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SPEED BANKRUPTCY: A Firewall to Future Crises

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Introduction

In the wake of the 2008 financial crisis, the federal government argued that the best way to save the nation's largest financial institutions was to use taxpayer funds to buy shares in these firms. In the words of former Treasury Secretary Henry Paulson, the most "effective step to improve credit market conditions..." was "to strengthen bank balance sheets quickly through direct purchases of equity in banks."¹

Paulson rejected a more effective solution that could have been easily written into law during the two weeks that it took to write the Troubled Asset Relief Program, or TARP, legislation: mass conversion of bank debt into bank equity. I denote this alternative "speed bankruptcy," but it has several designations, including "debt-to-equity conversions," "rapid recapitalizations," and the recently popular "prepack bankruptcy." Nobel Laureate and former Clinton Administration economist Joseph Stiglitz calls the same process "Super Chapter 11." Though he first recommended speed bankruptcy in response to the 1997 Asian Financial Crisis, Stiglitz recently renewed this call as a way to improve the health of the US banking sector. In *The Nation*, he said:²

*"Bankruptcy scares many people, but it shouldn't. All that happens is that the financial claims on the firm get restructured. When the firm is in very bad trouble, the shareholders get wiped out, and the bondholders become the new shareholders. When things are less serious, some of the debt is converted into equity. In any case, without the burden of monthly debt payments, the firm can return to profitability."*³

As I will show below, making this kind of "speed bankruptcy" work would only require minor changes to current bankruptcy law and only modest changes to investor expectations. Former IMF chief economist Simon Johnson sums up the benefits of speed bankruptcy nicely:

*"[I]f the banks are undercapitalized, and private money is not available, then the government could force creditors to swap claims into equity, thus instantly recapitalizing the banks while avoiding use of taxpayer funds."*⁴

The nation's biggest banks had over \$1 trillion dollars in long-term bonds on their balance sheets, bonds that would have been likely targets for debt-to-equity conversions under a speed bankruptcy regime.⁵ This means that without touching the first dollar of

bank deposits and without spending any taxpayer money it would have been possible to save most, and perhaps even all of the major banks in the fall of 2008. Instead, the United States implicitly turned the pre-existing debt of major banks into federally guaranteed debt, much like they did with the debt of Fannie Mae and Freddie Mac. This misallocation of resources has obvious moral hazard implications.

Since political and policy pressures may demand that policy makers use some combination of speed bankruptcy, Chapter 11 and government bailouts on a case-by-case basis, speed bankruptcy need not be the only tool used to save insolvent banks. My goal is simply to show that, at the very least, overnight debt-to-equity conversions could have been used to provide hundreds of billions of dollars of extra equity to weak firms in 2008, and could still be used the next time a firm that is ostensibly “too big to fail” comes close to going bust. Taxpayers may ultimately be required to pay for some of the mistakes of financial firms, but bondholders could be required to sacrifice as well.

The goal of this essay is fourfold. First, I provide a non-technical argument from economic theory that illustrates the merits of debt-to-equity conversions over taxpayer bailouts. Second, I address concerns about whether this kind of conversion would violate the rule of law and the expectations of investors. Third, I suggest that real-world politicians, driven by the same decision anomalies documented by behavioral economists, could be convinced to support speed bankruptcy. Fourth, I show that debt-to-equity conversions are unlikely to set off contagion or create other negative side effects. By doing so I intend to show that speed bankruptcy is a politically feasible as well as economically and legally desirable alternative to bailouts.

Balance Sheets in Theory: Leverage, Trust, and Productivity

It is a truism that firms need healthy balance sheets to succeed, but why? If an institution’s liabilities, such as its bonds, payables and mortgages, are less than its assets, which include its land, loan repayments and “goodwill,” how can that alone create trouble? After all, as long as assets are positive, there is still value in the firm. Surely the current shareholders can just continue to run the firm, or can they? This simple question drives the optimal capital structure literature in corporate finance.

Corporate finance theory shows why investors should care about healthy balance sheets. A repeated theme in the literature is that if a firm’s assets (what they own) are less than its liabilities (what they owe) then shareholders are likely to deploy the firm’s assets imprudently.⁶ “Asset stripping” is a classic example of such mismanagement, where shareholders in a negative-net-worth bank can vote to distribute the majority of incoming loan repayments as dividends. Other value-destroying options include borrowing money from new bondholders or even selling bank offices to pay special high dividends or to make stock repurchases. Since equity holders in negative-net-worth (also known as “upside-

down”) firms might well be spending debt holders’ money, bankruptcy law rightfully allows for debt holders to petition the court to put a firm into involuntary bankruptcy.

The threat of insolvency could also leave weakened shareholders essentially “gambling for resurrection” by taking big risks with scarce resources. After all, when a firm is near bankruptcy, shareholders have a strong incentive to take massive investment risks since they reap all the benefits if the gamble is successful and let the bondholders deal with the losses if the gamble fails. Nearly insolvent firms also run the risk of virtual takeover by opportunistic managers who, expecting bankruptcy to occur soon, may run the firm like a personal fiefdom, creating golden parachutes and the like. Further, firms may find that under conditions of near-insolvency no one is willing to lend to them, making it impossible for them to make sound investments. This is often known as “debt overhang.”⁷

Since the time that a firm spends upside-down is time that a firm will probably lose value, there are sound reasons for the legal system to act aggressively and put bondholders and other debt holders in charge of insolvent firms or at least to create incentives so that managers will behave in debtholders’ best interests.

Textbook Bankruptcy

The economist’s simple model of bankruptcy serves as a useful template for thinking about the value of high net worth and the perils of negative net worth. This template is expanded upon in several ways throughout this paper. In the textbook world,⁸

$$\text{Value of Assets} = \text{Debt} + \text{Equity}$$

or

$$V = D + E$$

As long as equity is large as a percentage of the firm (E/V is large), then equity holders’ incentives are roughly aligned with debt holder’s incentives. In other words, so long as the equity holders are making decisions that increase V , they will increase the chances that the firm has enough value to make all future debt payments. However, if, through some misfortune, the firm’s value plummets such that $V' < D$, shareholders are essentially upside-down in their own firms, which forces debt holders to head to the bankruptcy judge. After reviewing the firm’s balance sheet, the likely market values of assets, and the size of its debt promises, the judge will decide that the firm is insolvent.

In the “textbook case” the judge would then proceed by converting all of the firm’s debt holders into new shareholders. If V' is the post-crisis value of the assets, then $V' = E'$.

Once again, there will be a group of equity holders who have a strong incentive to maximize the firm's value. This simple story ignores questions of debt priorities, partial default, or the "consolation prize" shares that might be awarded to the old shareholders. Actually, much of these real-world complexities are left out of this paper wherever possible to focus in on the underlying principle at work here: that a firm's shareholders will tend to maximize the value of a firm's scarce resources whenever E/V is large.

The Mortgage Parallel

Consider an analogy with the housing industry. A homeowner is much like a stockholder, and a mortgage lender is much like a bondholder. A homeowner treats her home well partially because she hopes to resell it at a higher price at some future date. When a homeowner is massively upside-down in her mortgage, however, she knows that the chances of reselling her home for enough to cover the mortgage are much less and the alternative of "leaving the keys in the mailbox" starts looking better and better. So, mortgage lenders get nervous when homeowners are upside-down in their mortgages because they know that upside-down homeowners tend to behave against their best interests. Resale value, for a house or for a firm, is therefore how a market system encourages owners to think about the future.

Extensive research by the Federal Reserve Bank of Boston shows that negative home equity, not high mortgage payments, has driven the majority of increased foreclosure rates in the wake of the financial crisis.⁹ So when a homeowner with positive home equity loses her job, she almost always finds a way to keep paying her mortgage, but if she has negative home equity, a job loss looks like a good time to let the bank take the house. In this case the bank will not get everything owed to it, but getting something is better than losing everything.

Note that with homes, as with firms, the owner's limited liability is key. In both cases, it is difficult or even impossible for lenders to go after the homeowner (shareholder) if there is a foreclosure (bankruptcy). In both cases, lenders become the new implicit or explicit owners, and with their takeover, the asset, whether a home or a firm, is now in the hands of someone who once again has good incentive to maximize the value of the asset.

Why Government Equity Purchases Do Not Work as Well as Bankruptcy

As the crisis of 2008 unfolded, financial market experts concluded that many of the nation's largest banks were holding junk assets. In other words, V was much less than previously thought for most of these struggling financial institutions. While share prices plummeted for the nations' largest money centers, policy makers began casting about for solutions.

In response, in October 2008 President Bush signed legislation creating the Troubled Asset Relief Program, or TARP, which ultimately gave Treasury \$700 billion either to buy bad mortgage assets from distressed banks or to pay cash in exchange for shares in these banks.¹⁰

Unfortunately for those who predicted that enactment of the TARP would strengthen financial markets, bank share prices plummeted in the days following the legislation's passage. Prices continued to fall, pausing only for a few days when Secretary Paulson announced on October 10, 2008 that the Treasury would buy shares in the nation's biggest banks.

It should be noted that the biggest stock market decline in recent history occurred *after* Congress took definitive action to resolve the crisis: "with the Dow slumping nearly 778 points, in the biggest single-day point loss ever..." approximately \$1.2 trillion in market value was knocked out, "marking the first post-\$1 trillion day ever."¹¹ While discerning the meanings of market swings is perilous, it is plausible to conclude that the passage of TARP, and the political dynamics it set off, were themselves the root cause of most of the panic in the fall of 2008, as suggested repeatedly by John Taylor in numerous recent writings [See Figure 2].

Figure 2.



From testimony by John B. Taylor (October 22, 2009),
<http://judiciary.house.gov/hearings/pdf/Taylor091022.pdf>

In any event, the nation settled on bank bailouts that included stock purchases as their desired tool for resolving weak banks and weak bank holding companies. The plan was for government to purchase shares in these weak financial institutions and raise E/V in the process, thereby making bank balance sheets healthier. However, the standard model for bankruptcy outlined above does not account for governments purchasing shares in banks since government-owned shares are clearly not the same as privately owned shares.

To its credit, the Paulson-Treasury did recognize the potential for political pressures to affect these financial institutions and explicitly instituted non-voting shares early on in attempt to shortcut some public choice-related downsides of government ownership.¹² This fear of politicized lending is still well founded, however. In India, for instance, government-owned banks increase their lending by 11 percent in election years compared to privately owned banks.¹³

The effects of politicization show up in cross-countries studies as well. In a widely cited study, La Porta, de Silanes, and Shleifer analyze large banks in 92 countries. Controlling for the level of economic development and other relevant factors, they find that

government ownership of banks is associated with slower subsequent financial development and lower subsequent growth of per capita income.¹⁴ Their evidence “supports the more recent ‘political’ theories of the effects of government ownership of firms” (p. 265).

These statistical studies reinforce the longstanding view that large banks present the state with a uniquely powerful tool for controlling an economy. Revolutionaries have long asserted the power of banks. A few days before the October Revolution, for instance, Lenin himself set forth his view:

*“Without big banks, socialism would be impossible. The big banks are the ‘state apparatus’ which we need to bring about socialism, and which we take ready-made from capitalism...”*¹⁵

Similar viewpoints were widely adopted around the world, particularly in the 1960s and the 1970s, with “governments nationalizing the existing commercial banks and starting new ones in Africa, Asia, and Latin America.”¹⁶

On a much smaller scale, the Indian experience mentioned above is just one more example of politicians using the power of the banking system for their own political ends. Government control of the financial system “politicizes resource allocation for the sake of getting votes or bribes for office holders...” and also softens budget constraints and lowers economic efficiency.¹⁷

Unfortunately, since the U.S. government’s current partial ownership of banks allows it “to collect savings [from taxpayers and Treasury bondholders] and to [perhaps subtly] direct them toward strategic long term projects,” the likelihood that “inefficient but politically desirable projects” are financed is increased.¹⁸ The threat of politicized lending causing slower long-term growth in the United States is all too real. At this time, the clearest examples of politically influenced lending have involved pressure directly on the Federal Reserve and Treasury, but the theoretical argument that banks receiving TARP funds will tend to lend in ways favored by politicians is too strong to ignore.¹⁹

Beyond this public choice critique of government equity stakes in banks, there is a simple mathematical critique. Consider a bank on the edge of insolvency, so that $V = D$. Two options for the struggling institution are as follows:

1. A government buys new shares equivalent to 10% of the firm’s value,
so $V' = 1.1V = D + E'$

2. A government judge converts the most junior 10% of the firm's debt into new shares, so $D' = 0.9D = 0.9V$.

What does the firm's E'/V' look like in these two cases?

1. $E' = 0.1V$, so $E'/(1.1V) = 0.1/1.1 = 9.1\%$
2. Again, $E' = 0.1V$, but now $V' = V$, since there were no new cash injections.
So $E'/V' = 0.1/1 = 10\%$

So when the government purchases new equity, it increases the equity ratio while simultaneously increasing the firm's asset base, which weakens the equity-thickening effect of the cash infusion. Debt-to-equity conversions, by contrast, increase the numerator while leaving the denominator untouched. In this case, we get a 10 percent larger effect when we pursue debt-to-equity conversions. So any political benefits of government ownership, or any economic concerns about cascading defaults after bankruptcy, should be weighed against the arithmetic certainty that debt-to-equity conversions do more than government equity purchases to increase the weak firm's equity ratio.

Why Banning Mark to Market is Not the Answer

One solution to the banking crisis proposed repeatedly in the last year, especially by free-market advocates, has been the restriction of mark-to-market accounting practices. Bankers have even recently persuaded two members of Congress to introduce a bill "to establish a new body that could suspend accounting rules for financial institutions" altogether. President of the American Bankers Association Edward L. Yingling says the proposal addresses "systemic risks that accounting standards can have on the economy."²⁰ Steve Forbes, the publisher and one-time presidential candidate, goes even further when he claims that mark-to-market accounting is the "principal reason why our financial system is in a meltdown."²¹ They say the problem, in short, is not that banks made unsound loans, but rather that someone is forcing them to report sound loans as unsound. If only the banks could state that the assets were valuable, then the system would be safe.²²

Mark-to-market accounting has had an off-and-on history in the United States. Suspended in 1938, mark-to-market was re-implemented as a standard practice in the accounting profession by the Financial Accounting Standards Board and became effective in the fall of 2007.²³ The technique involves measuring the value of a firm's assets at their market value, not at their purchase, or book value. So if a firm owns a share of Microsoft

stock that it bought at \$50 but which is currently worth \$500, under the mark-to-market approach the firm has a \$500 asset, while under the book approach it only hold a \$50 asset.

Of course, with the recent collapse of housing prices, the reverse was more often the case. Since mortgage-backed securities held by banks were suddenly trading for 30 cents on the dollar if they traded at all, book values were generally higher than market values.²⁴ Some argued that these low prices, combined with few active trades in the market, were evidence that the market was not pricing these securities correctly.²⁵ Further, since bank regulators and bankruptcy judges tend to focus on “market” values of assets rather than book values when deciding if a bank is sound, mark-to-market opponents thought that incorrect market prices could drive good firms into bankruptcy.

Could the bankruptcies and bailouts of struggling firms have been avoided if mark to market practices were suspended? If the reason a firm’s asset value has fallen is because its most opaque assets have plummeted in value, should bankruptcy judges and bank regulators just give shareholders the benefit of the doubt? In bank regulation circles, this approach would be called a form of “capital forbearance,” which amounts to hoping that someday things will “work out:” that either the market will “come to its senses” and push the price of the opaque asset back up, or that something else will come along to save the day.²⁶

While hope and patience might solve some of life’s problems, in the world of corporate governance, capital forbearance is another way of spending the bondholders’ money. It may not quite be “gambling for resurrection,” but it is surely “praying for resurrection.” Stockholders and managers alike have a strong incentive to claim that any collapse in asset value is merely market mispricing; so claims that market prices are wrong do nothing to weaken the very real temptation by managers and stockholders to engage in asset stripping, thereby destroying V in an effort to pull out as much E as possible from unlucky debt holders. Suspending mark-to-market will only work in a world where stockholders and managers are angels, which is most assuredly not the world in which we live.

Speed-Bankruptcy: Both Possible and Desirable in the Real World

The canonical bankruptcy model described thus far is just that, a model. Modern firms, especially large financial firms with fully owned corporate subsidiaries, have enormously complex structures of formally secured or unsecured liabilities: a mix of debt, equity, leases, payables, and the like. Real-world application therefore begs the question of whether or not the elementary bankruptcy story sketched out thus far can actually be applied in reality.

The complexity of actual firms often explains why corporate bankruptcies usually take years to resolve. For instance, when the US marked the third anniversary of the September 11, 2001 terrorist attacks, US Airways filed for bankruptcy, following the example of United Airlines, which entered bankruptcy in 2002.²⁷ Delta and Northwest Airlines continued the trend by filing for protection from creditors in September 2005. At that time, United, the number two airline in the United States at the time, had been in bankruptcy court for almost three years. An article at the time noted, “With those four major airlines and some smaller ones already in bankruptcy, nearly half of the industry’s capacity is on carriers operating under bankruptcy court oversight.”²⁸

Obviously, the downside to these Chapter 11 filings is that the process is lengthy. However, can “speed bankruptcy” be an effective alternative in the real world? It can be for a few key reasons:

1. Multi-year bankruptcy procedures are negative-sum legal battles between former shareholders and various classes of debt holders. From an “ex-ante efficiency” point of view,²⁹ a process that quickly reduced debt and put new shareholders in charge right away would be better. In other words, if various classes of investors made decisions behind a “veil of ignorance,” to use John Rawl’s well-known concept,³⁰ with no knowledge of which class of investor they would become, they would likely choose speed bankruptcy. In other words, if our goal is to maximize the efficient use of a firm’s scarce resources, speed bankruptcy is preferable.
2. FDIC resolution mechanisms, which are one form of speed bankruptcy, can actually take place in merely a weekend—clear evidence that speed is possible. “Every time this procedure has been invoked,” according to Hart and Zingales, “the [insured] depositors were paid in full and had access to their money at all times. The system works well.”³¹ Although the FDIC may sign a loss-sharing agreement with the purchasing bank, thus creating some long-term government funding commitment, the new banking entity is able to proceed in a clear legal environment. Further, although the mechanics of the FDIC mechanism are different from those of a simple debt-for-equity conversion, the result is the same: less debt, more equity, a stronger balance sheet, and a firm run by private equityholders.
3. The rapid emergence of Chrysler, GM, and CIT from their recent “prepack” bankruptcies confirms that speed is possible as well. When Chrysler was forced to file for Chapter 11 bankruptcy on April 30, 2009, President Obama promised its reorganization would be “efficient” and “controlled. Sure enough, “with the touch of pen to paper and a simple wire transfer, Chrysler completed its alliance” with Italian automaker Fiat in 42 days, “largely ending its quick trip through bankruptcy” court.³² The more complex General Motors filed for Chapter 11 next on June 1, 2009, marking the fourth- largest filing in U.S. history and

the largest overall for an industrial company. GM emerged from bankruptcy in just 40 days on July 10, 2009.³³ Lastly, on November 1, 2009, CIT entered a “voluntary pre-packaged bankruptcy restructuring”³⁴ process that turned into the fifth-largest bankruptcy by assets in U.S. history, from which they emerged rather quickly on December 10, 2009. As the only major firm in the financial sector to emerge from bankruptcy, CIT was far more fortunate than others like Lehman Brothers, Washington Mutual, and IndyMac.³⁵

4. A lingering concern may be that certain debt holders have inviolable rights: that, for instance, secured debt holders must be paid off penny for penny before equity holders receive anything. Ironically, this “absolute priority of claims” rule is more honored in breach than in observance. For instance, Lawrence A. Weiss’s research finds that “priority of claims” were violated in 29 out of 37 bankruptcies filed by New York and American Stock Exchange firms between November 1979 and December 1986. This breakdown primarily occurred “among the unsecured creditors and between the unsecured creditors and equity holders.” Secured creditors’ contracts are generally upheld.³⁶

The fourth point is especially relevant for two reasons:

First, since modest violations of the absolute priority rule are so common, debt holders typically take this into account before investing in a firm. These investors are not like bank depositors, who reasonably place great faith in their absolute senior priority. Instead, they typically know that in the event of financial crises, some negotiation will take place between the various classes of liability holders, with ex-ante contracts serving as just one focal point of negotiations. Thus, violations of absolute priority are not a rule-of-law violation.³⁷

Indeed, in his widely-cited paper describing the 1978 Bankruptcy Reform Act, Eric A. Posner finds that “large creditors argu[ed] the new law should follow Chapter XI....and have informal, flexible procedures even for bankruptcies of large, public corporations.”³⁸ He then documents how this flexibility, which created a bargain among shareholders, creditors, and managers, became part of the institution of corporate bankruptcy. The American form of bankruptcy is an institution where creditors, including bondholders, assume that post-bankruptcy outcomes are driven by pragmatism, not by rote formula. “The final bill...” Posner notes, contained a “watered-down absolute priority rule.”³⁹

Second, violations of the absolute priority rule are often driven by the quest to increase value-creation. In the legal literature, this is known as the “maximization norm.”⁴⁰ For instance, the decision to give some post-bankruptcy value to pre-bankruptcy shareholders might be driven by a desire to deter pre-bankruptcy asset stripping. If

shareholders in a weak firm know that they will probably get at least some stake in the post-bankruptcy firm, then this by itself will deter asset-stripping, and give the shareholders at least a modest incentive to continue focusing on the firm's long-run health.

So, if some form of "speed bankruptcy" can be shown to be value enhancing to the firm, then claims that it would be a violation of the rule of law would largely be ignored. Once again, our bankruptcy and FDIC receivership rules already sacrifice absolute priority to value creation in some circumstances.

The simplest speed bankruptcy: Debt-to-Equity conversion

Now we have enough background to spell out a simple but practical speed bankruptcy story focused on the unique problems of large financial conglomerates. This proposal is quite simple, and similar to that of Luigi Zingales⁴¹: Existing debt (commercial paper and bonds) will be transformed into equity. For this debt-to-equity conversion, I propose that unsecured bonds with maturities longer than roughly five years be converted to voting common shares. At the same time, previous shareholders retain their shares, thus giving shareholders some ex-ante incentive to behave well when the company is enduring its crisis. Enough debt should be converted into equity so that the post-speed-bankruptcy firm will, with near-certainty, be able to avoid returning to bankruptcy for the next few years; this will give future lenders the confidence to lend at non-penalty rates to the post-bankruptcy firm. Since multiple trips through the Chapter 11 are common for corporations, this is a genuine concern.⁴² Finally, the ratio at which bonds are converted to shares should be generous enough that bondholders will have a genuine possibility of recovering the full value of their bonds in the event that a sound firm was mistakenly bankrupted.

Some questions immediately arise: Why only convert tradable bonds? Might not other financial commitments be even more junior? Isn't this a major violation of the priority of claims?

These questions are best answered by returning to the "maximization norm." A common complaint about why bankruptcy or even FDIC-style resolution is impossible for financial conglomerates is that the firm has to be kept up and running or else asset value will be destroyed. If true, then the only value-maximizing option left is federal bailouts, government ownership, and all of the public-choice problems that bailouts entail.

But the essence of speed bankruptcy is the power to keep the firm up and running: Friday's bondholders become Monday's new shareholders, and the banking conglomerate can continue borrowing and lending much as before, with little possibility of a short-run crisis. This creates a third way, entirely different from either multi-year Chapter XI or

Treasury purchases of new equity, and this third way solves the speed problem that is allegedly so crucial.

So since there is a tool at hand that can make bankruptcy a practical, value-maximizing possibility, it should be given every possible consideration. During the financial crisis of 2008, the Paulson Treasury department instead gave speed bankruptcy a curt dismissal. Philip Swagel, a Treasury economist at the time, later noted,

The simple truth is that it was not feasible to force a debt for equity swap or to rapidly enact the laws necessary to make this feasible. To academics who made this suggestion to me directly, my response was to gently suggest that they spend more time in Washington, D.C.⁴³

Since the “maximization norm” is so strong in bankruptcy law, much stronger than the priority of claims, and since speed bankruptcy can be a tool for value maximization, this means that the priority of claims can be sacrificed in order to keep the firm up and running with lower ex-post leverage. Indeed, the key reason speed bankruptcy can occur quickly is because corporate bonds are publicly traded: Their liquidity, their transparency, provides the source of the speed.

There is one key legal barrier to speed bankruptcy, and it is spelled out in Zingales⁴⁴: The netting-out provision for derivatives at the moment of bankruptcy. We will avoid discussing this issue here, but worthwhile references exist.⁴⁵ For our purposes, the important point is that in the two weeks that the U.S. Congress spent passing the \$700 billion TARP legislation in 2008, it could easily have implemented this small reform.

Further, as Congress deliberates over whether to create a new “resolution authority” for large financial conglomerates, it should seriously consider benefits of having explicit debt-to-equity conversion provisions in any new resolution authority: Just as criminal prosecutors appreciate having the threat of the death penalty in order to secure life-without-parole convictions, so too can speed bankruptcy be used as a threat—perhaps an unstated threat—to bring bondholders to the negotiating table.

So whether debt-to-equity conversion becomes the first choice or merely another weapon in the resolution authority’s arsenal, it appears that such this form of speed bankruptcy would preserve the value of the firm as a going concern with only a modest violation of the priority of claims.

What about contagion?

One argument in favor of bank bailouts is that banks have interconnected liabilities, with one bank's depositors owing money to another bank, so that if one bank fails to repay its depositors, that will set off cascading bank failures. Another argument is that bank customers are panicky (whether for rational or irrational reasons) and that if one bank is allowed to fail, there will be a value-destroying run on other banks. Thus, governments must bail out failed banks, even beyond the statutory FDIC insurance requirement. This fear of failure has driven our quest for bailouts over the past two years; but does evidence back up this folktale?

It does not. First, it should be noted that for the large money-center banks at the heart of the recent financial crisis, deposits make up half or less of the liabilities. A glance at the 10-K or 10-Q forms of these banks will confirm this fact. Bankruptcy law and practice decree that deposits are the most senior form of financial liability, with little room for this particular violation of the absolute priority rule. That means that in a speed-bankruptcy process that converted much of the non-depository debt into equity, the weak bank's assets would have to be worth less than *half* of the pre-crisis levels before one would need to bring in federal money for a bailout of depositors. So as long as $V_{\text{Crisis}} > \text{Total Deposits}$, then without bailout money one can make every depositor whole, penny for penny.

This might sound counterintuitive, since we often think of "banks" as mostly specializing in taking in deposits and lending money to borrowers. This is true of our small banks and regional banks; but money center banks, those at the heart of this crisis, took on many other forms of liabilities, liabilities that both through law and custom come in much lower in the priority of bankruptcy claims.

So any speed bankruptcy regime would almost surely leave deposits untouched for the big money-center banks. But perhaps the holders of Citibank's \$350 billion in long-term bonds or holders of Bank of America's notes or JP Morgan's commercial paper would be plunged into insolvency if these money-center banks defaulted on their debts: And if banks (or their major customers) hold each others' debts as assets, this could be a source of financial contagion. Fortunately, there has been a massive empirical literature searching for evidence of bank contagion, so one need not speculate on the matter. One review of the literature by Kaufman in 1994 notes:

[B]ank contagion is largely firm-specific and rational, as it appears to be in other industries, and...the costs are not as great as they are widely perceived to be.⁴⁶

More recent empirical work both favorably cites Kaufmann's result and generally finds evidence in favor of his claim. Further, even during America's greatest banking crisis, the Great Depression, there is little evidence for contagion:

...the panic did not produce significant social costs in the form of failures among solvent banks.⁴⁷

The one great argument in favor of bank bailouts—negative spillovers to other, healthy banks—appears to be of little merit. The recent defaults of Dubai World, the investing arm of the government of Dubai, likewise set off no financial contagion.⁴⁸

And note that the bank contagion research provides *a fortiori* evidence that debt-to-equity conversions will cause even less contagion than a bank default: Those studies focused on *depositors* losing value in their most liquid investments, investments often held to fund short-term purchases. But debt-to-equity conversions, which are at the heart of speed bankruptcy, leave deposits untouched: They convert *bonds*, notes, and other medium- and long-term financial obligations into equity. Indeed, speed bankruptcy gives bondholders an asset with some value, so they are not wiped out dollar for dollar.⁴⁹ Thus there is little reason to fear major contagion from speed bankruptcy.

If some concern remains, it might best be resolved through some combination of an improved speed bankruptcy procedure plus generous short-term lending from the Federal Reserve. There is little reason to think that converting some debt claims into equity claims will create large short-run problems, and they will avoid the productivity-destroying long-run problems associated with government-owned banks.

Addressing the Behavioral Public Choice surrounding Bailouts

If there is little argument for bank bailouts, then why do they occur so often? Kaufmann's analysis gives the clues: Banking crises may not have true contagion effects, but compared to other crises, in a banking crisis the bad news tends to erupt quickly, setting off an air of panic. So if policy makers and voters fall prey to the usual decision-making failures documented by behavioral economists—if they dramatically emphasize the present over the near future (hyperbolic discounting), if they weigh the cost of possible losses two to three times more than the benefits of possible gains (loss aversion), and if they believe that it's important to "do something" (action bias), then policy makers may push for bailouts even if they know that on average, things would turn out better in the medium term without them.

Thus, policy proposals, including those that may broadly be categorized as “do nothing, experience some pain, weigh benefits and costs about equally,” should find ways to show policy makers that the proposal actually isn’t as costly as they might think. And here, it’s relatively easy to make the case: Speed bankruptcy is likely to be fast (addressing the hyperbolic discounting of politicians), efficient (especially if it works roughly as well as FDIC resolution, thus addressing the loss aversion of politicians), and it provides plenty of action-oriented headlines about the government acting boldly to save the economy (addressing the action bias of politicians).

Speed Bankruptcy in Advance: Funeral Planning and Convertible Hybrid Securities

The Obama administration’s proposals to mandate “funeral planning” or “living wills” for large financial institutions is a clear example of planning for speed bankruptcy. These proposals amount to creating a prepack bankruptcy plan every few months, making it possible for a financial holding company to go through bankruptcy in roughly the same time as Chrysler and GM: perhaps 6 weeks. This isn’t quite the overnight process of debt-to-equity conversion, but neither is it the years of negative-sum legal battles seen in the airline industry.

Federal Reserve Governor Tarullo spoke in support of corporate living wills recently, emphasizing that it would help market participants as well as regulators to be prepared for the worst.⁵⁰ One benefit is that it would “remove some of the uncertainty around a possible resolution,” so that investors wouldn’t have their expectations violated. Governor Tarullo closed by stating that

[I]t is imperative that governments convince markets that they can and will put large financial firms into a resolution process rather than bail out its creditors and shareholders.⁵¹

In a world where bank bondholders have likely become convinced that they’ve invested in firms that are de facto branches of the federal government, it will likely take an enormous institutional change before bondholders again believe that they’ll be forced to contribute to resolving a weak financial institution. Funeral planning will help to focus their minds on the possibility of their bank’s execution.

There are other proposals akin to the debt-to-equity swap mechanism currently being examined in the world of policy research. The Council on Foreign Relations’ Squam Lake Working Group on Financial Regulations recently proposed that regulators consider the use of regulatory hybrid securities as an important means to resolve large insolvent financial institutions.⁵² The Squam Lake Working Group proposed that banks need to create a “long-term debt instrument that converts to equity under specific conditions.”⁵³

Specifically, banks would issue these bonds prior to the occurrence of a crisis. And under a two-step trigger mechanism, these bonds would automatically convert to equity to recapitalize an under-capitalized or insolvent bank.⁵⁴

The first trigger would be a declaration by regulators that a systemic crisis is underway. The second trigger would be built into the hybrid security itself, so that when violated, the conversion will go into effect. An example of such a provision is if the ratio of tier 1 capital to risk-adjusted assets (capital adequacy requirement) is violated. Other measures such as the specific rate at which debt would be converted into equity would have to be predetermined as well.

In any event, the goal of this approach is to expedite the recapitalization of banks and to reduce the cost to taxpayers. The Squam Lake proposal is simply another application of speed bankruptcy: A fast, low-cost, way to reduce debt and increase equity without marshalling an enormous amount of taxpayer funds. Their proposal, like a simple debt-to-equity conversion, forces bondholders to bail out their own firms.

Speed bankruptcy as emergency parachute

In a world without funeral-planned bankruptcies or Squam Lake-style hybrid convertibles—perhaps the best kinds of speed bankruptcy—is debt-to-equity conversion I propose a practical alternative? Yes, it is; as noted earlier, it would instantly achieve something very close to the economist’s textbook version of bankruptcy: Less debt, more equity, lower leverage, a firm with new shareholders acting roughly in the firm’s best interest. And the nation’s large, complex financial institutions have a large amount of such widely-traded debt in circulation—Citigroup has issued over \$200 billion in long-term bonds, roughly 10 percent of its assets—so the proposal outlined here is a plausible resolution mechanism in real-time.

And of course, it’s worth reemphasizing that even if this were to violate the absolute priority rule, that would itself reflect little change from the status quo. Thus, if Congress fails to implement a funeral planning procedure, and if a large, systemically-important firm plunges into insolvency, policy makers should recall that they have investors at hand to recapitalize that weak firm: the firm’s own long-term bondholders.

The focus on long-term bonds: Why?

Why do I recommend that only long- (and medium-) term bondholders be converted into shareholders? Because to the extent that there is a risk of contagion, it is concentrated at the short end of the term structure. For instance, a study by Craig Furfine concluded from simulations that the failure of the biggest bank could create “illiquidity [that] could spread

to banks holding almost 9 percent of U.S. banking system assets.”⁵⁵ A liquidity crisis is manageable, and much less serious than a true solvency crisis—liquidity is just a matter of the term structure of asset maturity—but it should be avoided when possible.

The focus on long-term bonds: A source of peril going forward

If only medium- and long-term bond contracts will be broken in speed-bankrupted firms, then short-term debt is implicitly government-backed (just like all big-bank debt is implicitly or explicitly government-backed during the current crisis). Under such a regime, lenders will quickly realize that short-term lending is safer than ever, so borrowers will quickly find that short-term borrowing is cheaper than ever. The net result would likely be a world of megabanks financed overwhelmingly by short-term, too-liquid-to-fail debt. Thus, if rapid debt-to-equity conversions become part of the new institutional mechanism, regulators will need to place limits on short-term debt.

Indeed, this merely repeats some of the lessons learned in the debate over subordinated debt in the early 2000’s, surveyed in Stern and Feldman’s *Too Big to Fail*. The Gramm-Leach-Bliley financial reform bill attempted to create a class of subordinated debt that would be explicitly banned from any future bailouts. Major financial institutions would have been required to hold some portion of their liabilities in the form of subordinated debt in order to give financial markets and regulators alike a market-based measure of firm health: If yields on a major firm’s subordinated debt spiked, that would be a warning sign. But financial institutions and the Federal Reserve Board both pushed back against this market-based indicator, and so the subordinated debt requirement never made it through the regulatory process.

One lesson of the subordinated debt debacle is quite clear: If subordinated debt was being explicitly banned from bailouts, then all other debt is at least in principle bailout-qualified. The implicit government backing for major financial institutions was certainly known at the time of the subordinated debt debate.

Another lesson was that firms will resist issuing debt that is bailout-free, and will overwhelmingly prefer debt that is bailout-qualified. Thus, any push for speed bankruptcy will surely be met by resistance larger than the resistance to subordinated debt, and if speed bankruptcy were to become part of the institutions of modern financial capitalism, firms would do everything possible to issue short-term, non-defaultable debt.

Speed Bankruptcy: A tool for smoothing the leverage cycle.

In his classic article, “The Debt-Deflation Theory of Great Depressions,” economist Irving Fisher argued that one reason recessions last so long is because of the burden of debt.⁵⁶

When a fairly healthy firm loses sales during a recession, it might respond by cutting back on wages and dividends. By cutting back on those expenses, the firm frees up cash flow for future investment, helping the economy return to health.

But in contrast with the burden of wages and dividends, the burden of debt is contractual: Debtholders are under no legal obligation to reduce debt. Thus, compared to debt-free firms, firms with debt have to make bigger wage and dividend cutbacks to maintain the same level of investment. In practice, they'll make some compromise: Lower investment in return for more-modest wage and dividend cutbacks. Thus, the "debt overhang," as it's known, multiplies the effect of the initial drop in sales and makes recessions longer and deeper than otherwise.

Fisher's story is at the heart of the "balance sheet channel" literature in macroeconomics. The most recent incarnation of the balance sheet story comes from Geanakopoulous's widely-cited paper, "The Leverage Cycle."⁵⁷ Like Bernanke and Gertler⁵⁸ and Kiyotaki and Moore⁵⁹, he develops a theoretical model to explain how leverage—high debt-to-equity ratios—can turn a small economic shock into a big, economy-wide recession.⁶⁰

The balance sheet literature agrees that high debt makes recessions bigger than otherwise. Speed bankruptcy provides a solution to the problem of over-leverage, and it does it in the simplest, most transparent way possible: By reducing debt and converting it into equity. If in the fall of 2008, hundreds of billions of dollars of big-bank debt had been converted into equity, Citigroup wouldn't now be spending enormous effort "trying to shrink the bank's balance sheet."⁶¹

Citi, like other big banks, is trying to sell assets in order to reduce its liabilities. Under speed bankruptcy, Citi's overall balance sheet might be roughly the same size as in the pre-crisis world: But the "liability" side would have less debt and more equity. Indeed, if market participants expected that during future banking crises, the weakest big banks would be speed bankrupted and thus returned to relative health, it's likely that the crises themselves would be smaller since there were be an expectation of less leverage heading into the post-crisis recovery.

An expectation of healthy future banks makes current investors less panicked about the future. In today's world, by contrast, investors know that when bad news hits, it comes bundled with years of overleveraged, debt-heavy banks that made too many contractual promises during the boom years, banks that might be subject to political influence for years on end. That expectation makes the crisis itself worse than it need be.

One lesson of the financial crisis literature is that even if financial crises can't be avoided, their effects can be moderated. Part of the Washington Consensus that has ruled the development community in recent decades is that wages must be flexible, and strong unions should be reined in. Otherwise, rigid labor contracts could turn a modest drop in labor demand into mass unemployment, mass strikes, and economic disarray. Similarly, flexible debt contracts—a willingness to treat every bond as a convertible—can prevent bad news about bank loans from turning into a macroeconomic catastrophe.

The Source-of-Strength Doctrine: Pushing capital from bank holding companies into banks.

Now, a technical issue: In large bank holding companies, the true “bank” subsidiary is under FDIC supervision, while the holding company is largely not. Indeed, the true bank is typically a wholly-owned corporate subsidiary of the parent holding company. Can conventional speed bankruptcy—a conversion of holding-company bonds into shares—help out an insolvent subsidiary? Indeed, is it even legal to do so?

The answer to both questions is “yes.” The Federal Reserve’s “source of strength” doctrine states that the Fed has authority to force a bank holding company to inject capital into its weak FDIC-regulated banks.⁶² So if a bank holding company’s stock has plummeted so far that it appears insolvent, and if the cause of the insolvency is largely from a weak bank subsidiary, then speed bankruptcy could be used to resolve the firm: Holding-company-debt would be converted to holding-company equity, and the Federal Reserve could force the now-deleveraged firm to inject some of that equity into the weak bank subsidiary.

Ashcraft shows that fresh capital from parents and even from corporate siblings is routinely injected across corporate boundaries under our current system of law: So as long as tradable bonds exist within a holding company or its subsidiaries, there is an opportunity to use debt-to-equity conversions to save a large, weak bank.

The principle: Creditors share losses before taxpayers

The decision to make big-bank debtholders whole during the financial crisis has created massive moral hazard problems for future policy makers. The U.S. government has given a combination of explicit and implicit guarantees for the debt of the nation’s major financial institutions. This reduces private-sector monitoring of bank health and raises incentives to lend to big banks over small banks. And at the macroeconomic level, expected bailouts amplify Geanakopolous’s leverage cycle.

But as we've shown, there's an alternative, even in the midst of a crisis: Speed bankruptcy, the court- or regulator-appointed conversion of tradable bonds into shares of common stock. By reducing debt and increasing equity, it reduces leverage and places the firm back in the hands of people who have money at risk. By freeing up future cash flow, it gives banks more money to lend. It is surprising that this proposal, which Luigi Zingales pushed for in the midst of the 2008 crisis, didn't garner more attention at the time, since its underpinnings are familiar to macroeconomists and corporate finance economists alike. Behavioral economics may explain why policy makers and even academics behaved as they did during the financial crisis.

For policy makers creating a new resolution authority for big firms, the message is clear: Government purchases of equity stakes in big banks are quite unnecessary, given the structure of the balance sheets of modern systemically-important banks. There is an alternative—indeed, there always was.

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² Joseph E. Stiglitz, *Reforming the Global Economic Architecture: Lessons from Recent Crises*, *Journal of Finance*, Vol. 54, No. 4, (Aug., 1999), pp. 1508-1521.

³ Joseph E. Stiglitz, *A Bank Bailout that Works*, *The Nation*, March 23, 2009. Note that in the article Stiglitz actually proposes a “Good Bank/Bad Bank” as a solution to the financial crisis, but this setup still involves cutting back on debt claims, thereby raising equity claims.

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⁵ The fall 2008 10-Q statements of the biggest TARP recipients (Citigroup, JP Morgan Chase, Bank of America, Wells Fargo, and US Bancorp, included a total of over \$1 trillion in long-term bonds on their books. These bonds might not be the primary targets for debt-to-equity conversion, since some may rank high in seniority, but this gives a sense of the magnitude of tradable, transparent, liquid, non-depository liabilities in these firms. Note that \$1 trillion is substantially larger than the \$700 billion Congress appropriated for TARP itself.

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