

## Chapter 10\*

### Financial Institutions Subject to the Bankruptcy Code

#### Overview

Systemic risk can be broadly thought of as the failure of a significant part of the financial sector – one large institution or many smaller ones – leading to a reduction in credit availability that has the potential to adversely affect the real economy. Systemically important companies can generally be defined as financial intermediaries who are not only commercial banks taking deposits and making loans, but also include investment banks, money-market funds, mutual funds, insurance firms, and potentially even hedge funds, whose failure poses a systemic risk or “externality” to the financial system. This externality can come through multiple forms including an information contagious effect on other financial institutions, a depressing effect on asset prices and/or reduction in overall market liquidity.

With respect to counterparty risk, the failure of a highly interconnected firm can have a ripple effect throughout the system. For example, consider the over-the-counter derivatives market. The main reason for systemic risk in OTC markets is that bilaterally set collateral and margin requirements in OTC trading do not take account of the “counterparty risk externality” that each trade imposes on the rest of the system, allowing systemically important exposures to be built up without sufficient capital to mitigate associated risks. The prime example in the current crisis is AIG who built up \$450 billion of one-sided credit default swap exposure on the so-called AAA-tranches of securitized products. These positions were built up with little or no capital support. Because all the trades were in the same direction, once the trades lost value, it meant that AIG’s failure would be passed on throughout the financial system.

The second, and related, way systemic risk can enter the market is through spillover risk that arises as one institution’s trouble triggers liquidity spirals, leading to depressed asset prices and a hostile funding environment, pulling others down and thus leading to further price drops and funding illiquidity, and so on, causing a “death” spiral.

The third type of systemic risk is that financial institutions operating in the shadow banking system are subject to “bank-like” runs. The new model of banking relied heavily on the short-term, wholesale funding market. Examples that illustrate this point are (i) the volume of repo transactions going from \$2 trillion daily in 1997 to \$6 trillion a decade later in 2007, and (ii) money market funds accumulating over \$4 trillion in assets compared to the \$8 trillion of deposits in the banking sector. Since these funds are rolled over on a short-term basis, sudden withdrawal of these funds due to uncertainty about a financial institution’s health can ironically cause the institution to fail. When a particular institution fails in this manner, uncertainty about the health of similar institutions can lead to a wide-scale run. And therefore otherwise well-capitalized firms can face runs on their short-term liabilities, causing a systemic crisis.

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The above discussion highlights the problem of having a large, complex, financial institution (LCFI) fail and go into bankruptcy. The analysis therefore suggests that any regime setup by the government for the insolvency of LCFI must follow three basic principles:

- The counterparty risk of the LCFI must be contained. While the hope is that this risk is mitigated through ex ante prudential regulation, the question arises what happens if this regulation fails.
- There needs to be a procedure for dealing with a large amount of illiquid assets. As mentioned above, forced asset sales of financial institutions can have a catastrophic effect on the system.
- There must be well-defined rules for what happens to the liabilities of the financial firm when it fails, otherwise a run on most of the firm's liabilities will occur. A general reduction in uncertainty about the bankruptcy process, and greater transparency, will also contain the system-wide run.

## **The Crisis**

In fact, a reason frequently given for the bailout, rather than bankruptcy, of LCFIs during this crisis is that if these firms entered bankruptcy, the contest over their assets could paralyze them and the broader financial markets in the process. The collapse and bankruptcy of Lehman Brothers is cited as an example of such an event.

The idea would be to require such firms to have a wind-down plan in advance of financial crisis so that in the event of such crisis the firms could dispose of their assets in a quick, orderly fashion. In the process, those obligations that were still in the money despite the firm's insolvency could be fully honored, thus "cabining" the effect of the firms' failure to those obligations that could not be paid.

## **Current Proposals**

While the FDIC can close down a large commercial (depository) bank, that bank is often part of a bank holding company. The bank holding company may engage in inefficient internal transfers of capital to keep the bank from closure and play the waiting game. Typically, the bank holding company also issues a lot of debt and trades in systemically risky assets such as credit default swaps and other OTC derivatives. And, if closure of the bank leads to contagious runs on the non-bank subsidiaries of the bank holding company – such as broker dealers, insurance companies, etc. – then they may also end up in a disorderly bankruptcy and the entire financial institution may fail.

The House and Senate bills both try to address this issue. They create a mechanism to unwind failing systemically significant financial companies through receivership.\* The

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\* Their plan also argues for the financial institutions themselves to develop a plan for winding down their institution upon failure (H.R. 4173, Sec. 1104). Having the institutions write up the plan seems appropriate given the enormous legal complications involved with multinational, complex institutions. Presumably, with the plans in place, international coordination could then be initiated.

provisions in the bill allow for some open assistance though these “bailout” costs of unwinding the companies will come from a systemic fund paid for by systemically important financial firms.

The House bill describes several steps towards the dissolution of a LCFI.<sup>\*</sup> The first is that, upon the written recommendation of the Federal Reserve Board and the appropriate regulatory agency, if the Secretary of the Treasury determines the LCFI is close to default and its failure would have adverse effects on financial stability, the FDIC will be appointed as receiver for this company for the period of one year.<sup>†</sup> The second is that the FDIC would have the authority to take certain actions towards the company such as (i) making loans to or purchasing any debt obligations, (ii) purchasing any of its assets, (iii) guarantee its obligations to a third party, (iv) taking a lien on its assets, and (v) selling or transferring its assets, liabilities or obligations. The third is that the cost of these actions would be paid for by the pre-funded “systemic dissolution fund” and the proceeds of asset sales of the company. If these amounts are not enough, then an additional assessment would be charged to systemically important firms. The fourth is that the FDIC would “prescribe rules and regulations regarding the allowance or disallowance of claims by the Corporation and providing for administrative determination of claims and review of such determination”.<sup>‡</sup> According to the section of the bill, these rules might adopt the provisions of the Federal Deposit Insurance Act with respect to the “determination of claims for a covered financial company as if the covered financial company were an insured depository institution.” The rules in general cover procedures for determination of creditors and the authority to repudiate contracts albeit with certain exemptions for qualified financial contracts.

## **Evaluation of Current Proposals**

The bills are modeled on FDIC legislation and thus can borrow established convention and precedent from that law. The positive aspect of the bill is that it gives legal authority to deal with systemically important financial institutions that are not just depository institutions. These institutions can avoid Chapter 7-like liquidations, which create havoc on the financial system.

Nevertheless, if the goal of the legislation is to reduce the uncertainty surrounding bankruptcy of a LCFI, the proposed law has all sorts of imprecision, such as how fraudulent conveyance is treated. Moreover, if the government’s investment is at stake, the legislation applies a 20% haircut<sup>§</sup> to “secured claims” as well as those subject to the stay; but note that the proposal also provides that qualified financial contracts, including securities, commodities, futures, forward, repurchase, and swap agreements are exempted from the stay, and the rights of holders of those contracts, including the rights to under “any security agreement”, are not to be limited.

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<sup>\*</sup> H.R. 4173, Sec. 1603 and 1604.

<sup>†</sup> The Senate bill reads very similarly. The main difference is that the recommendation comes from the newly created Agency for Financial Stability as opposed to the Federal Reserve Board.

<sup>‡</sup> H.R. 4173, Sec. 1609.

<sup>§</sup> H.R. 4173, Sec. 1609, page 306.

In addition, it is not clear how the receivership addresses the three principles mentioned above to deal with systemic risk.

### *Counterparty Risk*

One of the most serious problems associated with the receivership of a LCFI is how to handle the counterparty risk that results from the LCFI's failure. The regulator can guarantee all counterparty risk but that creates moral hazard. This aside, it still means that millions of OTC derivative transactions would need to be managed in a receivership. Fears of unwinding positions and fire sales in the OTC market can lead to the market freezing and counterparty risks popping up elsewhere in the system. This is what happened in the current crisis when Lehman Brothers and AIG failed.

One solution is to look to the origins of the OTC derivative market and look to how financial institutions (before the deregulation of the late 1990s) dealt with the bankruptcy issue. In the early 1990s, dealers created separate facilities to be market makers in OTC derivatives. In the event of bankruptcy of the parent company, all OTC contracts of the facility were closed out at the midpoint between the bid and ask price. Thus, there was no issue with respect to the bankruptcy infecting the rest of the OTC market. With respect to capitalization, the facility was required to hold enough capital to be able to cover the liquidation at the midpoint, thus, creating the incentive for the facility to not have net exposures.

Building on these ideas, the resolution process could have the stipulation that all OTC derivative contracts of the LCFI get closed out at the midpoint. The contracts would be ring-fenced and the dollar amounts netted against each other, so that only the net proceeds became a liability of the failed LCFI (if in fact they faced losses). The counterparties would then become general creditors of the firm on a pro rata basis. As an incentive to reduce systemic risk, all derivative dealers (and other financial institutions who are large OTC players) would be required to hold enough capital to cover any losses at the midpoint, the exact same provision the aforementioned facilities faced as independent subsidiaries.\*

### *Asset Sales*

How would the financial institution be organized in a receivership so that the regulator can balance the systemic risk of fire sales of assets of the financial firm against a quick resolution of the firm to maintain its enterprise value and a well-functioning financial market? One idea is to take the healthy assets and most of the bank's valuable ongoing operations and place them in a "good bank". Deposits would also follow. Some of these deposits may be insured, others (e.g., businesses and foreign holdings) are not. But the likelihood is that the good bank is now so well capitalized that there would be no threat of a bank run. The net equity, i.e., assets minus deposits, would be a claim held by the other existing creditors of the bank, namely shareholders, preferred shareholders, short-term creditors and long-term creditors according to their original priority. The goal would be to re-privatize the good bank as soon as possible. After all, the point of the

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\* Upon bankruptcy, however, this excess capital would go into the general pool of assets and not be secured against any net losses from OTC derivatives.

exercise is to create healthy financial institutions which can start lending again to creditworthy institutions.

The tricky part of a receivership is the handling of the bad assets. The bad assets would be divided into two types – those that need to be “managed” such as defaulted loans in which the bank would own the underlying asset, and those that are of the “hold to maturity” type such as AAA-rated securities and subordinated tranches of asset-backed securities. With respect to the former, the government could hire either outside investors, much like the Fed has done by hiring BlackRock to manage some of the Bear Stearns and AIG portfolios it has back-stopped, or create partnerships with outside investors as was done with the Resolution Trust Corporation in the S&L crisis. Along with the equity of the good bank, these bad assets would be owned by the existing creditors. The proceeds over time would accrue to the various creditors according to the priority of the claims. Most likely, the existing equity and preferred shares would be wiped out in such an arrangement and at least some of the debt would effectively have been swapped into equity in the new structure.

There is an additional way to dispose of the bad assets of a failing LCFI. Some argue that the government is not best suited to manage bad assets of a failing institutions and that this is the job and expertise of true private sector bankers. When privatizing the assets and liabilities of a failed LCFI, the government could include both the bad and the good assets into that transaction and provide – via properly priced government guarantees of the bad assets after a first loss for the creditors – an incentive to the private investors purchasing the privatized bank to take over both the good and the bad assets. This is the approach that was used by the government in the privatization of IndyMac after its takeover by the FDIC.

### *Managing the Systemic Risk of Runs*

The Congressional bills do not address the systemic risk associated with runs. This market failure arises because, not dissimilar to the 1930s, regulated institutions as well as their unregulated siblings have fragile capital structures in that they hold assets with long-term duration or low liquidity but their liabilities are highly short-term in nature. Going back to the Panic of 1907 and the Banking Crises of 1930, 1931 and 1932, those crises involved massive system-wide runs on banks. Arguably, the current crisis also went pandemic when there was a run on the investment banks and money market funds after Lehman Brothers failed. Like these past runs, the runs on investment banks and money market funds occurred because there was uncertainty and lack of information about the health of these institutions, and their funding source was short-term and mobile (i.e., repo and securities lending transactions for investment banks, fund flows for money market funds).

The question is whether the legislation reduces the likelihood of runs via the proposed orderly dissolution of the financial firm? Most likely not. One possibility would be to make the too-big-to-fail guarantees of short-term funding explicit and, through a system of insurance premiums, reserve requirements and limits on activities, attempt to manage the resulting moral hazard problem.

The second is to create, as part of the insolvency regime, a mechanism by which the systemwide run is reduced without guaranteeing the liabilities. Consider the repo market. The basic idea is that, in a financial crisis, the resolution authority has the right to place a stay on repo transactions, thus, preventing a massive withdrawal of funding for relatively illiquid positions. Of course, lenders use the repo market precisely because it is collateralized and short-term. Thus, to maintain some degree of liquidity during this period, the Federal Reserve would open up its lender of last resort facility (LOLR) albeit at a sharp haircut and for a fee. This would give time for the underlying collateral of the repo to be sold albeit potentially at a loss. The stay and LOLR, however, would provide a temporary lifeline to a solvent firm to survive an “undeserved” run. Of course, it is important to note that if the firm were deemed to be insolvent, then the Fed would not be a LOLR, and the firm would go into receivership. The goal is not to save failing firms but rather make sure the systemic risk does not spread.

A significant problem remains. The government receivership model outlined in the bill will not accomplish its purpose if the assessment tax for being systemic is too low.<sup>\*</sup> Moreover, even with the appropriate charges, the financial firm has an incentive to bait-and-switch, which is the standard hidden action problem associated with moral hazard. Specifically, as written, the bills allow for a government backed corporation, funded in part by risk-based assessments of too-big-to-fail financial institutions, to take a failing institution into receivership and at its discretion pay or guarantee obligations as it deems necessary to stabilize the financial markets. Consequently, financial instruments held in these too-large-to-fail institutions have government insurance that the same instruments held by smaller institutions do not. This should funnel capital into the largest institutions, and unless they are sufficiently regulated prior to failure exacerbates moral hazard. So this, combined with the apparent exemption from the stay for qualified financial contracts (mentioned above), seems to be a continuation (albeit at a lower level) of the government subsidy.

### *A Living Will*

To deal with this problem, the regulator needs to create a credible plan that both avoids the costs of liquidation in bankruptcy but allows for creditors to pay for the risks they incurred. This is important as it will bring back market discipline to the financial sector and remove the implicit government guarantee for the LCFI.

The concept of a corporate living will is well-established in the academic bankruptcy literature.<sup>†</sup> The proposal is, in essence, to divide a firm’s capital structure into a hierarchy of priority tranches. In the event of an uncured default (after ample opportunity for cure) on a firm’s debt obligation, the equity of the firm would be eliminated and the lowest priority debt tranche would be converted to equity. If elimination of the lowest priority debt tranche created enough liquidity to pay the firm’s remaining debt obligations than there would be no need for further

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<sup>\*</sup> See Chapter 6, “Taxing Too-Big-to-Fail Institutions”.

<sup>†</sup> See Barry E. Adler, *Financial and Political Theories of American Corporate Bankruptcy*, 45 Stanford Law Review 311 (1993). See also, Robert C. Merton, *The Financial System and Economic Performance*, 4 J. Fin. Services Res. 263 (1990) (also proposing a debt-to-equity conversion, but through the liquidation of a holding company rather than through a transformation of obligations within a firm).

restructuring. If obligations to the higher debt tranches remained in default (after opportunity for cure) the process would repeat until either all defaults were cured or the highest priority tranche was converted to equity. Only at the point where a firm defaulted on its most senior obligations, after the elimination of all junior debt, would holders of those senior obligations have reason to foreclose on collateral, as elimination of the junior debt classes would, until that point, provide liquidity that could stabilize the firm and perhaps stem any run on the firm's assets.

Significantly, in no case would there be a need for a judicial valuation or determination of which obligations were or were not entitled to satisfaction. The prospect of default-driven transformations of the tranches from debt to equity would provide firms eternal solvency -- or at least solvency until a class of secured claims is impaired -- and without the need for bankruptcy restructuring beyond simple adherence to the prescribed capital structure or, to use the terminology of the current debate, without need for bankruptcy beyond simple adherence to the firm's living will.

There are potential drawbacks to the living will concept. For the proposal to be effective, the transformation, or winding down, of the firm must be triggered by an easily verifiable signal such as default on obligations rather than a difficult one such as inherent asset value. The key to the proposal, after all, is to provide swift rescue and payment of those obligations still in the money despite the firm's inability to make good on all its obligations. Such a transformation, or winding down, runs the risk that a firm in financial crisis will eliminate an interest that might have later proven to be valuable in a traditional bankruptcy reorganization, where time and the debtor's continued search for liquidity might resolve the crisis. But there are costs, too, to a traditional reorganization, including uncertainty and the potential paralysis of the financial markets that has led to the recent proposal that regulated financial institutions have living wills. Moreover, the market has recently shown an appetite for the idea, or something like it; Lloyd's TSB, for example, issued reverse-convertible debt, which would be transformed into equity in the event the firm failed to maintain a specified capital requirement. The idea behind contingent capital is discussed in Chapter 9.

A note of caution is in order here. If the living-will concept is to be effective, current legal impediments must be removed. For example, the bankruptcy law should be amended so that a bankruptcy judge would lack the authority to stay a transformation or winding down of the firm in accordance with the firm's preordained plan. Also, unless the requirement of a living will is intended as an implicit tax increase, the law should clarify that a potential transformation of interest-bearing debt to equity under a living will would not render the debt "equity" for the purposes of interest-payment deductions.