators would have time to scrutinize the will and explore its details in the context of the current crisis. During this time, the additional capital created by the conversion would allow the institution to comply with capital standards without having to sell assets.

In short, easier resolution of an institution is a public good that benefits society but not necessarily bank owners. Thus, our fourth recommendation is as follows:

**Recommendation 4.** *All major bank holding companies and other large complex financial institutions designated by the systemic regulator should be required to file a living will every quarter. This set of detailed instructions should explain how the institution could be legally dismantled in the event of its failure.*

Each country's systemic regulator should scrutinize the plans for the institutions in its jurisdiction to find emerging risks. Living wills would provide an early warning about new systemic risks and give regulators an opportunity to understand important new products. By comparing institutions, the regulators could also push laggards to match the steps taken by the leading institutions.

We are leery of additional mandates that could prove costly for financial institutions. We think living wills, however, score well on the ratio of value of information generated relative to the cost of producing it. There will no doubt be start-up costs in organizing the reports, but once in place the marginal cost of continuing to update the plan should be low. In contrast, for all the reasons outlined above, the marginal benefits should remain large.

The Basel II framework already includes provisions regarding the monitoring of operational risk. A rapid resolution plan could, by regulatory decree, be required without the need for any legislation. Regulators of bank holding companies should immediately mandate that major bank holding companies prepare rapid resolution plans that contain all the elements described above. For systemic in-

stitutions that are not constituted as bank holding companies, legislation should be passed to permit regulators of these entities to require rapid resolution plans.

Two further steps could enhance the operation of the new procedures. We offer them as additional recommendations.

**Recommendation 5.** *Banks whose plans suggest longer periods for a “standard” resolution should be required to hold more capital or to have a larger fraction of liabilities—such as regulatory convertible debt—that can be converted to equity without invoking bankruptcy.*

**Recommendation 6.** *Systemic regulators should be required to review the resolution plans each quarter and compare plans across institutions to ensure that all institutions have acceptable plans. The regulator should have the authority to fine institutions whose plans are deficient.*

## APPENDIX: THE SPECIAL CHALLENGES OF QUALIFYING FINANCIAL CONTRACTS

The demise of an institution that has substantial amounts of certain types of financial contracts can create many technical problems beyond those identified in the body of this paper. These problems could cause spillovers that threaten the stability of the whole financial sector if a sufficiently large institution were to be declared bankrupt under existing laws. The proposed new forms of resolution authority do not, on their own, eliminate these problems.

Two important problems are associated with swap contracts and repurchase agreements. Many participants in the swap market argue that they would not use swaps if the contracts were at risk for uncertain settlement as part of a bankruptcy proceeding. As a result, the normal bankruptcy process does not apply to swaps. In particular, swap counterparties can net positions, access collateral quickly, and close out positions without being exposed to lengthy legal stays. When positions are closed, the amount owed is determined by the master agreement between the parties. Typically, non-defaulting swap counterparties have the right to the replacement cost of their positions. The special treatment of these contracts can provide incentives to structure derivative contracts as swaps.

The transaction costs associated with settling swap contracts at bankruptcy can be enormous. For instance, suppose entities A and B have a swap contract that, based on the current mid-market price (between the bid and ask prices), implies entity A owes entity B \$100. If B goes bankrupt, A does not settle its position with B by simply paying B \$100 in cash. Instead, A is entitled to set up the same derivative position with another counterparty and pay B what it receives for the new position. Firm A will typically establish the new position at the bid price, which is below the mid-market price of \$100. Thus, A will receive—and pay B—something less than \$100—perhaps \$99. In this scenario, 1 percent of the money owed to B would be lost.

Suppose B also has an offsetting swap with firm C. On this contract, B owes C \$100 on a mid-market basis. When B goes bankrupt, C will probably have to pay a bit more than \$100, say \$101, to reestablish its position with another counterparty. Thus, C would present B with a bill for its net replacement cost of \$101. In short, B's offsetting long and short contracts with A and C—which simply cancel each other if B survives—cost B the bid-ask spread when it goes bankrupt. More generally, B's total bankruptcy costs from its swap contracts is the total *gross* value of its positions multiplied by half their effective average bid-ask spread. Most large financial institutions have many offsetting positions that are fine-tuned to yield little net exposure to critical risks, but the gross value of the contracts is large. For example, the largest market participant, JPMorgan Chase, had about \$80 trillion (according to the latest reports from the Office of the Comptroller of the Currency) in total outstanding derivatives contracts; the total market size is estimated at roughly \$600 trillion. Thus, even ignoring the chaos associated with the rebalancing of huge portfolios, the failure of any of the large players in these markets would dissipate tens of billions of dollars merely in transactions costs. Moreover, as non-defaulting counterparties seek to replace their positions elsewhere in the market, they can destabilize price behavior, with potential knock-on effects. These problems can be mitigated with the use of central clearing.

A different problem arises with repurchase agreements when failure becomes a concern. Repurchase agreements are effectively collateralized loans, with most maturing on the next business day. Were default to occur, the lenders' claim on the pledged collateral is senior to the claims of all other creditors. Despite this priority, the potential cost of having the collateral trapped in a bankruptcy proceeding for even a short period is large relative to the interest due on a one-day loan. Moreover, despite the haircut taken when the collateral is established, there is some chance that the value of the collateral will drop below the value of the loan on the same day the borrower defaults. As a result, if a



firm's short-term creditors believe there is a nontrivial chance it will fail, most will not roll over their loans when they mature. Those that remain will insist on collateral whose market value is quite certain. Short-term U.S. Treasury securities may continue to be accepted, but more volatile securities will no longer be accepted. As seen in the case of Bear Stearns, the result is essentially a run on the borrower.

## Endnotes

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1. See Squam Lake Working Group on Financial Regulation, “An Expedited Resolution Mechanism for Distressed Financial Firms: Regulatory Hybrid Securities” (Council on Foreign Relations Press, April 2009).
  2. The resolution procedure should specify the types of contracts, which must include clauses that can be invoked in a resolution event. The idea is to provide the institution and its counterparties guidance about what can be expected and reduce the uncertainty that would otherwise exist if the regulators have totally unchecked discretion.
  3. For instance, the convertible hybrid securities we have proposed would need to specify what the owners receive if the securities have not been converted to equity before a firm is unwound. This contingency must be addressed before the securities are issued.
  4. A cross-guarantee is a covenant that links multiple contracts. Typically, a cross-guarantee states that if a party defaults on one contract, the terms of a second contract change. For example, the second contract may become immediately payable.
  5. Other factors that should determine capital requirements are discussed in Squam Lake Working Group on Financial Regulation, “Reforming Capital Requirements for Financial Institutions” (Council on Foreign Relations Press, April 2009).

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