

## Why Banks are Not Allowed in Bankruptcy

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Abstract: Unlike most other countries, the United States uses different procedures to resolve insolvent banks and non-bank firms. When on-bank firms file for bankruptcy, the Bankruptcy Code divides control among the various claimants and requires a judge to supervise the bankruptcy process. By contrast, the FDIC acts as the receiver for an insolvent bank and has almost complete control of the resolution process. Other claimants can sue the FDIC, but they cannot obtain injunctive relief, and their damages are limited to the amount that they would have received in liquidation. The FDIC has acted as the receiver of insolvent banks since the Great Depression, and the concentration of power in the FDIC is traditionally justified by two arguments: i) the need for a timely disposition of the bank's assets to maintain the liquidity of deposits and encourage faith in the banking system, and ii) the FDIC's role as the largest creditor gives it an incentive to maximize the recovery from the assets. We revisit these arguments in light of the dramatic changes that have occurred in banking and ask whether they still (or ever did) justify FDIC control. We suggest that the first argument fails because it conflates the need for a timely satisfaction of the claims of insured depositors by the FDIC with the need to quickly dispose of the failed banks assets. As stated, the second argument does not justify FDIC control as one must generally ask whether the largest creditor will take actions that are harmful to the other claimants on the failed firm. However, if slightly modified the second argument is much more persuasive. A detailed survey of failed banks reveals that the typical failed bank's capital structure leaves the FDIC as the *only* major creditor and that the value of the FDIC's claims nearly always exceeds the value of the failed bank's assets. The FDIC is therefore the residual claimant on the bank's assets and has the incentive to make the right decisions in resolving the failed bank in general and disposing of the bank's assets in particular. We question whether this principal can justify recent proposals to extend FDIC control over the resolution of large bank holding companies. We further note that this principle limits the circumstances in which the FDIC should retain control over the resolution of the banks themselves. Three limits are considered: resolution of large banks with complex liability structures, debt conversion schemes which allow for automatic financial restructuring of a failed bank, and agency costs associated with the FDIC's role in asset dispositions. The Article argues that these limits do not justify removing the FDIC from control in resolving most bank failures.

Most nations resolve failed banks with the same procedures they apply to other insolvent firms.<sup>1</sup> American law is different. American banks and thrifts do not receive bankruptcy protection.<sup>2</sup> Instead, regulators seize insolvent or unsound banks or thrifts and give the Federal Deposit Insurance Corporation (FDIC) the authority to resolve them. Almost always the FDIC chooses to resolve seized institutions through a receivership.<sup>3</sup> Very different rules govern the bankruptcy and bank receivership processes. These rules appear in different titles of the United States Code and have important substantive differences. The most important difference between the two procedures is the concentration of control over the disposition of the failed firm's assets. The traditional bankruptcy reorganization divides control among the various claimants and appoints a judge to supervise the process. The overwhelming majority of reorganizations are resolved consensually with the approval of each class of creditors and shareholders.<sup>4</sup> Even when a debtor tries to "cram down" a plan over the objections of dissenting creditors, the debtor must win approval of at least some creditors, and the other creditors can ask the judge to reject the plan because it fails to comply with tests of horizontal and vertical equity or it is not in the best interests of the creditors.<sup>5</sup>

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<sup>1</sup> See Rosalind L. Bennett, *Failure Resolution and Asset Liquidation: Results of an International Survey of Deposit Insurers*, FDIC Banking Review 1, 9 (2002?) ("Outside the United States, most failed banks go through a regular corporate bankruptcy process."); Apanard Angkinand & Clas Wihlborg, *Bank Insolvency Procedures as a Foundation for Market Discipline*, at 4, LEFIC Working Paper 2005-08, [www.cbs.dk/C=LEFIC](http://www.cbs.dk/C=LEFIC).

<sup>2</sup> Banks are ineligible for bankruptcy, and so neither the bank nor the bank's creditors can place the bank in bankruptcy. 11 U.S.C. § 109(b), (d) (2009). As noted below, bank holding companies can file for bankruptcy in the United States, and many of the largest bankruptcies on record have been bank holding companies. See *infra* note 29, and accompanying text.

<sup>3</sup> The FDIC can decide to resolve the bank by a conservatorship or by a receivership. Conservatorships are very rare, however.. Between 1934 and 2005 only two banks were resolved in conservatorships. See Richard S. Carnell, Jonathan R. Macey & Geoffrey P. Miller, *The Law of Banking and Financial Institutions* 706 (4<sup>th</sup> ed. 2009). For convenience, we therefore use the term "bank receivership" to refer to any proceeding designed to resolve an insolvent bank.

<sup>4</sup> Cite.

<sup>5</sup> 11 U.S.C. § 1129(b) (2009).

Debtors sometimes bypass the traditional reorganization with a relatively quick sale of many of the assets or at least the assets necessary for some of the business to continue operating. This quick sale denies the creditors the ability to vote on the sale, but the debtor must still seek approval of the bankruptcy judge,<sup>6</sup> and the dissenting creditors can at least ask the judge to enjoin the sale. The recent Chrysler bankruptcy provides a nice illustration of this process. Within a few weeks of Chrysler's bankruptcy filing, the debtor sold substantially all of its operating assets to a "New" Chrysler owned by the UAW, Fiat and the U.S. and Canadian governments.<sup>7</sup> New Chrysler emerged from bankruptcy and continued manufacturing and selling cars.<sup>8</sup> The original corporate entities and the few assets that New Chrysler did not want stayed in bankruptcy, and Old Chrysler remains there to this date.<sup>9</sup> Eventually the bankruptcy process will conclude, and these remaining assets and the proceeds of the sale to New Chrysler will be distributed to the creditors of Old Chrysler. This sale occurred outside of a plan of reorganization, and the creditors did not vote on the sale. However, a bankruptcy judge did approve the sale, and the creditors had a right to, and did, argue that the approval should have been denied. Apart from its notoriety, the way in which Chrysler's principal assets were disposed of now is fairly typical in large bankruptcy reorganizations.<sup>10</sup>

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<sup>6</sup> *Id.* at § 363.

<sup>7</sup> See Mark H. Anderson & Jeff Bennett, Pension Funds Ask High Court to Delay Sale of Chrysler, *Wall St. J.*, June 8, 2009, at B3.

<sup>8</sup> *Id.*

<sup>9</sup> See Alisa Priddle & David Shepardson, Chrysler Sells Good Assets to Fiat, New Company Formed, *Detroit News*, June 11, 2009, at B1.

<sup>10</sup> Two features of Chrysler's sale were somewhat unusual: the sold assets remained subject to certain liabilities and interests, and the bidding was restricted to offers that assumed these liabilities and interests. See Congressional Oversight Panel, September Oversight Report: The Use of TARP Funds in the Support and Reorganization of the Domestic Automobile Industry (September 9, 2009). However, the timing and judicial approval of the sale outside a reorganization plan were typical.

A bank receivership begins when the FDIC seizes control of the bank. In the vast majority of cases, the FDIC has already identified an acquiring financial institution when it seizes the failed bank.<sup>11</sup> The “acquirer” will assume some or all of the failed bank’s deposits and perhaps some of the failed bank’s other liabilities as well. As consideration, the acquirer will receive some of the failed bank’s assets and will usually receive a payment from the FDIC. The FDIC will usually retain most of the failed bank’s assets,<sup>12</sup> and it will take months or even years for the FDIC to liquidate these assets.<sup>13</sup> However, the initial purchase and assumption occurs much more quickly than the initial sale of a firm’s assets in bankruptcy. The automobile bankruptcies generated headlines because the sales were completed in a matter of weeks.<sup>14</sup> A typical purchase and assumption of a failed bank is quicker. The FDIC nearly always identifies an acquirer before they seize the bank at the close of business on a Friday, and some of the failed bank’s offices will reopen as part of the acquiring bank the following Monday.

The FDIC enjoys a level of control that a dominant creditor could only dream of obtaining in bankruptcy. There are few checks on the FDIC’s discretion in disposing of bank assets. The initial purchase and assumption will be complete long before a judge can conceivably hear an objection. Even if a creditor’s objection is timely, the law significantly restricts the grounds upon which a creditor can complain about the sale.<sup>15</sup> The law also limits complaining creditors to a monetary remedy based on the amount that they would have received in a liquidation of the bank’s assets.<sup>16</sup>

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<sup>11</sup> For statistics on the method of resolution chosen by the FDIC, *see infra* Figure 1. The FDIC had identified an acquirer in every “PA” or “PI” transaction.

<sup>12</sup> *See infra* note 80, and accompanying text.

<sup>13</sup> See Division of Resolution and Receiverships, Asset Disposition Manual, Ch. 2 (at 22) (1999) (; *supra* text accompanying notes 83-87.

<sup>14</sup> See *supra* note 10.

<sup>15</sup> See 12 U.S.C. § 1821(d)(13)(D).

<sup>16</sup> See 12 U.S.C. § 1821(i)(2).

Although articles in the legal literature discuss the initiation of the bank resolution process,<sup>17</sup> there is surprisingly little discussion of the resolution process itself—on what happens after the process has been initiated. This Article focuses on the resolution process. The literature offers two possible reasons for giving the FDIC the extraordinary control it has. The first is speed.<sup>18</sup> Control gives the FDIC the ability to sell assets with no interference from other creditors and little judicial oversight. This allows for quick resolutions. A swift resolution in turn can ensure liquidity for depositors, increase depositors' confidence in the banking system, and prevent runs on both failed and healthy banks. We are not persuaded by this justification. The identified benefits of speed depend on the timely reimbursement of insured depositors (a matter governed by the terms of FDIC insurance) and not on the sale of the failed bank's assets. In fact, the FDIC does not typically complete the disposition of the failed bank's assets until four years after the seizure of the bank.<sup>19</sup>

The second reason for FDIC control is that it is likely the largest creditor of the failed bank and therefore has an incentive to maximize the recovery from the bank's assets.<sup>20</sup> But bankruptcy does not grant the largest creditor control over the resolution of non-bank firms; all claimants (including shareholders) are given a voice to ensure that the largest creditor does not use its control to their detriment. If, however, the FDIC enjoys all the gain and suffers the loss from its decision in disposing of assets, it is the residual claimant and has the incentive to make socially optimal decisions. The available evidence suggests that the FDIC is in fact the residual claimant in the overwhelming majority of bank failures. The FDIC typically accounts for the vast majority of the claims against the insolvent banks.<sup>21</sup>

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<sup>17</sup> See, e.g., David Skeel, *The Law and Finance of Bank and Insurance Insolvency Regulation*, 76 Texas L. Rev. 723 (1998); add others

<sup>18</sup> See, e.g., Bennet, *supra* note 1, at 7.

<sup>19</sup> See *supra* note 13.

<sup>20</sup> See, e.g., Bennett, *supra* note 1, at 9.

<sup>21</sup> See *infra* Table 1.

Claims senior to those of the FDIC are nearly always paid in full,<sup>22</sup> the FDIC almost always loses at least some money,<sup>23</sup> and claims junior to the FDIC almost never receive a distribution.<sup>24</sup> Thus, in most cases the FDIC has the financial incentive to sell the assets of the failed bank for their greatest value. Unlike corporate bankruptcy, bank resolution procedures concentrate decision-making in a single entity with the financial interest in making the right decision about how to dispose of the assets.

Although we make a case in favor of the concentration of control in the FDIC, the case has three major caveats. First, the FDIC does not make decisions, its employees and directors do. As a government agency the FDIC may not effectively incentivize its employees to make wealth maximizing decisions. Despite this limitation, however, the FDIC may be the best available alternative given the current capital structure of most failed banks. Second, although the FDIC appears to have been the residual claimant in nearly all of the bank insolvencies, it may not have been the residual claimant for most of the assets that have passed through the bank insolvency process. The capital structure of our very largest banks makes it less likely that the FDIC serves as the residual claimant, and the largest banks are dramatically bigger than those that typically fail. A single failed bank, Washington Mutual, accounts for about than seventy percent of all of the assets of banks that have failed in the last ten years,<sup>25</sup> and the FDIC suffered no losses from its closure.<sup>26</sup> It is dangerous to draw conclusions for a sample of one, but there are other reasons to believe that the FDIC may not be the residual claimant if other extremely large banks failed. Although special insolvency procedures for failed “mega-banks” are possible, we argue for the advantages of a single set of generally applicable procedures. Finally, a number of scholars have suggested the greater use of convertible debt or other mechanisms designed to eliminate the need

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<sup>22</sup> See *infra* notes [ ]-[ ], and accompanying text.

<sup>23</sup> See *infra* Figure 2., and accompanying text.

<sup>24</sup> See *infra* notes [ ], and accompanying text.

<sup>25</sup> The percentage of assets held by failed “mega-banks” rises considerably if one includes banks that receive open-bank assistance, such as Citigroup’s bank subsidiaries. However, our focus on the resolution of failed banks, not those that are saved by government assistance.

<sup>26</sup> See *infra* notes [ ], and accompanying text.

for bank resolution procedures and losses to the FDIC. We do not address these proposals at length because this Article takes the capital structure of banks as given. However, we argue that these procedures would not entirely eliminate the threat of insolvency and that some resolution procedure must remain available.

This Article is structured as follows. Part I contrasts bankruptcy and the bank resolution process. Assessments of the existing bank resolution system must take into account the capital structure of failed banks, particular their liability structure and loss to the FDIC in resolving failed banks. Accordingly, Part II uses data from past bank failures to present the best case for the existing bank resolution system. The best case, it concludes, is a strong one. Part III describes caveats that limit but do not undermine that case. Part IV applies these arguments to recent proposals to extend the FDIC's control to insolvent bank holding companies. Part V concludes.

### **I. Bankruptcy and Bank Insolvency**

Most banks (and nearly all big banks) are owned by bank holding companies.<sup>27</sup> Bank holding companies can, and do, file for bankruptcy, but their bank subsidiaries are ineligible for bankruptcy relief.<sup>28</sup> For example, Washington Mutual, Inc. filed for bankruptcy,<sup>29</sup> but its subsidiary, Washington Mutual Bank, entered receivership and its resolution was governed by a very different set of laws. This is more than just a matter of the organization of statutes, administrative convenience, or discrete technical rules. A more fundamental contrast concerns control: Unlike decision-making under any of the Chapters of the Bankruptcy Code, the law of bank resolution gives decision-making power to one party, the FDIC, and the FDIC can exercise this power with almost no judicial review. The importance of

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<sup>27</sup> Bank holding companies own over 80% of U.S. banks and almost all banks with assets of at least 1 billion dollars. See [www.fedpartnership.gov/bank/bank-holdingcompanies](http://www.fedpartnership.gov/bank/bank-holdingcompanies) (2007 percentages).

<sup>28</sup> 11 U.S.C. § 109.

<sup>29</sup> Washington Mutual, Inc. is the second largest bankruptcy on record, behind only Lehman Brothers Holdings, Inc. [http://lopucki.law.ucla.edu/study\\_results.asp](http://lopucki.law.ucla.edu/study_results.asp).

this difference in control can be best understood by comparing a bank receivership to the type of creditor-controlled bankruptcy process that has allegedly become extremely important in the large-business bankruptcy practice.

#### **A. Dispersed Control in Bankruptcy**

We argue that the primary difference between bankruptcy and bank insolvency is the distribution of control. We therefore must describe the distribution of control in bankruptcy. Control begins with the initiation of the process, and the initiation decision is very different for a bank than it is for other firms. Only a bank's primary regulator,<sup>30</sup> and the FDIC in some cases,<sup>31</sup> can place it in receivership. By contrast, a non-bank firm can voluntarily file for bankruptcy,<sup>32</sup> or a coalition of its creditors can force it into bankruptcy in most cases if it is not paying its debts.<sup>33</sup> For this reason, creditors have some control over the initiation of a bankruptcy case; they have almost no control in the initiation of the bank resolution process.<sup>34</sup> A number of scholars have examined the initiation decision.<sup>35</sup> We focus instead on control in the resolution process—on control once the process has started.

Control (the power to decide what to do with the firm's assets) is a continuous variable, not a discrete one. Accordingly, claimants can have more or less control over that decision. In bankruptcy, stakeholders have different degrees of control over asset sales, depending on the bankruptcy Chapter under which they seek relief. In Chapter 7, for example, the firm's assets are liquidated by a trustee who can in turn be chosen by the firm's unsecured creditors.<sup>36</sup> The trustee decides how best to

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<sup>30</sup> See, e.g., 12 U.S.C. § 1464(d)(2)(A) (Office of Thrift Supervision may appoint receiver for an insured savings association). The primary regulator is the entity that has issued the bank's charter.

<sup>31</sup> See 12 U.S.C. 1821©(4), (10).

<sup>32</sup> 11 U.S.C. § 301.

<sup>33</sup> *Id.* at § 303.

<sup>34</sup> Even ignoring involuntary bankruptcy, creditors can partially control initiation by controlling access to credit, access to collateral, etc. In theory, creditors could influence the regulator's decision of when to seize the bank. On the other hand, we show below that non-deposit creditors play an insignificant role with most banks.

<sup>35</sup> See *supra* note 17, and accompanying text.

<sup>36</sup> 11 U.S.C. § 702,

liquidate the assets, but her decision is subject to judicial approval.<sup>37</sup> Most courts require the proponent of the sale to present an “articulated business justification” for the sale,<sup>38</sup> and other stakeholders can appear at the hearing and ask the court to stop the sale. The presence of judicial oversight gives the trustee (and the unsecured creditors) less than full control in the matter.

Most firms with asset sizes of even the smallest banks file in Chapter 11.<sup>39</sup> In Chapter 11 the managers of the firm retain control as the “debtor in possession.” As such they exercise the powers of the trustee.<sup>40</sup> If the corporation is to emerge from bankruptcy, the managers must win confirmation of a plan of reorganization.<sup>41</sup> This plan will answer three fundamental questions. First, how will the assets of the firm be used? Second, what is the value of the firm’ assets? Third, how will the proceeds of the assets be divided amongst the various claimants?

There are two ways for a plan to be confirmed. One is by the consent of creditors.<sup>42</sup> The other is by judicial confirmation of the plan under prescribed conditions over the objection of creditors.<sup>43</sup> Creditor consent is determined by complicated voting procedures that can grant substantial power to minority creditors. Claims and interests are divided into classes and half of the claims (2/3 by value) of each class must vote in favor of the plan.<sup>44</sup> Dissimilar claims cannot be placed in the same class (unsecured creditors can’t be in the same class as secured creditors, etc.),<sup>45</sup> and thus a group of creditors or even equity holders can block confirmation if they believe that they are entitled to or can demand more. Junior claimants can sometimes demand more simply because the alternative to a

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<sup>37</sup> Section 363(b) requires judicial approval for sales outside of the ordinary course of business.

<sup>38</sup> See *In re Chrysler LLC*, 576 F.3d 108 (2d Cir. 2009); *In re Lionel Corp.*, 722 F.2d 1064 (2d Cir. 1983). For a critical evaluation of this standard, see Lynn M. LoPucki & Joseph W. Doherty, *Bankruptcy Fire Sales*, 106 Mich. L. Rev. 1 (2007).

<sup>39</sup> Cite.

<sup>40</sup> 11 U.S.C. § 1107(a).

<sup>41</sup> This assumes that the plan will be confirmed during the period in which only the debtor can propose a plan.

<sup>42</sup> 11 U.S.C. § 1129(a)

<sup>43</sup> *Id.* at § 1129(b)

<sup>44</sup> *Id.* at § 1126(c)

<sup>45</sup> *Id.* at § 1122

consensual plan is so difficult and costly. Most significantly, the court must determine that the plan achieves both horizontal equity (the plan does not unreasonably discriminate between creditors of equal priority) and vertical equity (the plan does not pay junior creditors anything if senior creditors are not paid in full).<sup>46</sup> Because plans will rarely pay everyone in cash, these findings will require difficult and time-consuming fact-finding. Most confirmed reorganization plans are consensual.<sup>47</sup>

Both consensual and nonconsensual confirmations take time, and the Code authorizes management to make day-to-day operating decisions prior to confirmation.<sup>48</sup> The Code also allows management to make some decisions that are not in the ordinary course of business if the management obtains court approval.<sup>49</sup> Bankruptcy practitioners have found that they can use this power to accomplish the first goal of a plan of reorganization (determine how the assets will be used) without the bother of seeking plan approval.

The recent automobile bankruptcies provide salient examples of this trend. The Chrysler and General Motors groups filed for bankruptcy protection under Chapter 11. Rather than seek approval of their creditors to a plan of reorganization, each quickly sold their most valuable assets to a newly formed entity in exchange for cash and the assumption of some of the old firms' liabilities.<sup>50</sup> The old corporate groups remained behind in bankruptcy with the unwanted assets and the disfavored creditors, but the press reported that the firms emerged from bankruptcy. As a practical matter the press was correct: the firm's critical assets and operations emerged from bankruptcy; only the disfavored creditors and assets retained by the old corporate shells remained behind.

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<sup>46</sup> *Id.* at § 1129(b)

<sup>47</sup> Cite.

<sup>48</sup> *Id.* at § 363

<sup>49</sup> *Id.* at § 363(b)(1).

<sup>50</sup> For example, the purchaser of Chrysler paid about \$2 billion in cash and assumed about \$2 billion in liabilities <http://www.calfee.com/Article.aspx?ContentKey=647>. For GM's sale, see Mike Specter, GM Asset Sale Gets Judge's Nod, Wall Street J., July 6, 2009, at B1. A summary of the details of both Chrysler and GMs' sales appears in the Congressional Oversight Panel, September Oversight Report: The Use of TARP Funds in the Support and Reorganization of the Domestic Automobile Industry 13-31 (Sept. 9, 2009).

According to the literature, Chapter 11 sales of going concerns outside a reorganization plan were unusual between 1978 and the mid-1990s. By 2000 such sales were frequent, not the exception. In 2002, for instance, a majority of large firms in Chapter 11 were sold in one form or another.<sup>51</sup> By one count, about 16 percent were auctioned by means of a 363 sale.<sup>52</sup> The percentage is higher if asset sales in bankruptcy by management, within the ordinary course, are counted. The trend continues to be prevalent to date.<sup>53</sup> It is common for an acquirer of a distressed firm to the price of a non-bankruptcy restructuring of the firm to the purchase price of the firm in a 363 sale.<sup>54</sup>

This description implies that management controls the process of disposing of assets. As a formal matter they do. As a practical matter, however, creditors will often decide how the firm's assets will be disposed because they enjoy sufficient leverage to effectively dictate the management's decisions.<sup>55</sup> Once again, the automobile bankruptcies provide a good example. The continued existence of Chrysler and General Motors (and thus the fate of the senior management) largely depended on continued funding. Only the federal government was willing to lend. Management was understandably loath to make decisions that would anger the administration. Similarly, management of other bankrupt firms may be unwilling to make decisions that would anger their dominant creditors, particularly if these creditors included strong covenants in their loan agreements. Management jeopardizes its continued

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<sup>51</sup> See, Baird (2004), Baird & Rasmussen (2002, 2003); generally George W. Kunev, Hijacking Chapter 11, 21 Emory Bankr. L. Dev. J. 19 (2004). Note that the classification of asset dispositions into reorganizations or asset sales is somewhat subjective. Nearly every bankrupt debtor in Chapter 11 reorganization will use § 363 to sell at least some assets. Section 363(b) authorizes the sale of assets in the ordinary course without court approval. The trustee, acting as the debtor in possession, often will sell assets to maintain liquidity or avoid losses on assets with declining values. We are more interested in sales of substantial portions of the firm outside of the ordinary course of business.

<sup>52</sup> Based on LoPucki's and Baird and Rasmussen's data; LoPucki, *Courting Justice* pp. 170-71.

<sup>53</sup> LoPucki's web cite data. See *In re Chrysler LLC*, 576 F.3d 108 (2d Cir. 2009), Lynn LoPucki & Joseph W. Doherty, *Bankruptcy Fire Sales*, 106 Mich. L. Rev. 1, 12-15 (2007), both summarizing the rise of 363 sales.

<sup>54</sup> See John Blakely, Lehman, Chrysler, GM: The Fallout, The Deal, August 9, 2009, <http://www.thedeal.com/newsweekly/features>.

<sup>55</sup> See Barry E. Adler et al., *Destruction of Value in the New Era of Chapter 11* (Oct. 24, 2006); Kenneth M. Ayotte & Edward R. Morrison, *Creditor Control and Conflict in Chapter 11*, Northwestern University Law School, Law & Econ. Research Paper Series, No. 08-16 (2008); Douglas G. Baird, *The New Face of Chapter 11*, 12 Am. Bankr. L. Rev. 69, 75 (2004).

employment with the firm and perhaps future employment prospects by making decisions that creditors with leverage dislike.<sup>56</sup> However, neither management nor a dominant creditor will have complete control. By selling assets outside of the plan of reorganization, they successfully deprive other claimants of the right to vote to block the sale. But they must still seek judicial approval of the sale, and these other claimants have the right to argue that the sale is not in the best interest of the claimants as a group. Management, on the sale proponents' behalf, must provide a business reason for the sale, and it must convince the court that the sale maximizes the value of the estate. Thus, in an important sense dominant creditors and the bankruptcy court share control over disposal of the firm's assets. As we note below, the sale of a bank's assets does not require judicial approval.

#### **B. Bank Insolvencies and the Purchase and Assumption Agreement**

Bank receiverships and bankruptcy proceedings operate under significantly different rules. The differences include the procedure for determining claims, the right to repudiate contracts, stays of litigation, and the power to avoid certain transactions. Claims against a non-bank debtor are allowed or disallowed by the bankruptcy court, and its determination can be appealed.<sup>57</sup> By contrast, the authority to disallow claims is given to the FDIC, as receiver; its determination is subject to limited judicial review.<sup>58</sup> The FDIC has the power to repudiate or perform contracts entered into by the failed bank;<sup>59</sup> the bankruptcy trustee can reject or assume only contracts that are executory.<sup>60</sup> Litigation against the failed bank is not automatically stayed while the bank's failure is being resolved. The FDIC instead must timely request a court to enjoin litigation,<sup>61</sup> and courts disagree as to whether they must comply with the

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<sup>56</sup> Cite to pre- and post-bankruptcy retention rates; Henderson; S. Gilson.

<sup>57</sup> 11 U.S.C. § 502.

<sup>58</sup> 12 U.S.C. § 1821(d)(5)(E). Courts have only rarely disagreed with the FDIC's disallowance of a claim; for a rare instance see *Adagio Investment Holdings Ltd. v. FDIC*, 338 F. Supp.2d 71 (D.D.C. 2004).

<sup>59</sup> 12 U.S.C. § 1821(e)(1)..

<sup>60</sup> See 11 U.S.C. 365(a).

<sup>61</sup> 12 U.S.C. § 1821(d)(12)(A), (B).

request.<sup>62</sup> Applicable law does not otherwise prevent creditors from enforcing their property rights in the failed bank's assets.<sup>63</sup> Bankruptcy's automatic stay prevents the enforcement of property interests (such as security interests) in the assets of the debtor.<sup>64</sup> Finally, certain payments made by non-bank firms to their creditors are recoverable by the firms' trustees as preferences.<sup>65</sup> Depositors are creditors of their depository banks. However, withdrawals by depositors before the bank fails are not recoverable by the FDIC as preferences. The FDIC's power to avoid fraudulent transfers by the failed bank is more limited than the comparable power given to the bankruptcy trustee. Unlike the trustee's power,<sup>66</sup> the FDIC avoidance power requires actual fraud;<sup>67</sup> constructive fraud is insufficient. These are important difference between bank and bankruptcy insolvency rules. However, we argue in this Section that the most critical differences are the allocation of control over the resolution process and the distribution of losses among claimants

Somewhat different priority rules order claims against banks and non-banks. Regardless of whether the firm is a bank or non-bank, secured claims have first priority with respect to their collateral,<sup>68</sup> administrative expenses should be paid before unsecured creditors,<sup>69</sup> and subordinated debt and equity should receive nothing unless will receive nothing unless general unsecured creditors are paid in full. The priority rules differ, however, in the extent by which they distinguish between unsecured creditors. Bankruptcy does grant some unsecured creditors priority over others; for example, workers and customers are given limited priority over general claimants.<sup>70</sup> However, in large corporate

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<sup>62</sup> Cite divided case law.

<sup>63</sup> FDIC Advisory Opinion: Self-Help Liquidation of Collateral by Second Claimants in Insured Depository Receiverships (Dec. 15, 1989), FDIC 89-49.

<sup>64</sup> 11 U.S.C. § 362.

<sup>65</sup> *Id.* at § 547.

<sup>66</sup> *Id.* at § 548.

<sup>67</sup> Cite

<sup>68</sup> See 12 U.S.C. § 1821(11)(A) ; 11 U.S.C. § 725.

<sup>69</sup> See 12 U.S.C. § 1821(d)(11)(A)(i); 11 U.S.C. § 507(a)(2).

<sup>70</sup> 11 U.S.C. § 507(a)(4), (7)..

bankruptcies these priority claims do not typically account for a substantial portion of the total claims.<sup>71</sup> By contrast, banking law grants priority to domestic deposits over foreign deposits and general claims.<sup>72</sup> The FDIC insures domestic deposits up to an amount that varies over time, currently \$250,000,<sup>73</sup> and becomes subrogated to the claims of these creditors.

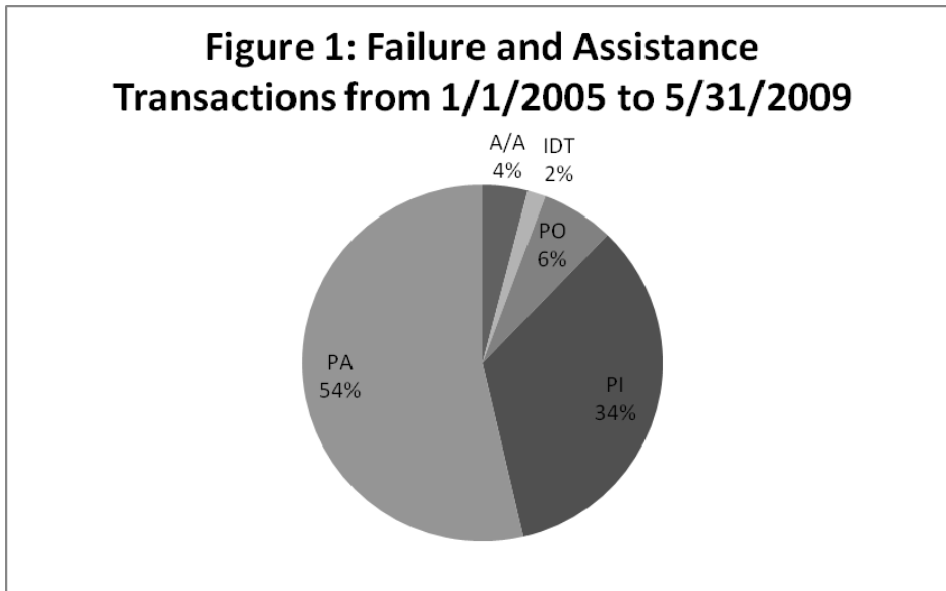


Figure 1 presents the FDIC’s categorization of how they dealt with troubled banks between 1995 and 2009. The FDIC can provide assistance without closing the bank (the FDIC calls these “Assistance Transactions” or “A/A”).<sup>74</sup> This includes purchasing nonvoting securities in the bank or assuming some of its liabilities.<sup>75</sup> Its purpose is to reinforce the capital of a troubled bank, making the bank more

<sup>71</sup> Cite. Bankrupt debtors do, however, sometimes repay “critical vendors” at the outset of the case even though other creditors will not be repaid in full. However, the authority to do so is unclear; see *In re Kmart Corp.*, 359 F.3d 866 (7<sup>th</sup> Cir. 2004).

<sup>72</sup> See 12 U.S.C. § 1821(d)(A)(ii); 12 U.S.C. § 1813(l) (“deposit”).

<sup>73</sup> See 12 U.S.C. § 1821(a)(1)(A). The insured limit has been raised temporarily to \$250,000; see . The insurance limit applies to the depositor, not the deposit.

<sup>74</sup> See 12 U.S.C. § 1823©(1), (3). Another open bank transaction is a reprivatization in which management takes over the bank and sells it with or without the assistance of the FDIC. See 12 U.S.C. § 1821(d)(16)(E).

<http://www2.fdic.gov/hsob/help.asp#BF1TT>. We do not discuss this transaction as it has not been used since 1989 and has been used just three times since 1934.

<sup>75</sup> See 12 USC § 1821(a)(3), (c)(5).

attractive to investors, and avoid having put the bank through the resolution process. Assistance transactions are rare, however. The only assistance transactions that occurred between 1995 and 2009 were the FDIC's assistance to the five bank subsidiaries of Citigroup.<sup>76</sup> The FDIC and the U.S. Treasury guaranteed \$306 billion of loans and securities held by these banks. Under a loss sharing arrangement both agreed to bear part of the banks' losses on these assets above 29 billion, up to stipulated amounts. The arrangement also gave the FDIC and Treasury preferred shares in Citicorp's banks.<sup>77</sup>

If the FDIC decides to close a failed bank it has several options. It can simply pay the insured depositors what they are owed (a "pay-out" or PO) or transfer the insured deposits to another bank (an "insured deposit transfer" or IDT). In both cases the FDIC liquidates the assets of the bank, and distributes the proceeds in accordance with the priority structure. Like open-bank assistance, these choices of resolution are rare, occurring only about eight percent (6% PO and 2% IDT) of the time since 1995.

In eighty-eight percent of cases the FDIC finds a bank that is willing to assume some or all of the failed bank's liabilities and purchase some or all of the failed bank's assets. In a significant portion of the cases (34%), the acquirer assumes only the insured liabilities (a purchase and assumption of insured deposits, or "PI"). However, most of the time (54%), the acquirer assumes some of the uninsured deposits as well (a purchase and assumption agreement or "PA"). These transactions also vary in the nature of the assets acquired. The standard purchase and acquisition contract grants the acquirer the option to purchase the physical assets of the bank (the offices, furniture, etc.),<sup>78</sup> but on average these assets account for only about 2.3% of total assets; the primary assets of the bank are its cash, loans and

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<sup>76</sup> See Figure 2. In generating Figure 2 we calculate each bank as a separate transaction even if the banks are part of a related family. For example, the assistance that the FDIC provided to Citigroup and its affiliates counted as five transactions because there were five banks.

<sup>77</sup> See Summary of Terms, Citicorp arrangement (11/23/2008) [online through spreadsheet data]

<sup>78</sup> Samples of purchase and assumption agreements can be found on the FDIC's web page, [www.fdic.gov](http://www.fdic.gov).

securities<sup>79</sup> In most (51%) cases the acquirer will acquire less than one-quarter of the assets of the failed bank;<sup>80</sup> the remaining assets are then sold by the FDIC in the ensuing months or even years.<sup>81</sup> Even when the acquirer does acquire the majority of the assets of the failed bank, the FDIC will often enter into a loss-sharing agreement so that it retains much of the risk of a decline in value. Of the twenty-nine insolvencies in which the acquirer purchased more than three-quarters of the firm's assets, the FDIC entered loss-sharing agreements in eighteen of the transactions;<sup>82</sup> the FDIC entered into just one loss-sharing transaction in the sixty-nine transactions in which the acquirer took less than three-quarters of the failed bank's assets.

Since 1991 the FDIC has been required choose the resolution method that imposes the least cost on the insurance fund<sup>83</sup> unless it determines that doing so is necessary to avert systemic risk. However, in order to invoke this exception to the least cost rule it must obtain the approval of the Chairman of the Federal Reserve, the Treasury Secretary; and they must consult with the President.<sup>84</sup> This exception has been invoked just once in the last decade – in order to provide assistance to Citigroup's bank subsidiaries. Prior to the adoption of the least cost standard, the FDIC used standards that allowed them to consider, among other things, the impact of a bank closure on a community.<sup>85</sup> Congress worried that the FDIC was too willing to consider these other factors and too willing to pay an acquiring bank to assume all of the liabilities of the failed firm, not just the insured liabilities. The effect of such payment payments was to use the federal deposit insurance fund to subsidize payments to

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<sup>79</sup> See Frederick S. Mishkin, *The Economics of Money, Banking and Financial Markets* (7<sup>th</sup> ed. 2006) (in 2004 8 percent of total commercial bank assets were "other assets," which include physical capital).

<sup>80</sup> In about 51% of the Purchase and Assumption (PA, PI and P&A) transactions for which the FDIC provided data on the assets acquired the acquiring bank purchased less than 25% of the failed bank's assets. In another 12% of these transactions the acquirer purchased between 25% and 50% 20% of the assets. The remaining transactions were between 50% and 75% (7% of transactions) and 75% and 100% (30% of transactions).

<sup>81</sup> See *supra* note 13, and accompanying text.

<sup>82</sup> This ratio rises to 16 of 19 transactions if we restrict our sample to 2008 to 2009.

<sup>83</sup> See 12 U.S.C. § 1823©(4)A).

<sup>84</sup> See 12 U.S.C. § 1823©(4)(G).

<sup>85</sup> See William R. Ostermiller & Mike Spaid, *Overview of the Resolution Process, in The FDIC and RTC Experience: Managing the Crisis* 55, 60 (1998) .

uninsured depositors and other creditors because the FDIC typically would have to pay an acquiring bank more to assume all of a failed bank's deposits than assume only its insured deposits. Accordingly, some observers believed that resolutions involving the assumption of all deposits would become the exception rather than the norm as they would not satisfy the least cost requirement.<sup>86</sup> Data on the form of resolution used by the FDIC between 1995 and 2009 clearly show that this has not been the case as PA transactions outnumber PI transactions by a factor of about two to one.<sup>87</sup>

Some of the similarities and differences between a bank resolution and a bankruptcy that utilizes section 363 should be apparent. The two processes are similar in that the core assets or goodwill of the failed entity are quickly transferred to an acquirer. Assets not transferred are retained for months or even years before being liquidated and creditors paid in accordance with the relevant priority rules.<sup>88</sup> They differ in three fundamental ways. First, the initial stage of the bank resolution process is much faster than even the quickest bankruptcy. Chrysler and General Motors were notable because the sales were completed in a matter of weeks, and the fastest 363 sales take more than a week.<sup>89</sup> In every completed purchase and assumption transaction, the FDIC completed the sale of the failed bank simultaneously with its seizure. In many cases the failed bank's offices that were seized at the close of business on a Friday reopened as part of the acquirer on Monday.<sup>90</sup>

Second, the standards for determining the method of resolutions are not the same.

Surprisingly, the Bankruptcy Code does not provide the judge with an explicit standard for approving

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<sup>86</sup> See, e.g., Swire, cited in Skeel.

<sup>87</sup> See *supra* Figure 1. The results do not change materially if we expand our sample to include all transactions from 2002 through 2009. During this period there were 125 PI transactions and 250 PA or P&A transactions.

<sup>88</sup> Lehman Brothers Holdings, Inc.'s bankruptcy shows the same pattern. The largest bankruptcy in U.S. history, Lehman's North American investment banking unit and headquarters was sold in a 363 sale within a week of its bankruptcy filing. Other core units were sold within weeks later. Still other assets were auctioned approximately three months after the filing. See Lehman's Collapse: A Timeline, The Deal, September 26, 2009, <http://www.thedeal.com/dealscape/2009/09>.

<sup>89</sup> See LoPucki, *Courting Failure*, Table at 171-72; also his post-2003 data on 363 sale times.

<sup>90</sup> Cite.

sales outside of the ordinary course of business.<sup>91</sup> The standard has been left to courts, which typically require the sales proponent to articulate a “sound business reason” for the sale.<sup>92</sup> Many courts and commentators believe that the judge should approve a transaction if, and only if, it increases the aggregate return of all parties with legal claims against the failed entity.<sup>93</sup> Other commentators disagree; they believe that the court should also consider the interests of other stakeholders who lack a legal claim such as workers or the local community.<sup>94</sup> Congress explicitly rejected this broader “stakeholder” standard in the context of bank insolvencies when its own money was on the line. It did, however, provide a possible exception in the case of systemic risk, but this exception requires an acknowledgement of those who face far more political accountability than a bankruptcy judge.<sup>95</sup> Significantly, this exception has only been invoked once, to preserve a group of banks owned by Citigroup.<sup>96</sup>

The third difference is the most significant. While control of the bankruptcy process is divided amongst all of the claimants, control over a bank receivership is concentrated in the FDIC. Bankruptcy provides all claimants with the opportunity to vote on the plan and to at least object to a sale outside of the ordinary course of business. When objecting to the sale, claimants can, and do, argue that the sale of the assets would yield more if the assets had been marketed in another manner or if an alternative buyer had been chosen.<sup>97</sup> If the judge believes that the dissenters have the better of the argument, she can enjoin the sale. By contrast, claimants on the assets of the failed bank have neither the right to vote on the sale of the key assets of the bank nor the ability to seek an injunction from a court. They can, and

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<sup>91</sup> 363.

<sup>92</sup> Lionel.

<sup>93</sup> See, e.g., Douglas Baird, *Loss Distribution, Forum Shopping, and Bankruptcy: A Reply to Warren*, 54 U. Chi. L. Rev. 815 (1987).

<sup>94</sup> See, e.g., Elizabeth Warren, *Bankruptcy Policy*, 54 U. Chi. L. Rev. 775 (1987).

<sup>95</sup> See *supra* notes [ ], and accompanying text.

<sup>96</sup> Cite.

<sup>97</sup> Provide example.

sometimes do, seek damages if they believe that the FDIC made poor decisions. However, the law only entitles them to the difference between what they received and the amount that they would have received in liquidation; they have no entitlement to any going concern value of the bank.

## **II. The Case for FDIC Control of Bank Insolvencies**

We argue that the key difference between a bank receivership and a bankruptcy proceeding is the concentration of control in a single decision maker – the FDIC. The FDIC is not a neutral arbitrator, and the concentration of control in its hands can impose costs if it acts against the interests of other creditors.<sup>98</sup> The literature offers two plausible justifications for this concentration of control. First, it allows for much greater speed and secrecy, and this speed and secrecy could yield benefits in banking. Second, concentration of control is appropriate to the extent that the FDIC is the largest creditor and will wish to maximize the value of the assets of the firm. We find the first justification unconvincing. However, if we recast the second justification to say that the FDIC is the residual claimant on the assets of most failed banks, it provides a strong rationale for FDIC control

### **A. The Benefits of Speed and Secrecy**

Numerous commentators ask whether banking regulators act with sufficient speed when seizing failing institutions.<sup>99</sup> Banks are highly leveraged, much more so than non-financial firms.<sup>100</sup> This high leverage means that relatively small shocks can quickly render the firm insolvent. The relatively liquid nature of the bank's assets means that the moral hazard created by insolvency or near-insolvency can be severe. Banks insolvent or close to insolvent can easily deploy their assets quickly to increase risk

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<sup>98</sup> Writing just after the bank crises of 1930-1933, Cyril Upham and Edwin Lamke worried that the recently created FDIC would favor its own interests over those of other creditors. They concluded that "...since [the FDIC] is a quasi-governmental body, it may be expected to administer assets fairly with respect to the rights of all depositors." Cyril B. Upham & Edwin Lamke, *Closed and Distressed Banks: A Study in Public Administration* 58 (1934).

<sup>99</sup> See, e.g., David Skeel, *The Law and Finance of Bank and Insurance Insolvency Regulation*, 76 *Texas L. Rev.* 723 (1998).

<sup>100</sup> Banks have a debt-equity ratio of about 9.1. Non-bank firms in different industries tend to have much lower leverage ratios. The following are median debt-equity ratios for select industries in 2004-5: Agriculture (dairy cattle and milk production): 2.3; manufacturing (plastics): 1.4; mining (sand and gravel): 1.4; and transportation (freight trucking): 2.6. See *Annual Statement Studies, Financial Ratio Benchmarks 2008-2009* (2008).

and exploit the option value of equity in a nearly insolvent firm. The dispersion of depositors makes coordination difficult, and thus initiation rules that differ from those that apply in bankruptcy may be justified. This paper does not, however, address the speed with which the regulator initiates the bank resolution process as the bank nears insolvency. Rather, it asks whether there are significant benefits from speed in resolving a failed bank once a procedure has been initiated. We are skeptical of the possible benefits of speed: confidence in the banking system and preserving the funds of the FDIC. Speed does not justify giving the FDIC control over the resolution process.

Speed provides two closely related benefits: liquidity and confidence in the banking system. Speed gives depositors uninterrupted access to their deposit balances, preserving liquidity.<sup>101</sup> The assurance of continued liquidity of deposits in turn increases depositors' confidence in the banking system and prevents series of bank runs that could pose a risk to the entire financial system. Although these benefits may be substantial, they do not require FDIC control over the resolution process.

In resolving a failed bank the resolving authority must dispose of the bank's assets and distribute the proceeds to the bank's creditors. These tasks are distinct from the FDIC's duty to honor its commitment to the insured depositors. The FDI Act requires the FDIC to reimburse insured depositors from the Deposit Insurance Fund ("DIF" or "insurance fund")<sup>102</sup> to the insured limit.<sup>103</sup> Reimbursement

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<sup>101</sup> See FDIC, *The First Fifty Years: A History of the FDIC 1933-1983* 83 (1984) ("there were also conflicting concerns that depositors had to wait too long to recover their funds..."). One can question the importance of this liquidity. Depositors can obtain liquid short-term funds by using credit cards or investing in money market funds offered by mutual funds. They do not need the liquidity provided by demand deposits; alternative products offering it are available. See Daniel R. Fischel, Andrew M. Rosenfield & Robert S. Stillman, *The Regulation of Banks and Bank Holding Companies*, 73 Va. L. Rev. 301, 318 (1987). For the rise of financial products issued by non-banks that are functionally similar to demand deposits, see Jonathan Macey & Geoffrey Miller, *Nondeposits and the Future of Banking Regulation*, 91 Mich. L. Rev. 33 (1992).

<sup>102</sup> For the history of the Federal Deposit Insurance Act, see Calomiris & White, in Goldin & Libsap (eds.); for FDIC practice of allowing prompt access, see Kaufman & Seelig, at 32. For the FDIC's prompt payment of insured deposits when conducting a direct payoff transaction, see Kaufman, *Depositor Liability*, at 245. The United States is one of the few countries that gives depositors immediate access to insured deposits; see Kaufman & Seelig, at 32-33, 36 (Table 1); Kaufman, *Using Efficient Bank Insolvency Resolution to Solve the Deposit Insurance Problem*, 8 J. Bank Reg. 40, 46 (2006) (FDIC usually pays insured deposits on close of business day after seizure). For the

of insured depositors does not therefore depend on when of whether the failed bank's assets are liquidated, or the liquidation value of those assets. Speedy payment of insured depositors is necessary to preserve the liquidity of their deposits. However, speed in liquidating the failed bank's assets is unnecessary to do so. As long as depositors have uninterrupted access to their insured deposits, they should be indifferent as to the fate of their depository bank or its assets. Insured depositors therefore have no reason to run on their failed banks. For the same reason, the failure of unhealthy banks cannot justifiably induce insured depositors of healthy banks run on their banks as long as they believe that the insurance fund is solvent and that they would be quickly reimbursed in the event of bank failure.

As insurer of the deposits, the FDIC must be subrogated to their rights so that it can be reimbursed for the expense of making depositors whole. However, the liquidation of the assets need not occur concurrently with the payment of depositors. In fact, the FDIC often retains a sizable portion of the failed bank's assets, by choice or necessity, and liquidates them over time.<sup>104</sup> The FDIC sometimes does transfer assets to the acquiring bank as partial compensation for the acquirer's assumption of insured deposits and other liabilities. However, as noted above, the acquirer usually receives less than a quarter of the failed bank's assets,<sup>105</sup> and the FDIC uses cash payments to make up the difference between the deposits assumed and the assets received. In other words, the FDIC must have a claim against the assets of a failed bank, but it need not control the disposition of these assets.

FDIC control of assets might be justified if it reduced the size of the FDIC's claim against the failed bank. For instance, consumers value liquidity and the convenience provided by a bank account. Accordingly, the FDIC can usually find an acquirer willing to assume the insured deposits for less than

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timing in which select countries with deposit insurance pay insured depositors, see Gillian G.H. Garcia, *Deposit Insurance: Actual and Good Practices* 83-84 (Table A7) (2000).

<sup>103</sup> 12 U.S.C. 1821(a)(5).

<sup>104</sup> See Division of Resolution and Receiverships, *Asset Disposition Manual*, Ch. 2 (at 22) (1999) (; *supra* text accompanying notes 83-87.

<sup>105</sup> See *supra* notes 80, and accompanying text.

the amount that it would cost the FDIC to repay the insured depositors in full.<sup>106</sup> The FDIC's control of the physical assets of the failed bank would be appropriate if consumer depositors were more likely to continue their banking relationship with the acquiring bank if the acquiring bank purchases some of these assets. In this case acquirers of consumer deposits would typically prefer to purchase the failed bank's physical assets. But the factual assumption is wrong: acquirers do not typically pick them up. Instead, the standard purchase and assumption agreement merely gives the acquirer an option to purchase them.<sup>107</sup> This is not hard to explain. Because acquiring banks have their own branches and other deposit facilities, they (and their depositors) do not usually need the failed bank's physical assets. Acquirers can preserve a consumer depositor's preexisting banking relationship with her failed bank, if at all, without buying the failed bank's furniture or equipment. In fact, throughout the 1980s the assets sold as a part of the basic purchase and assumption agreement were limited to cash and cash equivalents.<sup>108</sup> Acquirers are unlikely to pay more for deposits merely because the FDIC controls a failed bank's assets. In any case, physical assets account for a tiny fraction (an average of 2.29%) of the assets of the failed banks.

It might be thought that uninsured depositors and subordinate creditors prefer a quick liquidation of a failed bank's assets. Their willingness to invest in banks would be jeopardized by delays in the recoupment of their investments. The FDIC's control of the resolution process speeds resolution, increasing the liquidation value of their claims. This argument is unconvincing. First, most uninsured depositors and other creditors withdraw their deposits and are paid in full before a bank fails and thus

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<sup>106</sup> The acquirer typically "pays" a premium for the deposits.

<sup>107</sup> For a standard purchase option, see Purchase and Assumption Agreement between FDIC and Wilshire State Bank, June 26, 2009, sec. 4.6(a) (p. 17).

<sup>108</sup> See Eric Bloecher & John F. Bovenzi, Evolution of the FDIC's Resolution Practices, in *The FDIC and RTC Experience 1980-1994: Managing the Crisis* 65, 67 (1998).

do not suffer the consequences of delay.<sup>109</sup> The behavior of foreign depositors in Continental Illinois Bank and Trust's failure illustrates the behavior. Deposits in foreign offices are not "deposits" under the FDI Act, and they are therefore uninsured and junior in priority to deposits in domestic offices. Foreign depositors exited the bank in droves before it failed.<sup>110</sup> Most uninsured depositors therefore are unconcerned about the liquidation value of their claims against a failed bank because they will not have claims when the bank fails.

Uninsured depositors and other creditors who remain and are concerned about a bank's continued solvency can and do take security interests in the bank's assets.<sup>111</sup> Applicable law sometimes requires certain depositors and lenders to do so in any case.<sup>112</sup> Collateral makes uninsured secured creditors generally indifferent to the speed at which the failed bank is resolved. To the extent that they are concerned, there is no reason why they must wait until all of the assets are sold. Uninsured depositors could sell their claims to those who are more patient; by definition uninsured deposits are for substantial amounts. Alternatively, the resolution process could allow partial compensation of the uninsured depositors in advance of the completion of the process. In fact, in the past the FDIC has made advance payments to uninsured depositors,<sup>113</sup> although it has since discontinued the practice.<sup>114</sup> There is even less reason to rush on behalf of the non-depositors. As discussed more thoroughly in Section II.B.2 below, failed bank almost always have insufficient assets to repay the FDIC and uninsured depositors in full. Because they are junior to depositors in priority, non-depositors receive nothing. They therefore do not care about the speed at which a failed bank is resolved.

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<sup>109</sup> See Bradley & Shibut, at 20; Marino and Bennett, at 28-30; John S. Jordon, Depositor Discipline at Failing Banks, *New England Econ. Rev.* 15 (March/April 2000) (70 percent of uninsured deposits in sample of failed banks withdrawn within two years of failure). For evidence that uninsured depositors respond to the financial health of banks, see A.M. Davenport & K.M. McDill, 30 *J. Fin. Serv. Res.* 93 (2006); L.G. Goldberg et al., 36 *Quart. Rev. Econ. & Fin.* 311 (1996).

<sup>110</sup> Cite.

<sup>111</sup> Support.

<sup>112</sup> FHLB advances require collateralization; so too do deposits of public funds in most jurisdictions.

<sup>113</sup> Cite examples.

<sup>114</sup> Support.

Perhaps the greatest weakness with the speed of liquidation argument is that the FDIC does not, in fact, quickly liquidate the assets of the failed bank. The FDIC's own resolution manual proposes a four-year liquidation schedule,<sup>115</sup> and the average time elapsed between the seizure of failed banks between 2002 and 2003 and the date of the last distribution to depositors was forty-seven months. In only one transaction was the final payment made in less than one year (ten months).

### **B. The FDIC as Residual Claimant**

In some bankruptcies, such as single-asset real estate cases, one creditor is typically owed much more than any other. While bankruptcy does apply some special rules in the single-asset real estate context,<sup>116</sup> it does not assign total control over the process to the lender holding the first mortgage. It does not do so because of the fear that the lender will sell the real estate too quickly and at the expense of junior claimants.

The law can, however, entrust the largest creditor with control over the process if it is also the residual claimant; if it receives all of the gains associated with a good decision and all of the losses associated with a bad decision. A creditor is the residual claimant if two conditions are satisfied: i) those who have equal priority with the creditor have negligible claims or the creditor is fully compensated for the costs it incurs in maximizing the value of assets, and ii) regardless of the decisions made by the creditor, those senior to the creditor in priority will be paid in full and those junior to the creditor will not be paid anything. In most insolvencies there is no claimant who fully meets each criteria and the law must allocate control among the parties who bear at least some of the risk associated with the decision.

Consider what happens when the decision-maker is not the residual claimant. Take the first condition. Assume that a firm has two creditors of equal priority and each are owed \$50. Assume that the firm's assets can be sold for \$80 if the decision-maker incurs a cost of \$15. If this cost is not

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<sup>115</sup> See *supra* note [ ]

<sup>116</sup> See, e.g., 11 U.S.C. § 363(d)(3).

incurred, the firm can only be sold for \$60. It is socially efficient for the decision-maker to incur this cost, because the sale nets \$5 more if the decision maker incurs the cost ( $\$80 - \$15 = \$65$ ) than if he does not incur it ( $\$60 - 0 = \$60$ ). However, she will not incur the cost unless she is reimbursed. If the decision maker does not incur the cost, she will receive \$30 (half of \$60). If she incurs it, she will receive a net of \$25 ( $\$40 - \$15$ ). This problem can be eliminated by allowing the decision-maker to recoup her administrative costs before dividing the proceeds with the other creditor, but this can create its own problems. If the decision-maker derives some private benefit from these expenses (perhaps she can overstate her expenses), she can use this priority to divert value from the other creditor. However, her ability to do so declines as the proportion of the debt owed to the decision-maker increases.

Now consider the second assumption. Assume that a firm again has two creditors that are owed \$50, but now also assume that one is senior to the other. Suppose the decision-maker has three options. If she adopts plan A, there is a ninety percent chance that the firm's assets will be sold for a present value of \$70 and a ten percent chance that they will be sold for a present value of \$20. If she adopts Plan B, there is a fifty percent chance that the firm's assets will be sold for a present value of \$90 and a fifty percent chance that they will be sold for a present value of \$20. Plan C would be to sell the firm's assets immediately for \$60. Plan A is clearly the socially optimal choice as its expected present value of \$65 exceeds that of Plan B (\$55) and Plan C (\$60). However, if the decision-maker holds the junior claim, she will prefer Plan B as this will provide her with an expected payment of \$20 which is more than what she will expect to receive from Plan A (\$18) or Plan C (\$10). If the decision-maker holds the senior claim, she still does not have the right incentives. The senior claimant will prefer Plan C as this provides her with an expected payment of \$50 which is more than what she would receive from Plan A (\$47) or Plan B (\$35).<sup>117</sup> There is no true residual claimant in this hypothetical. Note that this

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<sup>117</sup> These examples ignore the possibility of Coaseian bargaining. For example, the junior claimant in this scenario could simply repay the senior claim in full and thereby obtain the right to make the decisions.

problem is not inevitable in the presence of senior and junior claimants; it disappears if we change the value of the claims. Assume, for example, that the senior claim is owed just \$20 and the junior claim is owed \$80. The senior claim will be paid in full regardless of the plan chosen. The junior claim bears all of the risk (it is the residual claimant) and would choose the plan (Plan A) that maximizes social welfare. Similarly, if we assume that the senior claimant is owed \$90 and that the junior claimant is owed \$10, then the junior claimant will receive nothing regardless of the plan adopted. The senior claimant bears all of the risk and would make the choice that maximizes social welfare.

Allocating decision making authority to the residual claimant is generally defensible. However, to supply ex ante efficient incentives, an exception may occasionally justify giving decisions to a junior claimant. The residual claimant has an incentive to make ex post socially optimal choices, because it benefits from doing so. But it might be insufficiently motivated to make decisions at earlier stages that avoid risk financial risk later on. Additional motivation is provided by taking decisions away from the residual claimant and giving them to junior claimants when the firm is in financial distress. Because junior claimants lack the incentive to make decisions to benefit residual claimants, the shift in decision making potentially harms residual claimants' interests. For this reason, residual claimants have a further incentive to remain in control of the firm's fortunes. To remain in control, they must make decisions that avoid putting the firm into financial distress. An ex post inefficient allocation of decision making is required to give residual claimants ex ante efficient incentives.

Assume, for example, that the senior secured creditors are the residual claimant of a failed firm and that allocating decision-making rights to unsecured creditors would result in a social loss (and a loss to the senior secured claimant) of \$30. While this creates an ex post cost, it may provide ex ante incentives for the senior secured lender to curb excessive risk taking by the debtor. Assume that one year before insolvency the firm could have sold its assets for \$100 and that the only debt was \$50 owed to the senior secured creditor. Finally, assume that the debtor also had the choice of engaging in a

project that, if successful, would have been worth \$200. However, the project would fail half of the time, and if it did so the firm's assets would be worth just \$50 and the firm would incur tort claims of \$100. Society would not want the firm to undertake this project. The expected value of project is \$75  $((.5 \times \$200) + (.5 \times -\$50) = \$75)$ , while liquidation of the firm would net \$50 for the unsecured creditors  $(\$100 - \$50)$ . However, the project would make the shareholders better off, on average, than if the firm were liquidated. If the firm were liquidated, shareholders receive nothing. For their part, the senior secured lender would have no reason to stop the shareholders from pursuing the project because its priority guarantees it payment in full (\$50) whether the project is undertaken or the firm liquidated. Note that the lender would oppose the project if either it shared control (and thus \$30 was wasted) or if it were subordinated to the tort victims. Imposing the ex post cost is a way to avoid the inefficiencies caused by the tort claimant's lack of priority and ability to control the debtor's investment decisions. The exception that separates decision making and residual claimants is inapplicable in bank failures. As we show below, there are very few fixed claimants that are junior to the FDIC; general creditors and subordinated creditors do not account for a meaningful component of the capital structure of failed banks.<sup>118</sup>

Two pieces of evidence that suggest that the FDIC is truly the residual claimant in the overwhelming majority of bank insolvencies. First, in Sections B.1 we show that the FDIC accounts for the vast majority of claims on the assets of both healthy and failed banks. The FDIC's status as the holder of the overwhelming majority of the debt does not ensure that it will be the residual claimant. Whether the majority creditor is a residual claimant depends on the value of the assets available for distribution to creditors. However, the greater the share of debt held by a creditor and the greater the value of the debt relative to the equity, the greater is the chance that the majority creditor will be the residual claimant too. For example, consider a bank with \$10 in senior secured claims, \$80 in insured

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<sup>118</sup> See *infra* Table 1.

deposits, and \$10 in general unsecured claims. Because the secured claims will have priority over the deposits and the deposits will have priority over the general claims, the FDIC will be the residual claimant as long as the plausible range of asset values is between \$10 and \$90. If assets have a \$90 value, the FDIC (subrogated to the rights of insured depositors) is repaid in full ( $\$90 - \$10 = \$80$ ). The FDIC receives nothing if assets have a value of \$10 or less ( $\$10 - \$10 = \$0$ ). The FDIC is repaid in part if asset values are between \$11 ( $\$11 - \$10 = \$1$ ) and \$89 ( $\$89 - \$10 = \$79$ ).

Second, we examine the actual payouts from failed banks in Section B.2. We show three patterns in these payouts: i) the most important secured creditors have recovered in full in every bank failure to date; ii) the FDIC suffered losses in the vast majority of bank failures; and iii) general creditors almost never receive any dividends. As a result, it is the FDIC that would enjoy the gains from a distribution method that yields greater proceeds.

### 1. The FDIC as the Largest Creditor

Most banks are part of holding company structures. However, with the possible exception of the very largest banks, discussed below, the capital structures of the actual banks are extremely simple. Domestic deposits account for the overwhelming majority of bank liabilities, and almost all of these domestic deposits are insured. These banks have comparatively little unsecured debt, and almost no subordinated debt. This is true whether we examine failed banks or banks more generally.

Table 1: Liability Structure of Failed Banks: 1995-2009

	Less than \$100 million	\$100 million to \$500 million	\$500 million to \$1 billion	\$1 billion to \$5 billion	More than \$5 billion
Banks	44	45	10	15	5
% Deposits (S.D.)	96.25% (4.61%)	92.85% (7.33%)	89.13% (5.38%)	86.51% (10.36%)	70.39% (7.73%)
% Insured	89.81%	80.75%	66.03%	78.79%	84.35%

(S.D.)	(10.47%)	(18.13%)	(23.37)	(17.84)	(6.15)
% Foreign Deposits	0.00%	0.35%	0.00%	0.44%	0.00%
(S.D.)	(0.00%)	(1.62%)	(0.00%)	(0.00%)	(0.00%)
%FHLB+Repurchase	1.95%	5.14%	9.31%	11.11%	26.22%
(S.D.)	(2.80%)	(7.11%)	(5.53%)	(11.20%)	(7.87%)
%Subordinated	0.07%	0.00%	0.15%	0.18%	0.62%
(S.D.)	(0.30%)	(0.00%)	(0.43%)	(0.38%)	(1.22%)
%"General" Claims	1.73%	2.01%	1.41%	2.20%	2.77%
(S.D.)	(2.59%)	(3.48%)	(1.32%)	(2.36%)	(4.00%)

Table 1 documents key characteristics of the liability structure of failed banks. For now we will ignore the very largest “mega-banks” – those with assets greater than, say, five billion dollars. In all other banks, deposits account for the overwhelming majority of liabilities. The proportion declines somewhat according to the size of bank, but remains high. Deposits constitute 96 percent of liabilities in failed bank with assets below \$100 million.<sup>119</sup> The percentages for banks with assets between \$100 and \$500 million, \$500 million and \$1 billion, and \$1 billion and \$5 billion are 93, 89, and 87 percent, respectively. Out of the 120 banks that failed between January 1, 1995 and June 1, 2009, only ten had deposits that constituted less than eighty percent of liabilities.<sup>120</sup> The predominance of deposit liabilities has not changed much during our sample; Table 1 would not change appreciably if we restricted our sample to banks that failed in 2008 or 2009.<sup>121</sup> Healthy banks have a similarly high percentage of

<sup>119</sup> We adjust the asset values of banks for inflation.

<sup>120</sup> The predominance of deposit liabilities has not changed much over time. Table x would not change materially if we focused only on banks that failed between 2008 and 2009.

<sup>121</sup> For example, deposits would account for [ ]% of liabilities for banks with less than \$100 million in assets, [ ]% for banks with . . .

deposits.<sup>122</sup> Banking law grants deposits in domestic branches priority over deposits in foreign branches. Except for the very largest banks, foreign deposits account for a negligible percentage of total deposits.<sup>123</sup>

The FDIC is only subrogated to the insured deposits, but Table 1 reveals that a strong majority of deposits are insured. The percentage of insured deposits at healthy banks is a little lower.<sup>124</sup> Table 1 presents data from the last Call Report issued before the bank's failure, and uninsured deposits are likely to decline further as the bank nears insolvency. If the resolution process is not yet complete, the FDIC does report the claims of uninsured depositors when the acquiring bank assumes only the insured deposits. In the sixteen transactions for which we could find data, uninsured depositors averaged just 4.75% of total deposits. Uninsured depositors typically either exit before a bank fails or convert their uninsured amounts to insured deposits. The bank replaces the exited funds with another funding source. For instance, a study of failed New England banks found that they lost about 70 percent of their uninsured deposits within two years of failure.<sup>125</sup> The banks, however, replaced these deposits with insured deposits. Such replacement allows the banks to retain the same source of funding while increasing the percentage of insured deposits. In addition, failed banks tend to overstate the amount of uninsured deposits, thereby understating insured deposits.<sup>126</sup> By contrast, healthy banks, which do not experience a run on uninsured deposits, retain higher percentages of uninsured deposits.

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<sup>122</sup> See FDIC Statistics on Depository Institutions Report (National banks), March 31, 2009 (deposits approximately 83 percent of liabilities for banks with assets up to \$100 million, 90 percent for banks with assets between \$100 million and \$1 billion, and 73 percent for banks with \$1 billion or more in assets). <http://www.2.fdic.gov/SDt/rpt-Financial.asp>

<sup>123</sup> Provide a quick fact.

<sup>124</sup> *Id.* (As of March 31, 2009, approximately 78 percent of deposits are insured at banks with up to \$100 million in assets, 71 percent at banks with between \$100 million and \$500 million in assets, and 59 percent at banks with more than \$1 billion in assets).

<sup>125</sup> See Jordon, *supra* note (New England Econ. Review 2000 article). For a finding that banks increase their proportion of insured deposits in response to a ratings downgrade, see Matthew T. Billet et al., *The Cost of Market Versus Regulatory Discipline in Banking*, 48 *J. Fin. Econ.* 245 (1998).

<sup>126</sup> See FDIC Staff Study, *An Evaluation of the Denominator of the Reserve Ratio 16* (February 12, 2007) (examination of some of failed banks show understatement in final Call Reports).

Uninsured domestic deposits are equal in priority to the insured claims to which the FDIC is subrogated. Other claims are either senior or junior to the FDIC, but these claims are rarely significant. Foreign deposits are junior to the FDIC's claims,<sup>127</sup> but (aside from the Mega-Banks discussed below) nearly all banks have either no or insignificant amounts of foreign deposits. Similarly, general claims rarely account for more than five percent of a bank's assets.<sup>128</sup>

The comparative absence of subordinated debt among failed banks deserves notice.<sup>129</sup> Subordinated debt represents only one percent of total liabilities among every category of bank, and is literally non-existent in failed banks with less than \$500 million in assets. The pattern is consistent with the issuance of subordinated debt by U.S. commercial banks generally. In the 1990s the percent of banks issuing subordinated debt declined for banks of all sizes except for very largest banks.<sup>130</sup> Subordinated debt was present on the balance sheets of almost all of the largest banks in 1998.<sup>131</sup> This trend continues. Only nine percent of banks sampled between 1996 and 2005 issued any subordinated debt, and nearly two-thirds of these banks were large banks with assets exceeding 1 billion dollars.<sup>132</sup> Thus, subordinated debt is as relatively rare in healthy banks as it is in failed banks.<sup>133</sup> The liability

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<sup>127</sup> See 12 U.S.C. § 1821(d)(11)(A); 12 U.S.C. § 1813(l).

<sup>128</sup> We estimate general claims as the sum of "Trading Liabilities," "Other borrowed liabilities" and "Other Liabilities" less "FHLB Advances".

<sup>129</sup> About eighty percent of U.S. banks and almost all banks with assets of at least 1 billion dollars. See Staff Study 172, Using Subordinated Debt as an Instrument of Market Discipline 26 (Table 4) (Federal Reserve System, December 1999). About ten percent of these holding companies issue subordinated debt with the issuers concentrated among the very largest holding companies. See Staff Study 172, Using Subordinated Debt as an Instrument of Market Discipline 26 (Table 4) (Federal Reserve System, December 1999). The percentage of bank holding companies issuing such debt has declined for every size bank holding company other than large companies (although the amounts have increased). *Id.* In any case, our story is about the capital structure of the bank, not the bank holding company. The FDIC resolves failed banks through receivership; bank holding companies file for bankruptcy.

<sup>130</sup> See Staff Study 172, Using Subordinated Debt as an Instrument of Market Discipline 26 (Table 4) (Federal Reserve System, December 1999).

<sup>131</sup> *Id.*

<sup>132</sup> See A. Sinan Cebenoyan & Fatma Cebenoyan, Subordinated Debt, Uninsured Deposits, and Market Discipline: Evidence from U.S. Bank Holding Companies 17 (July 2007).

<sup>133</sup> See Douglas D. Evanoff & Larry D. Wall, Subordinated Debt and Bank Capital Reform 13, 39 (Fed. Res. Bank of Chicago WP 2000-07, 2000).

structure of healthy banks is similar in these respects to that of failed banks.<sup>134</sup> Failed banks in all asset size categories show little debt owed to general creditors and almost no subordinated debt.

Secured claims are senior to the FDIC, and some domestic deposits are secured by the bank's securities or mortgages.<sup>135</sup> Federal Home Loan Bank advances are the most important type of secured liability for many banks.<sup>136</sup> These advances must be at least fully collateralized by securities.<sup>137</sup> Although many failed banks have not taken such advances, Federal Home Loan Bank advances are significant liabilities for banks which have taken them. Table 1 shows that Federal Home Loan liabilities rise with bank size from about 2 percent for the smallest banks to over 11 percent for banks between one and five billion and over twenty-six percent for banks over five billion. We note that the importance of FHLB loans may be due in part to the real estate boom of the first decade of the twenty-first century.

In sum, Table 1 shows that failed banks other than mega-banks have a comparatively simple liability structure. As banks near failure, most of their liabilities are domestic deposits, and the overwhelming majority of failed banks have no significant foreign deposits, general unsecured claims or subordinated debt. A few banks do have some Federal Home Loan Bank advances or other secured debt, but these secured claims rarely account for more than twenty-five percent of all liabilities. Some banks do have significant amounts of uninsured deposits (at least at the time of the last call report before failure), and these depositors will have a claim on the assets separate from the FDIC. However, the FDIC will share proceeds on a *pari-passu* basis with these creditors, and so they can generally trust

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<sup>134</sup> Cite random sample of banks within all asset size categories.

<sup>135</sup> State statute often requires deposits by states and political subdivision to be collateralized. See, e.g., . A random sample of failed banks by asset size reveals that these "preferred deposits" range between 0 and 3 percent of a bank's deposit liabilities. Such collateralization therefore represent a relatively unimportant sort of security interest.

<sup>136</sup> Cite telephone conversation with Timothy Critchfield at FDIC.

<sup>137</sup> See 12 U.S.C. § 1430(a)(3). Federal funds and repurchase agreements are also important type of secured liabilities.

the FDIC to maximize recovery as long as the FDIC is appropriately compensated for its expenses and is trying to minimize the loss to the insurance fund.

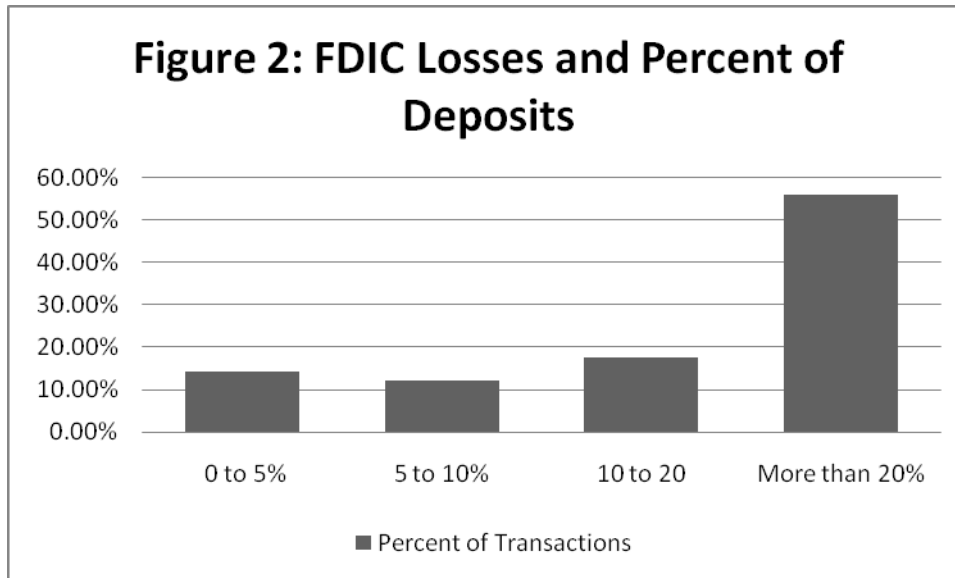
## **2. FDIC Losses on Failure**

Part 1 demonstrates that insured deposits account for the overwhelming majority of the liabilities of insolvent banks. Part 1 also demonstrates that most of the remaining liabilities will be senior to the FDIC's claim on the failed firm's assets (FHLB loans) or will share in the proceeds on a pari-passu basis (uninsured depositors). The senior secured liabilities should not disturb the FDIC's status as residual claimant because they are *always* paid in full; there has never been a default on an FHLB loan.<sup>138</sup> The uninsured deposits should not disturb the FDIC's status as residual claimant because most uninsured deposits will flee as the bank nears insolvency and the remaining will share in the proceeds on a pari-passu basis. The presence of a large amount of claims junior to the FDIC could distort the FDIC's incentives, but these claims (foreign deposits, general unsecured claims and subordinated debt) are practically non-existent in nearly all bank failures. Moreover, these claims rarely receive any payment. Of the fifty-one receiverships begun between 1995 and 2008 for which the FDIC reports the percentage distribution to general claimants, general claimants received nothing in forty-nine.<sup>139</sup>

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<sup>138</sup> See Mark J. Flannery & W. Scott Frame, The Federal Home Loan Bank System: The "Other" Housing GSE, 91 Fed. Res. Bank of Atlanta, Economic Review, 33, 39 (2006).

<sup>139</sup> General claimants received twenty-eight percent of their claims in the failure of Net First National Bank and one hundred percent of their claim in the failure of Dollar Savings Bank. The distribution to general creditors is only available for receiverships that are incomplete. It is therefore possible that general creditors could receive distributions in more of these receiverships.



Even if the FDIC were the sole creditor of the bank, it still would not be the residual creditor if the value of the assets exceeded the value of the bank’s liabilities. In theory, a bank with a solvent balance sheet could fail if its regulator mistakenly declared the bank insolvent and seized it or if a liquidity shock rendered the bank unable to meet short term obligations and unable to issue new shares to raise new funds. In reality, however, a failed bank’s assets almost never exceed its liabilities – the FDIC almost always loses significant amounts of money. As long as the FDIC is losing money, it has the proper incentive to maximize the amount recovered as the FDIC will receive each additional dollar raised.<sup>140</sup> Figure 2 shows the frequency with which FDIC losses (expressed as a percentage of deposits)<sup>141</sup> fall into various categories. Note that the FDIC’s loss rate is typically very high – more than half (56%) of bank failures losses exceed twenty-percent of total deposits. The loss rate is less than five percent in just fourteen percent of transactions.

<sup>140</sup> This is not entirely correct. The FDIC must share its recovery with uninsured domestic depositors. However, there are relatively few of these, *supra* note [\_\_\_], and the FDIC can first recover its expenses in recovery. As a result, it still has the correct incentives to maximize the value of the assets.

<sup>141</sup> The literature often presents FDIC losses as a percentage of bank assets. We choose instead to present them as a percentage of deposits because the FDIC does not insure the bank’s assets directly and therefore losses divided by deposits (or insured deposits) give a more accurate sense of the rate of loss. We use deposits instead of insured deposits because it is hard to estimate insured deposits.

### **III. Limits of the Case for FDIC Control**

Part II argues that the FDIC is likely the residual claim in nearly all bank failures. It concludes that the FDIC therefore should have the control of the resolution process bank insolvency law currently gives it. Part II's case for FDIC control depends on at least three assumptions that might not always hold. One assumption is the absence of agency costs within the FDIC. If the interests of the FDIC and its employees diverge systematically, the FDIC's control of the resolution process does not guarantee resolutions that maximize asset values. The second assumption concerns liability structure. If the liability structure of a bank differs from that of the vast majority of failed banks, the FDIC might not be the residual claimant of the bank. A third assumption concerns the need for control of the resolution process. Control is needed only if a distressed bank cannot feasibly recapitalize itself in advance, either through debt contracts or mandatory rules that alter the bank's capital structure on failure. If the bank can recapitalize itself, resolution of the bank's distress does not require the sale of its assets to a healthy bank or other action. In this case the FDIC's role can be limited to closing the bank. This Part describes these assumptions and the impact on the case for FDIC control when they do not hold. It concludes that FDIC control is justified in the typical bank failure.

#### **A. Agency Costs in Bank Resolutions**

Section II claims that the FDIC is the residual claimant and thus would maximize social value if it followed the law's command that it exercise its authority in a way that results in the least cost to the deposit insurance fund.<sup>142</sup> However, the FDIC does not (and cannot) actually exercise any authority. Its employees must act on its behalf, and these employees will have interests that diverge from those of the primary stakeholders in the FDIC - the member banks and the taxpayers. The employees' interests

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<sup>142</sup> See 12 U.S.C. 1823 ©(4)(A). "Public interest" here is understood broadly. The deposit insurance fund is funded by assessment against participating banks, not by tax revenues. However, bank resolutions that minimize costs to the deposit insurance fund make it unlikely that tax revenues will be used to subsidize failed banks. More generally, resolving failed banks maintains the integrity of the banking system. Both matters are concerns of "public interest."

likely include a desire for income, leisure and career advancement, in some combination.<sup>143</sup> Because FDIC employees' salaries are fixed, the outcome of a bank resolution has no effect on their income. It might also not affect any of their other interests. Accordingly, FDIC employees might act to serve their interests even at the expense of the FDIC's interest in resolving a failed bank. The divergence of the FDIC and its employees' interests creates agency costs.<sup>144</sup> Agency costs may prevent the FDIC's employees from making decisions that minimize the cost to the insurance fund and maximize social welfare. They might, for example, engage in too little marketing efforts and thereby sell the assets for less than they are worth. Alternatively, they might incur excessive costs in managing the disposition of assets.

Intra-organizational agency costs are not unique to the FDIC; large private organizations face these same costs. We might, however, expect private organizations to be better able to control these agency costs. The FDIC may be less able to design its employment contracts to align its employees' interests with its own,<sup>145</sup> and the FDIC may be subject to political pressure<sup>146</sup> or lobbying efforts on behalf of special interest groups. A number of scholars who have examined banking regulation prior to insolvency suggest that agency costs have resulted in lax supervision of the soundness of banks or thrifts.<sup>147</sup> As a remedy, they propose reforms (such as the increased use of subordinated debt) that would shift more risk to the private sector and thereby induce private sector actors to monitor the

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<sup>143</sup> Cf. Arnoud W.A. Boot & Anian V. Thakor, Self-Interested Bank Regulation, 83 *Amer. Econ. Rev.* 208 (1993) (model assumes that bank regulators maximize a combination of good supervisory reputation and social welfare).

<sup>144</sup> Agency costs are the sum of monitoring and bonding costs, and residual loss to the FDIC when its employees act on its behalf. Cf. Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 *J. Fin. Econ.* 305 (1976)..

<sup>145</sup> See Christopher James, *The Losses Realized in Bank Failures*, 46 *J. Fin.* 1223, 1224 (1991).

<sup>146</sup> See, e.g. Edward J. Kane, *Principal-Agent Problems in S&L Salvage*, 45 *J. Fin.* 755 (1990).

<sup>147</sup> See Edward J. Kane, *The Incentive Incompatibility of Government-Sponsored Deposit-Insurance Funds*, in *The Reform of Federal Deposit Insurance* 144 (J.R. Barth & R.D. Brumbaugh, Jr. eds. 1992); *The S&L Insurance Mess: How Did It Happen?* (1989); Asli Demirguc-Kunt, *Deposit-Insurance Failures: A Review of the Empirical Literature*, 25 *Econ. Rev.* 2 (1989).

debtor or at least provide more accurate measures of risk.<sup>148</sup> These arguments presume that the private organizations that assume this risk would be better able to solve the agency problems and therefore better able to monitor the debtor. We do not engage the debate over the relative merits of public versus private decision-making. If one believes that private sector actors are better able to monitor a bank's activity before insolvency, they may be better able to dispose of a bank's assets after it enters insolvency.

We do not, however, believe that these agency costs doom the argument for FDIC control. Most significantly, the argument takes the existing capital structure as given, and even if the FDIC is imperfect, it is hard to find other actors with better incentives. As noted above, the senior claimants (FHLB loans and other secured loans) and junior claimants (general creditors, subordinated debt holders and equity holders) obviously do not have the right incentives as the former are always paid in full and the latter will almost surely receive nothing. One could grant some decision-making power to the few uninsured depositors who have failed to get out before failure and perhaps have a judge mitigate disputes. However, this supervision imposes its own costs.

Decisions about the timing and terms of asset dispositions require discretion, whether the decision maker is the FDIC or another authority. Oversight of these decisions can eliminate some self-interested choices by the FDIC's employees, but perhaps at the expense of depositors' interests. After all, the depositors cannot effectively dispose of the assets themselves. For this reason, over a range of decisions there is a tradeoff between the authority to decide how to dispose of assets and agency costs. At the margin the optimal amount of agency costs in resolution therefore is positive. Courts and commentators in other contexts reach a similar conclusion. In corporate governance the business judgment rule protects the board of directors from liability for corporate decisions not infected by illegality or conflict of interest. The rule prevents a court from vetting a board's decision even when it

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<sup>148</sup> Cites.

harms shareholders' interests. By limiting judicial oversight, the rule enables directors sometimes to act carelessly. The rule's policy justification is that the quality of directorial decisions in the range of cases is worth the price.<sup>149</sup> The justification implicitly recognizes that defensible legal rules can create or allow agency costs. The observation applies equally to the FDIC's decisions about asset dispositions the resolution process. The FDIC's control of the resolution process therefore is not suspect simply because it creates agency costs in asset dispositions.

Although we lack direct measures of these agency costs, the literature does offer some related evidence. First, a study by Christopher James shows that (1) the FDIC's losses tend to increase with the percentage of the bank's assets that it retains, and (2) the direct costs of bank insolvencies average around ten percent of assets, far higher than the averages found in other studies of bankruptcy reorganizations.<sup>150</sup> Neither result clearly establishes the presence of substantial agency costs. The first result is consistent with the FDIC not being as adept as private banks at selling or managing bank assets. It is also, however, consistent with the possibility that acquirers are more willing to purchase low-risk assets or performing loans due to adverse selection. James tries to distinguish between these theories and finds no evidence that acquirers are less likely to purchase risky assets, though he does not disprove this theory either. The second result is harder to interpret because it is unclear if one should expect

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<sup>149</sup> See Stephen B. Bainbridge, *The Business Judgment Rule as Abstention Doctrine*, 57 *Vand. L. Rev.* 83, 109 (2004), *Director Primacy: The Means and Ends of Corporate Governance*, 97 *Nw. U. L. Rev.* 547, 603 (2002).

<sup>150</sup> Christopher James, *The Losses Realized in Bank Failures*, 46 *J. Fin.* 1223 (1991) (1985-86 loss 9.9%); FDIC 1991 Annual Report (8.3%), For estimates of resolution costs incurred by the Resolution Trust Corporation in disposing of failed savings and loan banks between 1989 and 1995, see *Evolution of the RTC's Resolution Practices, in The FDIC and RTC Experience: Managing the Crisis 1980-1994* 113, 138-39 (1998). Other estimates which count opportunity costs and declining asset values due to regulatory forbearance as resolution costs are higher; William P. Osterberg & James J. Thomson, *Underlying Determinants of Closed-Bank Resolution Costs, in The Causes and Costs of Depository Institution Failures* 75 (A.F. Cottrell et al. eds. 1995) (21%). By comparison, the direct costs of traditional Chapter 11 reorganizations are much lower. Estimates of median direct costs vary between 1.4 percent and 1.69 percent of prebankruptcy assets; see Arturo Bris et al., *The Costs of Bankruptcy: Chapter 7 versus Chapter 11 Reorganization*, 61 *J. Fin.* 1253 (2006) (1.69%); Lynn M LoPucki & Joseph w. Doherty, *The Determinants of Professional Fees in Large Bankruptcy Reorganization Cases*, 1 *J. Emp. Legal Stud.* 111 (2004) (1.4%); Brian L. Betker, *The Administrative Costs of Debt Restructurings: Some Recent Evidence*, 26 *Fin. Manag.* 56 (1996) (3.37%); Lawrence A. Weiss, *Bankruptcy Resolution*, 27 *J. Fin. Econ.* 285 (1990) (2.5%).

similar direct bankruptcy costs in bankruptcy and bank insolvency . When calculating direct costs of bankruptcy reorganizations scholars typically include the cost of hiring attorneys and business consultants but do not include the salaries of the managers of the firm. By contrast, once the initial purchase and assumption transaction is complete, the failed bank has no management left, and the FDIC must incur the full costs of managing the estate. In addition, some assets may simply be more expensive to administer than others.

Further evidence of the FDIC's performance comes from studies of the return to holding the stocks of banks that acquire the failed banks. If the FDIC does a poor job of auctioning the failed firm and routinely offers too good of a deal to acquirers, the share price of publicly traded acquirers should rise on the announcement of the P&A agreement. Of course, the acquirers stock may rise as long as the assets (or customer base) of the failed bank are somewhat unique so that potential buyers assign different valuations and the acquirer captures some of the gains from trade. However, a very substantial rise in price would provide some cause for concern. The literature does not, however, conclusively show that the FDIC is selling failed banks for far less than they are worth. Some early studies do find abnormal returns to acquiring banks<sup>151</sup> while others do not.<sup>152</sup> Part of the divergence in findings may be due to changes in the process of resolving failed banks; many of the studies finding no abnormal return focus on thrifts resolved through public option. Unfortunately, no study looks at transactions since the least cost resolution standard was adopted in 1992. We hope to remedy this omission in a related paper.

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<sup>151</sup> Balbirer, et al, *Regulation, Competition and Abnormal Returns in the Market for Failed Thrifts*, J Fin Econ 31 (February 1992), 107-31 ; Cole et al, *Asymmetric Information and Principal-Agent Problems as Sources of Value in FSLIC-Assisted Acquisitions of Troubled Thrifts*, J Fin Services Research 8 (1994), 5-28; Bertin, et al, *Failed Bank Acquisitions and Successful Bidders' Returns*, Financial Management (Summer 1989), pp 93-100; James & Wier, *An Analysis of FDIC Failed Bank Auctions*, J. Monetary Economics 141-153 (July 1987).

<sup>152</sup> Thomas F. Gosnell, et al, *The Acquisition of Failing Thrifts: Returns to Acquirers*, Financial Management (Winter, 1993) (finding no abnormal returns); Pettway and Thrifts, *Do Banks Overbid When Acquiring Failed Banks*, Financial Management (Summer 1985) pp 5-15 (finding negative abnormal returns); Horvitz & Lee, *Abnormal Returns in Post-FIRREA Acquisitions of Failed Thrifts*, 8 Fin Services Research 269 (1994)

## **B. The Liability Structure of Large Banks**

Section II shows that the overwhelming majority of failed banks have a similar liability structure. The majority of their debts are deposits, most of which are insured. They also have no or very little foreign deposits, general unsecured debt or subordinated debt. Some banks do have secured liabilities, but these liabilities are always paid in full. This makes the FDIC the likely residual claimant in nearly all bank failures. However, a properly designed bank insolvency law must take into account the likely residual claimant on most of the assets of failed banks. It must consider the size of assets of failed banks, not just the frequency with which banks fail. Showing that the FDIC is the residual claimant in 99 percent of bank failures means little if the remaining one percent of banks own almost all the assets of failed banks. As a result, bank insolvency law has to consider the size of a bank failure, not just the number of failures. Asset size matters because the liability structure of the very largest banks differs from that of banks with fewer assets.

In the United States, banking assets are, in fact, concentrated in the largest banks. This remains true whether one examines banks generally or failed banks in particular. In 2008 about 1.4 percent of insured financial institutions (commercial and savings and loan banks) had assets greater than \$10 billion. These “mega-banks” owned about 78 percent of all assets of insured financial institutions,<sup>153</sup> and the asset share of mega-banks has increased consistently over time.<sup>154</sup> Measured by their assets, mega-banks also predominate in bank failures. Insured bank institutions with assets greater than \$10 billion account for about three percent of the banks that have failed since 1995. However, these banks held 87 percent of the assets of banks in failure since that date.

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<sup>153</sup> See <http://www.census.gov/compendia/statab/>

<sup>154</sup> See Kenneth D. Jones & Tim Critchfield, Consolidation in the U.S. Banking Industry: Is the ‘Long, Strange Trip’ About to End?, 17 FDIC Banking Rev. 31, 35 (2005).

The capital structures of most banks with assets greater than five or ten billion dollars do, in fact, look like those of most other banks. Since 1995 the FDIC has resolved five banks with real assets greater than \$5 billion. The four smallest of these had deposits that ranged between 64 percent and 82 percent of liabilities and insured deposits that ranged between 76% and 91% of total deposits; none of these four banks had any foreign deposits. Secured loans (FHLB plus repurchase agreements) accounted for most of the remaining liabilities; these loans ranged from 18 to 35% of total deposits. None of these four banks had appreciable amounts of subordinated debt or general claims; the sum of these two categories ranged from 0.9% of total liabilities to 1.9% of total liabilities.

However, the fifth bank, Washington Mutual, had a capital structure that was appreciably different than the rest, and Washington Mutual was far larger than all of the other banks put together. In fact, Washington Mutual Bank, alone accounts for 73 percent of the assets of the failed banks in our sample.<sup>155</sup> Washington Mutual's subordinated debt accounted for 2.8% of liabilities, and its general claims accounted for 9.9%.<sup>156</sup> Washington Mutual had significant debts that were junior to the claims of the FDIC. It is dangerous to draw conclusions from a sample of one, but Washington Mutual's capital structure shares some features with other banks of similar size. For example, Wells Fargo has subordinated debt that accounts for 3.2% of its liabilities and general claims that account for about 11.6%. Other banks have significant debt that is junior to the FDIC in the form of foreign deposits. Foreign deposits represent about 13% of Bank of America's liabilities and 46% of Citigroup's liabilities.<sup>157</sup>

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<sup>155</sup> Cite ; see text accompanying notes & . Large non-bank firms also predominate in Chapter 11 bankruptcies. In 2008 less than one percent of all bankruptcy cases were initiated by Chapter 11 filings, and only about three one thousands of a percent (0.0003) were filed by large public corporations.

<http://www.uscourts.gov/bnkrptcystatistics.htm#calendar>. According to Lyn Lopucki, of the 1,117,771 bankruptcy filings in 2008, there were 39 large public bankruptcies among 10,160 Chapter 11 filings; <http://lopucki.law.ucla.edu/study.results.asn>.

<sup>156</sup> These figures are taken from Washington Mutual's final Thrift Supervision report filed before it closed. In the 10 weeks before closing, depositors withdrew about 9 percent of deposits made by the bank, and this would have changed its liability structure. See Robin Sidel et al., WaMu is Seized, Sold Off to J.P. Morgan, In Largest Failure in U.S. Banking History, Wall Street Journal, September 26, 2008, page A1.

<sup>157</sup> See 2009 Call Reports for Bank of America and Citigroup.

The presence of significant debt junior to the FDIC's claim makes it less likely that the FDIC is the residual claimant on the failed bank's assets. The least-cost resolution standard requires the FDIC ordinarily to resolve a failed bank in a way that imposes the least cost on the BIF.<sup>158</sup> The FDIC is not required to do so in a way that produces enough value to satisfy junior claims as well. Subrogated to the rights of insured depositors, the FDIC therefore has the incentive only to receive an amount equal to the insured depositors' claims. For this reason, the FDIC's control over the resolution process in large bank failures is unlikely to maximize the value of the failed bank's assets.

Washington Mutual Bank's resolution illustrates this conclusion. At its closing, the bank's assets had a book value of \$307 billion. The FDIC transferred most of the assets to J.P. Morgan Chase Bank as part of a purchase and assumption transaction. In return J.P. Morgan paid \$1.9 billion and acquired certain of Washington Mutual's contracts, and all of its deposits and liability to general creditors. J.P. Morgan did not assume Washington Mutual's subordinated debt or equity.<sup>159</sup> Subordinated debt and equity will receive nothing from the FDIC while the depositors and general creditors will be paid in full by J.P. Morgan. Because J.P. Morgan acquired all of Washington Mutual's deposits, there was no loss to the FDIC. If J.P. Morgan's paid top dollar for Washington Mutual's assets, subordinated debt has no complaint. It has a complaint if another bidder would have paid more: a higher bid price might have allowed distributions to subordinated debt. Because J.P. Morgan's bid resulted in no loss to the BIF, the FDIC has no incentive to seek or accept a higher-valued bid. Washington Mutual's holding company, the holder of subordinated debt, has sued the FDIC, presumably on the theory that the liquidation value of Washington Mutual's assets is sufficiently higher than the sum J.P. Morgan paid to partly or wholly

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<sup>158</sup> See supra note X and accompanying text.

<sup>159</sup> See Purchase and Assumption Agreement Between the Federal Deposit Insurance Corporation and J.P. Morgan Chase Bank, September 25, 2008, Article 2.1, Schedule 2.1 (pp. 8, 34), <http://www.fdic.gov/about/freedom/Washington-Mutual>.

satisfy its claims.<sup>160</sup> Its suit might fail on the merits. However, Washington Mutual’s liability structure does not justify a presumption in favor of the FDIC: Because the FDIC is not the residual claimant, its control of the resolution process cannot be assumed to maximize asset values.

The particular liability structure of large banks does not necessarily undermine the case for FDIC control of the bank resolution process. This exception applies only to the very largest banks, and these failures are very rare – these are the firms that are “too big to fail.” The FDIC is the residual claimant in almost all bank failures. At most, the liability structure of large banks justifies special resolution rules for infrequent large bank failures. Broadly, two different sorts of rules are possible. One is the creation of a separate resolution procedure for large banks that removes the FDIC from control in large bank resolutions and gives control over resolution decisions to the residual claimant. This arguably requires overly complex and administratively infeasible rules. Accurately valuing a failed bank’s assets at the beginning of the resolution process is difficult enough. Determining its liability structure to establish the amount of junior debt necessary to identify the residual claimant at that point is at least as hard. A less extreme alternative is to constrain FDIC control of the resolution decision in large bank failures. There is some precedent for doing so. The Bankruptcy Code includes separate provisions for small business debtors in Chapter 11 by way of separate reporting requirements and deadlines.<sup>161</sup> Their underlying rationale apparently is that small businesses seeking to be reorganized differ enough from larger businesses to warrant some special rules. In large bank insolvencies, special rules might better align the interests of the FDIC and residual claimants without removing the FDIC from control over the resolution process. These could include enhanced bid procedures, input by junior debt, or increase the potential liability of the FDIC to junior debt in connection with the disposal of assets. Our point is not to

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<sup>160</sup> See *Washington Mutual Inc. v. Federal Deposit Insurance Corp.*, 09-533, U.S. District Court, District of Columbia (Washington).

<sup>161</sup> See, e.g., 11 U.S.C. 101(51D), 308(b), 586(a)(7), 1121(c), 1125)(f).

advocate such rules. It is simply to note that they do not undermine the case for FDIC control of the resolution process even in large bank failures.

We close by noting that any ex post inefficiency caused by the FDIC's control of an insolvent mega-bank may enhance ex ante efficiency if it increases the losses suffered by shareholders and junior creditors. Today many reasonably argue that the prospect of government bailouts creates a moral hazard for investors because they can reasonably believe that the government may determine that the bank is too big to fail. If the government does allow the largest firms to fail with some probability, it can counter this moral hazard by increasing the losses suffered by investors when failure actually does occur. We do not, however, argue that the current structure is optimal as it is unlikely that the ex post inefficiency is anywhere near large enough to counter the effect of the moral hazard.

### **C. Self-Financed Restructuring: Debt Conversion**

The financial distress of a bank is cured by altering its capital structure. One way to do this is to reduce the bank's liabilities, either with or without the agreement of creditors. The typical Chapter 11 bankruptcy reorganization involves the firm's shareholders transferring the firm's assets to its creditors. The creditors exchange their debt claims for shares in the firm, and the former shareholder's shares are cancelled. As a result of this fictional sale, debt is reduced by being converted to equity. By contrast, a bank receivership uses an actual sale to reduce debt. The FDIC sells the bank's assets to a healthy bank, often also transferring some of the bank's liabilities. It distributes the proceeds of the sale to the bank's creditors and reimburses insured depositors. Unpaid claims of creditors are cancelled. As with the typical Chapter 11 reorganization, this process eliminates the financial distress by reducing the bank's debts. However, unlike recent large reorganizations, it does not require the FDIC (or other residual claimant) to have control over the bank's assets to dispose of them.

An alternative procedure alters a distressed bank's capital structure automatically, without a sale its assets. The procedure converts debt to common equity when a bank becomes financially

distressed.<sup>162</sup> To avoid the possibility of affected debt holders refusing to agree to the conversion, the procedure must be mandatory. To preserve existing priority among debt holders (and give legal certainty), debt is converted in the reverse order of priority, from the lowest to highest priority liabilities. As a result of the conversion, the bank's liabilities are reduced and its distress eliminated. Because the debt swap occurs automatically, when the bank becomes financially distressed, resolution also is automatic. There is no need for the FDIC to resolve the bank's distress.

The procedure for debt conversion can apply generally, not just when the bank is insolvent. In particular, it can apply when the bank's capital ratios fall below minimum required percentages. For example, assume that the required capital ratio is 8% and that the bank's only capital is common stock. The bank's simplified balance sheet initially is as follows:<sup>163</sup>

Assets	Liabilities
\$100	\$87 Deposits
	\$5 General Claims
	\$8 Equity (10 shares x \$.80 = \$8)

Initially, the bank's capital ratio meets the minimum requirement of 8%. Later, the bank's assets decrease in value, and its balance sheet looks like this:

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<sup>162</sup> A number of proposals for debt conversion have been made, with some differences among them; see, e.g., Heather Landy, Experts: No Pain Means No Gain, *American Banker*, July 6, 2009; Luigi Zingales, Yes We Can, Secretary Geithner, 6 *The Economist's Voice* 1 (February 2009), Plan B, October 8, 2008, <http://faculty.chicago.booth.edu>; Squam Lake Working Group on Financial Regulation, An Expedited Resolution Mechanism for Distressed Financial Firms: Regulatory Hybrid Securities (Council on Foreign Relations Working Paper, April 2009); David G. Mayes, et al., The Proposed Approach to Bank Insolvency Legislation, in *Who Pay for Bank Insolvency?* 331 (D.G. Mayes & A. Liuksila eds. 2004); Mark J. Flannery, No Pain, No Gain? Effecting Market Discipline via "Reverse Convertible Debentures," in *Capital Adequacy Beyond Basil: Banking, Securities, and Insurance* 171 (Hal S. Scott ed. 2005); Augustin Landier & Kenichi Edua, The Economics of Bank Restructuring: Understanding the Options 1, 12-13 (International Monetary Fund, June 4, 2009. For earlier proposals that apply to all firms, not just banks, see Barry E. Adler, Financial and Political Theories of American Corporate Bankruptcy, 45 *Stan. L. Rev.* 311, 324-25 (1993); Note, Distress-Contingent Convertible Bonds: A Proposed Solution to the Excess Debt Problem, 104 *Harv. L. Rev.* 1857, 1869-77 (1991). Many of the proposals call for debt conversion by contract; the description in the text provides for mandatory conversion under the prescribed conditions.

<sup>163</sup> The example is based on Flannery, *supra* note, at 176 (Table 5.1), but used for different purposes.

Assets	Liabilities
\$97	\$87 Deposits
	\$5 General claims
	\$5 Equity (10 shares x \$.50 = \$5)

The bank's assets have declined to \$97, and its capital ratio has declined to 5.15% ( $5/97 = 5.15\%$ ). Its share price has declined to \$.50 per share. Assume that applicable law requires that debt be converted to equity at its market price. If applicable law requires a debt swap to preserve the required 8% capital ratio, the bank must have \$7.76 in equity. Because it has only \$5 in equity, \$2.26 of the bank's debt must be converted to equity. Applicable priority rules give deposits priority over the claims of general creditors. Thus, \$2.26 in general debt is converted to equity to retain the 8% minimum capital ratio, reducing its debt to \$2.24 and giving it 5.52 shares for a total of \$2.76 in equity ( $5.52 \times .50 = \$2.76$ ).

Accordingly, the bank's balance sheet at T2 is adjusted to reflect the following:

Assets	Liabilities
\$97	\$87 Deposits
	\$2.24 General claims
	\$7.76 Equity (15.52 shares: 10 "old" shares + 5.52 newly issued shares; share price \$.50)

The bank's leveraged ratio by is restored without the need to raise additional capital. The bank can continue operating.

A distressed bank can be restructured by a debt conversion when it is insolvent. In this case equity is extinguished and the lowest priority debt is converted to equity to restore solvency. For instance, assume the bank later becomes insolvent, as its balance sheet at that time reveals:

Assets	Liabilities
\$80	\$87 Deposits

\$5 General claims

(\$12) Equity (10 shares)

The bank's assets are sufficient to satisfy only \$80 of the \$92 in outstanding claims against it. Thus, to return to solvency, the 10 shares must be cancelled and \$12 in debt must be converted to equity. Because general claims have lower priority than deposits, the general claims totaling \$5 are extinguished. This leaves \$7 of the \$87 in deposits which must be converted to equity, leaving \$80 in deposit liabilities. After the conversion necessary to restore solvency, the bank's debt has been reduced from \$93 to \$80, and \$7 in stock issued in exchange for the swapped debt. Applicable priority rules give insured and uninsured depositors the same priority in a bank resolution.<sup>164</sup> Thus, the bank's insured depositors (if any) are issued shares, in proportion to their share of \$7 in deposits converted to equity. However, this does not deprive depositors of access to the insured balances in their deposit accounts. Insured depositors are reimbursed by the FDIC from the bank insurance fund in the amount of their insured deposits. Their interests therefore are unaffected by the conversion of their debt into equity.<sup>165</sup> The FDIC in turn is subrogated to the rights of depositors it reimburses.<sup>166</sup> As a result, the FDIC owns shares of the bank in proportion to the insured depositor's share of the \$7 in swapped deposit liabilities. The FDIC can sell these converted shares, as it can almost any asset in a bank's resolution.

To continue operating, the bank must meet the 8% minimum capital ratio. This requires the new shares it has issued have a total traded value of \$6.40 ( $\$6.40 = \$6.40/\$80 = 8\%$ ). As a result, a further \$6.40 in deposits must be converted to shares. The bank operates with existing management and array of investments, unless the shareholders decide otherwise. For its recent advocates, debt conversion is attractive because it recapitalizes distressed banks without taxpayer dollars. We note a

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<sup>164</sup> See 12 U.S.C. 1821(d)(11)(A)(ii).

<sup>165</sup> Zingales' proposed debt conversion scheme for systemically important banks exempts individual depositor liability; see supra note, "Plan B," at 5. Because conversion does not affect the liquidity of insured individual depositor's deposits, the exemption is unnecessary.

<sup>166</sup> See 12 U.S.C. 1821(g).

different consequence of debt conversion: the FDIC plays no role in resolving the bank's financial distress. It does not have to transfer the bank's assets or liabilities, or both, to a healthy bank or otherwise control the resolution process. Instead, the bank's distress is eliminated by an automatic "deleveraging" of the bank's debt.

A procedure for debt conversion limits but does not undermine the FDIC's role in the resolution process. To begin with, the procedure is a proposal for reforming existing bank insolvency law. It is not a rationale for (or against) the FDIC's role in the resolution process as it exists. That said, the proposal's limited role for the FDIC in the resolution process is attractive. The FDIC's costs in resolving a bank failure are significant.<sup>167</sup> By restructuring a bank's debt without transferring its assets, debt conversion avoids these costs. However, debt conversion is difficult to design so as to be easily applied to most bank failures. As important, the scheme does not always make it unnecessary for the FDIC to transfer assets of a failed bank. Take these points in turn. There are less and more serious problems of design. The less serious problem is the authority to trigger the conversion of debt to equity and cancellation of existing equity. Stakeholders do not have complete information about the value of the assets and therefore are likely to have different opinions about the bank's assets values. They therefore are unlikely to all agree on the need for recapitalization. The bank's balance sheet cannot be used as a reliable basis of information, because it computes assets and equity at book value. Book values tend to lag behind the market value of assets at troubled banks.<sup>168</sup> Because stakeholders are unlikely to trigger the debt conversion, the FDIC (or some other entity) must have the authority to trigger it. A plausible

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<sup>167</sup> Estimates of the direct costs to the FDIC, although imprecise, are as high as 21 percent of asset values; see note supra . By comparison, the direct costs of traditional Chapter 11 reorganizations are much lower. Estimates of median direct costs vary between 1.4 percent and 1.69 percent of prebankruptcy assets; see Arturo Bris et al., *The Costs of Bankruptcy: Chapter 7 versus Chapter 11 Reorganization*, 61 *J. Fin.* 1253 (2006) (1.69%); Lynn M LoPucki & Joseph w. Doherty, *The Determinants of Professional Fees in Large Bankruptcy Reorganization Cases*, 1 *J. Emp. Legal Stud.* 111 (2004) (1.4%); Brian L. Betker, *The Administrative Costs of Debt Restructurings: Some Recent Evidence*, 26 *Fin. Manag.* 56 (1996) (3.37%); Lawrence A. Weiss, *Bankruptcy Resolution*, 27 *J. Fin. Econ.* 285 (1990) (2.5%).

<sup>168</sup> See Joe Peek & Eric S. Rosengren, *The Use of Capital Ratios to Trigger Intervention in Problem Banks: Too Little, Too Late*, *New England Economic Review* 49, 51 (Sept/Oct. 1996).

and observable trigger is the FDIC's seizure of a bank. This authority does not give the FDIC control in resolving the bank: its seizure of the bank simply triggers the conversion of debt to equity. The FDIC's role is limited to initiating the process by which debt is restructured automatically.

The more serious problem is the design of the financial trigger the FDIC is to use to initiate the resolution process. Debt is to be converted to equity when the bank is economically insolvent: when all claims due against the bank cannot be satisfied from its earnings. Cash flows being difficult to measure directly, the market value of assets and liabilities serve as proxies for net present value. However, measurement of insolvency by market value has its own problems: market value is sometimes difficult to gauge, indeterminate, and manipulable. Loans are important assets of banks, and nonstandard terms in commercial or installment loans and unobservable risk characteristics of borrowers make many loans difficult to value when not traded in active markets. Something similar might be true of securitized assets on a bank's books. Market value in both cases is hard to determine. Financial triggers based on share price cannot be used at all for banks in which equity is privately held. Although the market price of traded shares can be used, variance in daily trading prices can be random. Averaging traded prices over a longer period avoids this trouble but brings another: strategic manipulation of share prices. For instance, debt holders expecting FDIC intervention might short shares of the bank in an effort to drive the price down. A lower share price allows them more shares if their debt is converted to equity.<sup>169</sup> Although this manipulation is unlikely to be successful with large banks whose stock is actively traded, it might work with smaller banks whose shares are less actively traded. A financial trigger geared to share value also might entice management to try to lower share price by bringing FDIC intervention, for the purpose of having conversion result in more shares issued.

These problems in design do not in advance make a debt conversion scheme unworkable.

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<sup>169</sup> See Flannery, *supra* note , at 186; Swan Lake Working Group on Financial Regulation, *supra* note , at 4.

However, they make implementing it infeasible for bank resolutions. Methods of estimating the bank's value that avoid market price or other pricing mechanism likely cannot be applied. They rely on time and liquidity

that may not be available in the case of many failed banks. Take Bebchuck's proposal to give stakeholders an option to purchase senior claims for their face amount.<sup>170</sup> Assume that the bank has two creditors, each with \$100 claims having equal priority. Suppose the market price of the bank is

\$200. Debt conversion cancels the shareholder's stock and transforms the creditors' \$200 claims to equity. Under Bebchuck's proposal, the shareholders are entitled to regain their stock for the face amount of claims. If shareholders believe that the bank is worth more than \$200, they will repurchase their stock. If they believe the bank is worth less than \$200, they will not. In this way the repurchase option avoids the need to rely on market price in converting debt to equity.

Bebchuck's proposal requires liquidity and time that often is missing in bank failures. The proposal sets a stipulated short period in which stakeholders can exercise their options. In the case of failed banks, this period must be very short. Otherwise, uncertainty about the bank's capital structure risks disrupting its operations. To exercise their options within the period, stakeholders need funds quickly. This usually is not a problem where the price of exercising their options is small relative to their wealth. But liquidity is a problem when the required exercise price is proportionately large even for institutional shareholders. Stakeholders with large illiquid holdings can borrow funds in amounts needed to exercise their options. However, the ability to borrow quickly is not guaranteed. A lender will not make an unsecured loan for \$200 if the market price of the shares in a bank is less than \$200. Although it might lend \$200 on a secured basis, the lender needs time to value collateral and obtain the required security interest. The time needed can exceed the period in which the stakeholder can exercise its option. Because the stipulated period must be very short in bank failures, liquidity problems

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<sup>170</sup> See Lucian Arye Bebchuk, A New Approach to Corporate Reorganizations, 101 Harv. L. Rev. 775 (1988).

likely prevent stakeholders from exercising their purchase options.<sup>171</sup> In these cases the market price of the bank effectively is final: it determines the division of value among the bank's stakeholders according to their priority. By comparison, the pricing mechanism used in FDIC-led bank resolutions works quickly. The FDIC solicits bids prior to closing the bank; the winning bid usually determines the value of the bank. Even if workable, a debt conversion scheme does not eliminate the need for FDIC control of the resolution process entirely. It only limits the occasions on which the FDIC must resolve a bank by transferring its assets.<sup>172</sup> The FDIC (or other entity) must do so on at least two occasions: (1) where the bank cannot feasibly continue even with its debt restructured, and (2) where the bank's assets are more valuable in the hands of another bank. Debt restructuring eliminates the bank's insolvency; it does not assure the bank's continued operation. Because a debt swap leaves the bank's assets unaffected, the restructured bank may be barely solvent but remain unhealthy. For the same reason, any imbalances between illiquid assets and depositor demand continue. If the bank cannot attract capital, it risks repeated debt exchanges. In these circumstances the bank's assets are better acquired by another bank or a non-bank firm. Alternatively, when a debt exchange leaves the bank healthy, its assets may be more valuable when used by another bank. More generally, the financially restructured bank may need to be restructured economically. Thus, in both of these circumstances, the value of the bank's assets is maximized by transferring them. The only question is how they are transferred: by agreement among

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<sup>171</sup> See Zingales, Plan "B," *supra* note , at 5 (ten days). Aghion et al.'s proposed alternative to a Chapter 11 reorganization also gives stakeholders purchase options on equity; Philippe Aghion, Oliver Hart & John Moore, *The Economics of Bankruptcy Reform*, 523, 540 n.40 (1992). Their stipulated period of one month in which these options are exercisable enhances the ability of stakeholders to obtain needed funds. However, a month is far longer than the time in which bank failures plausibly must be resolved.

<sup>172</sup> The "bank creditor recapitalization" proposal studied by the Reserve Bank of New Zealand separates the mechanism for restructuring a bank from the decision about its continued operation. On insolvency the claims of the bank's creditors are eliminated until the liquidation value of the bank's assets equal the remaining claims. Once solvency is restored, the relevant bank regulator decides to liquidate the bank, allow for debt exchanged for equity, or a sale of the bank. See Ian Hamilton, *The Reserve Bank of New Zealand's Creditor Recapitalization (BCR) Project: An Option for Resolving Large Banks?*, in *Systemic Financial Crises: Resolving Large Bank Insolvencies* 397 (D. Evanoff & G. Kaufman eds. 2005); Allan Bollard, *Systemic Financial Crises—Resolving Large Bank Insolvencies*, 67 *Reserve Bank of New Zealand Bull.* 33, 39-40 (2004); cf. Mayes & Liuksila, *supra* note .

the bank's stakeholders or by the FDIC or other entity. This is merely a matter of the size of transaction costs associated with these different ways of transferring bank assets. There are arguably fewer costs incurred when the FDIC or other entity arranges for the transfer. The dispersion of stakeholders with incomplete information about asset values and potential acquirers make the process of negotiation costly. By contrast, a single entity can act unilaterally. Its ability to act without obtaining the agreement of other stakeholders reduces the cost of finding an acquirer.

The next question, then, is whether that entity should be the FDIC or another stakeholder. The argument in Part II suggests that it should be the FDIC. This is because a debt exchange in almost every bank failure will leave the FDIC the residual claimant. Almost all failed banks have no or few debt subordinate to deposits. Insured deposits are the major liabilities of most banks. Because the FDIC is subrogated to the claims of insured depositors, it ultimately shares loss with uninsured depositors when a bank fails. Thus, the consistent pattern of FDIC loss shows that depositors lose money in most bank failures. There are not enough assets to satisfy the liability to depositors. For this reason, a debt exchange will give depositors equity in the failed bank, including, by subrogation, the FDIC.<sup>173</sup> The FDIC will have the largest share of equity, since insured deposits represent most deposits. As the largest holder of equity, the FDIC receives the majority of the value of assets above the claims of the bank's creditors. It therefore is a residual claimant on the bank's assets and has the incentive to arrange for a sale that maximizes their value. In the very few large bank failures, where banks tend to have liabilities

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<sup>173</sup> See supra note . This conclusion assumes that the implementation of a debt conversion scheme does not change the capital structure of banks to create more debt junior to deposits. Some schemes include a proposed mandatory percent of convertible debt a bank must maintain; see Flannery, supra note . Changes to the bank's capital structure affect the conclusion above only if they result in no loss to the FDIC in bank failures. Maintenance of a required percentage of convertible debt does not guarantee that a bank will not become so insolvent that both this debt and deposit liabilities are eliminated. The FDIC therefore could incur loss even if the failed bank has maintained the required percentage of convertible debt.

junior to deposits, other stakeholders may be the residual claim on the bank's assets. In resolving these these banks, the FDIC's control of the disposition of assets arguably should be restricted.<sup>174</sup>

#### IV. Bank Holding Companies [To Come]

#### V. Conclusion

It is not obvious why the FDIC should have the central role it has in resolving failed banks. The bankruptcy law of most other countries does not give bank regulators this role. Two arguments sometimes are given to justify the FDIC's control over the bank resolution process: speed in asset disposal and the FDIC's status as the largest creditor of the failed bank. The argument from speed wrongly conflates the quickness with which assets are disposed with the quickness with which deposits can convert their deposits into cash. Speed in disposing of assets has nothing to do with preserving the liquidity of deposits. This Article, however, takes seriously the FDIC's status as the largest creditor of the typical failed bank and the implications of this status. Data suggest that the likely asset values of most failed banks makes the FDIC is the residual claimant on those assets. It therefore has the proper incentives to act to maximize these asset values. Other stakeholders in those assets do not the same incentives. This is distinctive of most bank insolvencies, and justifies giving the FDIC control of the resolution process. Things could be different and sometimes are. The capital structures of mega-banks often differ from those of the typical failed bank. Bank holding companies too exhibit more complicated capital structures, with significant general and subordinated debt. [Section omitted]. With large banks the allocation of control to the FDIC is presumptively unjustified. Non-regulatory claimants likely are the residual claimants on the assets of bank holding companies. In both cases the "residual claimant" principle allocates control to claimants other than the FDIC or other regulator.

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<sup>174</sup> See supra text accompanying notes .