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WORKING PAPER

# An Expedited Resolution Mechanism for Distressed Financial Firms: Regulatory Hybrid Securities

Squam Lake Working Group on Financial Regulation April 2009

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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.

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## An Expedited Resolution Mechanism for Distressed Financial Firms: Regulatory Hybrid Securities

#### INTRODUCTION

This short document develops a proposal aimed at sounder restructuring of distressed financial companies. We recommend support for a new regulatory hybrid security that will expedite the recapitalization of banks. This instrument resembles long-term debt in normal times, but converts to equity when the financial system and the issuing bank are both under financial stress. The goal is to avoid ad hoc measures such as those taken in the current crisis, which are costly to taxpayers and may turn out to be limited in effectiveness. The regulatory hybrid security we envision would be transparent, less costly to taxpayers, and more effective.

### WHY WE NEED EXPEDITED RESTRUCTURING MECHANISMS FOR DISTRESSED FINANCIAL FIRMS

As the ongoing financial crisis makes clear, banks play an important role in the economy. When banks are healthy, they channel savings into productive investments. When banks are unhealthy—whether undercapitalized or, even worse, insolvent—this role is compromised. Banks lend less, with adverse effects on investment, output, and employment. In response, governments often intervene to try to rehabilitate troubled banks during financial crises. There are several reasons why these institutions may inadequately recapitalize on their own.

First, after a bank has suffered substantial losses, managers who represent the interests of share-holders may be reluctant to issue new equity because of what economists call the debt overhang problem. If a troubled bank issues new equity, the bank's bondholders get some of the benefits because the new capital increases the likelihood they will be repaid. Existing shareholders, on the other hand, bear costs because their claims on the firm are diluted. Issuing new equity amounts to a transfer from existing shareholders to bondholders. Thus, shareholders may prefer that the bank satisfy its capital requirements by selling risky assets or reducing new lending (including loans and lines of credit). If other banks are also in trouble and are forced to cut lending, the economy suffers.

Additionally, banks that are troubled but still satisfy regulatory capital requirements may decide it is in their interests to hold out for a government bailout. If a bank believes the government will not allow it to fail—and that the terms of a bailout will not be too onerous—management may choose to play chicken with the regulators, waiting for a government intervention rather than finding a private solution.

Finally, banking is a business founded on confidence; bankruptcy reorganization or an out-of-court workout is often not a viable option if a problem bank is to remain a going concern. The complexity of bank liabilities, the importance of short-term financing, and the transactional nature of

many of their business relationships make it difficult for these institutions to survive a distressed restructuring. Even the threat of a restructuring may cause clients to flee and short-term creditors to withdraw their capital.

In this respect, banks and other leveraged financial firms are special. Most troubled nonfinancial firms can restructure—in or out of bankruptcy—by reducing or eliminating the claims of existing stockholders and converting debt into equity. As we saw with Lehman Brothers, however, distress for a financial firm usually leads to partial or complete liquidation (selling parts of the company to new owners) rather than a restructuring that would return the company to economic viability.

In short, because of the debt overhang problem and the possibility of a government bailout, banks prefer to reduce lending, sell assets if possible, or simply wait, rather than recapitalize themselves and maintain their lending capacity. And when financial firms do get into significant financial trouble, the standard restructuring process is typically ineffective and disruptive. If enough banks are affected and new banks or healthy banks cannot expand quickly enough, the resulting disruption of credit markets can lead to a significant economic slowdown.

Once a crisis hits, governments often try to prop up the financial sector through interventions, such as those we are currently witnessing. For example, the U.S. Treasury has made equity investments on terms that are typically attractive to banks, the FDIC has guaranteed debt issued by banks, and the Federal Reserve has effectively purchased "troubled" assets of several large financial institutions. These interventions are problematic. They are made at great cost to taxpayers. And they are ad hoc and thus difficult for capital-market participants to anticipate, which stifles recapitalization by those participants. The resulting uncertainty inhibits essential risk sharing, borrowing, and lending.

A more systematic and predictable approach would be better. For example, the FDIC's resolution mechanism avoids many of the costs associated with a standard bankruptcy. By quickly changing bondholders into stockholders and, when necessary, quickly transferring assets to healthy firms, the FDIC minimizes the economic disruption of a failed bank. Systemic financial risk is not restricted to banks. In the current crisis, for example, the government has made massive transfers to AIG because of concerns about the effect a failure of this insurance company would have on the economy. Thus, it may be necessary to extend this expedited mechanism to a larger set of financial firms, as recently recommended by Federal Reserve chairman Ben Bernanke.

Although FDIC regulators try to avoid disruptions when resolving a troubled bank, disruptions do inevitably occur and may impair the value of the bank's assets. It would be better if intervention were not necessary. Toward this end, we propose a complementary resolution mechanism: a new security that would allow a quick and minimally disruptive recapitalization of distressed banks.<sup>1</sup>

#### OUR PROPOSAL: A REGULATORY HYBRID SECURITY

When large financial firms become distressed, it is difficult to restructure them as ongoing institutions. As a result, governments hoping to sustain their critical financial system are willing to spend enormous resources during economic crises to prop up failing banks. Our proposal, a long-term debt instrument that converts to equity under specific conditions, is a better solution.<sup>2</sup> Banks would issue these bonds before a crisis and, if triggered, the automatic conversion of debt into equity would transform an undercapitalized or insolvent bank into a well capitalized bank at no cost to taxpayers. The costs would be borne by those who should bear them—the banks' investors.

Conversion would automatically recapitalize banks quickly with minimal disruptions to operations. Freed of an excessive debt burden, banks would be able to raise more private capital to fund operations. They would not need capital infusions from the government, and the government would not have to acquire the assets of troubled banks. Finally, the prospect of a conversion of long-term debt to equity is likely to make short-term creditors and other counterparties more confident about a bank's future.

If this hybrid security is a good idea, why don't banks already issue it? The answer is that traditional debt is more attractive to banks because they do not have to bear the full systemic costs of leverage. This conflict between private and social costs is particularly severe for banks that consider themselves too big to fail. The prospect of a government bailout lets them ignore part of the cost of the risky actions they take—such as issuing debt—while capturing all the benefits. Because our regulatory hybrid security shifts the cost of risky activities back where they belong, financial firms will be reluctant to issue it. To overcome this hurdle, government regulators must aggressively encourage the use of regulatory hybrid securities.

These regulatory hybrid securities will not prevent failure altogether, because banks also make other commitments such as accepting deposits and issuing short-term debt. After the new hybrid instrument converts to equity, if the value of a bank's other commitments exceeds the value of its assets, the bank may require additional complementary resolution mechanisms, such as an FDIC takeover.

A bank's hybrid securities should convert from debt to equity only if two conditions are met. The first requirement is a declaration by regulators that the financial system is suffering from a systemic crisis. The second is a violation by the bank of covenants in the hybrid-security contract.

This double trigger is important for two reasons. First, debt is valuable in a bank's capital structure because it provides an important disciplining force for management. The possibility that the hybrid security will conveniently morph from debt to equity whenever the bank suffers significant losses would undermine this productive discipline. If conversion is limited to only systemic crises, the hybrid security will provide the same benefit as debt in all but the most extreme periods.

Second, the bank-specific component of the trigger is also important. If conversion were triggered solely by the declaration of a systemic crisis, regulators would face enormous political pressure when deciding whether to make such a declaration. Replacing regulatory discretion with an objective criterion creates more problems because the aggregate data regulators might use for such a trigger are likely to be imprecise, subject to revisions, and measured with time lags. And, perhaps most important, if conversion depended on only a systemic trigger, even sound banks would be forced to convert in a crisis. This would dull the incentive for these banks to remain sound.

What sort of covenant would make sense for the bank-specific trigger? One possibility, which we find appealing, would be based on the measures used to determine a bank's capital adequacy, such as the ratio of Tier 1 capital to risk-adjusted assets.

In addition to the triggers, this new instrument will have to specify the rate at which the debt converts into equity. The conversion rate might depend, for example, on the market value of equity or on the market value of both equity and the hybrid security. Conversions based on market values, however, can create opportunities for manipulation. Bondholders might try to push the stock price down by shorting the stock, for example, so they would receive a larger slice of the equity in the conversion. Using the average stock price over a longer period, such as the past twenty days, to measure the value of equity makes this manipulation more difficult, but it opens the door for another manipulation. If

the stock price falls precipitously during a systemic crisis, management might intentionally violate the trigger and force conversion at a stale price that now looks good to the stockholders. Finally, in some circumstances, a conversion ratio that depends on the stock price can lead to a "death spiral," in which the dilution of the existing stockholders' claims that would occur in a conversion lowers the stock price, which leads to more dilution, which lowers the price even further.

An alternative approach is to convert each dollar of debt into a fixed quantity of equity shares, rather than a fixed value of equity. There are at least two advantages of such an approach. First, because the number of shares to be issued in a conversion is fixed, death spirals are not a problem. Second, although management might consider triggering conversion (for example, by acquiring a large number of risky assets) to avoid a required interest or principal payment on the debt, this would not be optimal unless the stock price were so low that the shares to be issued were worth less than the bond payment. Thus, management would want to intentionally induce conversion only when the bank is struggling. The advantages and disadvantages of different conversion schemes are complicated, however, and will require both further study and detailed input from the financial and regulatory community.

#### CONCLUSIONS

To improve the restructuring of distressed financial companies, we recommend regulatory support for a new hybrid security that will expedite the recapitalization of banks. Banks would issue this debt before a crisis and, if a prespecified covenant were violated during a systemic crisis, its automatic conversion into equity would transform an undercapitalized or insolvent bank into a well capitalized bank at no cost to taxpayers.

Our regulatory hybrid security would help avoid ad hoc measures such as those taken in the current crisis. It would be transparent, with a clearly contracted trigger mechanism. It would be less costly to taxpayers, by appropriately placing recapitalization costs on banks' investors. And it would be more effective than recent measures, to the benefit of the overall financial system.

#### **Endnotes**

1. Regulators impose capital requirements on financial institutions to reduce the likelihood these institutions will become distressed. In a related paper, "Reforming Capital Requirements for Financial Institutions" (Council on Foreign Relations Press, 2009), we argue that regulators should consider systemic effects when designing capital requirements.

<sup>2.</sup> This mechanism is closely related to one proposed by Mark J. Flannery, "No Pain, No Gain? Effecting Market Discipline via 'Reverse Convertible Debentures,'" in Hal S. Scott, ed., *Capital Adequacy beyond Basel: Banking, Securities, and Insurance* (Oxford: Oxford University Press, 2005).

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