

Closing Troubled Banks: How the Process Works

John R. Walter

Business failure typically occurs when a financially weak firm can no longer pay its creditors. Failure generally involves a series of steps. First, the firm suffers losses. Second, when the firm's creditors learn of the losses, they increase their estimate of the firm's probability of default. To compensate themselves for this increased risk, creditors demand higher interest rates or require debt repayment. Third, the firm finds itself unable to raise or generate additional funds to meet those demands and defaults. Creditors then either force the firm into bankruptcy, in which case a bankruptcy court decides how to best allocate the firm's assets to meet its debts, or the firm privately arranges with creditors for a payout of firm assets. In either case, the assets can be redeployed in more valuable uses. While business failure is often exceptionally disruptive for the firm's managers and employees, it is beneficial for society since it ensures that business resources are not devoted to ineffectual enterprises.

But what about banks? How does their failure ensue? A high proportion of bank liabilities are government-insured deposits. Deposit insurance primarily exists to prevent inappropriate bank runs that may occur when many of a bank's depositors seek to withdraw funds even though the bank is healthy. While it solves one problem—inappropriate runs—deposit insurance can create another. Insured depositors have no incentive to demand higher interest rates or debt repayment when their bank is troubled. While uninsured bank creditors will likely demand repayment, the bank can often raise funds to meet these demands by gathering new insured deposits at little extra cost. As a result, the market-driven process of failure and subsequent reallocation of assets is short-circuited for banks, and its societal benefits are muted.

Because market forces are unlikely to bring about the timely closure of troubled banks, the government agencies that charter and supervise banks

■ The author benefited greatly from discussions with Kartik Athreya, Marvin Goodfriend, Tom Humphrey, and John Weinberg. The views expressed herein are not necessarily those of the Federal Reserve Bank of Richmond or the Federal Reserve System.

are typically left to decide when a bank is no longer viable and should be closed. Mistakes by the agencies can create significant inefficiencies. For example, during the 1980s many insured depository institutions remained open long after they became insolvent. As a result, financial resources were tied up in inefficient operations for extended periods. Legislators recognized the problem and in 1991 enacted the Federal Deposit Insurance Corporation Improvement Act (FDICIA). The Act required bank supervisors to step in and close depository institutions more quickly and reformed the process by which the Federal Deposit Insurance Corporation disposed of failed depositories. All of which raise the crucial question: How do these agencies decide when to step in under rules established by the FDICIA? Further, how do the agencies proceed following intervention? This article seeks to answer these questions.

Supervision of healthy banks is intended to ensure that the government safety net does not provide incentives for banks to undertake inefficient risks. Supervision of banks includes propagating and enforcing restrictions on risky activities, setting deposit insurance premia and insurance coverage levels, and establishing minimum capital requirements as well as examining banks to ensure that capital requirements are met. The supervisory treatment of failing banks, however, is likewise important if the safety net is to be prevented from inducing excessively risky behaviors.

This article provides an overview of the process by which troubled banks are closed. It not only points out the beneficial changes to the FDICIA's closure process, but also indicates some areas of remaining weakness. One example involves the opportunities for uninsured depositors to escape losses by withdrawing their deposits immediately prior to bank failure. The FDICIA addresses one avenue of escape by restricting Federal Reserve discount window lending to troubled banks. As will be shown, even if the Act prevented all such lending, many uninsured depositors would be likely to escape losses nevertheless. Likewise, the oft-discussed systemic risk provisions of the FDICIA can provide incentives for excessive risk-taking.

Creditors of troubled nonbank firms have every incentive to require their prompt closure and to ensure that the assets of such firms are redirected. Typically bank supervisors must perform these roles for troubled banks. The FDICIA attempts to ensure that supervisors have incentives to close banks promptly and to dispose of their assets efficiently. This article is intended as an aid to those who would like to understand and perhaps improve the bank closure process.

1. NONBANK FAILURE VERSUS BANK FAILURE

In broad terms, failure occurs when a firm becomes unable to produce a market rate of return on its owners' capital investment. In other words, earnings from operations are insufficient to meet expenses, including interest payments to debtholders, and to pay owners a market return. The unproductive firm's assets

might simply be sold off, debts repaid, and the business closed. In such an example, losses are borne only by owners, with debtholders escaping any loss.

While closure can occur without great losses, frequently firm closure occurs under less favorable circumstances. Severe losses may rapidly overwhelm the firm. Alternatively, owners may not realize the severity of the earnings decline, or they may choose to hold out, hoping for a recovery. In such a situation losses can become large enough to consume a significant portion of the firm's assets. Owners are likely to seek additional funding from lenders or new investors. These providers will attempt to ascertain the likelihood that the firm can recover and produce a market return. If a recovery is deemed probable, perhaps including reorganization, then creditors advance new funds. Alternatively, if lenders or investors view the firm's troubles as long-lasting they will be unwilling to lend. The firm then is unable to meet payment demands from its creditors. These creditors can then force the closure of the firm in bankruptcy or by foreclosing on its assets.

In some cases, banks may follow the first discussed pattern of closure. Specifically, bank owners may find that their operation is no longer producing a market rate of return and that their investment can earn a higher return employed elsewhere. In such a case, the owners may simply liquidate the bank. Between 1991 and 2001, 38 banks were liquidated without the supervisors stepping in and requiring closure (FDIC 2003).¹ More typically, owners may sell their assets and liabilities to another bank. While bank supervisors do not classify such outcomes as failures, these outcomes are driven by the realization by bank owners that returns are insufficient. So liquidations and some mergers meet the definition of an economic failure.

Thus, while a bank failure can be similar to the failure of a nonbank firm so that market players—specifically the bank's owners—close the bank without supervisory intervention, in general a bank failure producing losses beyond those suffered by equity holders will be very different. The reason is that deposit insurance allows a bank with weak earnings to continue to raise funds sufficient to cover its losses. Imagine a bank that has suffered a string of losses, such that it would be clear to outsiders that the bank is unlikely to be able to repay out of earnings any additional debts it undertakes. A nonbank firm in such a situation would be unable to convince investors to extend funds to cover future operations. But depositors, protected against loss by a government guarantee of repayment, are quite willing to provide the bank with additional funding. As a result, insured-troubled banks can frequently remain open long past the time they would be closed absent deposit insurance.

¹This figure includes banks that discontinued deposit operations or otherwise liquidated or closed. It excludes banks that failed or merged. See "Notes to Users" in FDIC (2003). While the bank supervisors did not force the closure of these banks, it is likely that the threat of supervisory intervention may have been important in some of the closures. Owners may have shunned closure had the threat not been looming.

This distinction between investors' treatment of nonbanks and depositors' treatment of banks points out why banks are special, and why bank supervisors must be especially vigilant to quickly close troubled banks. Once any firm, whether bank or nonbank, suffers losses great enough to consume all of its owners' investment, its owners have a strong incentive to undertake very risky investments, since at that point they have no more investment to lose. Risky investments will be attractive because they might produce a large enough return to save the firm. While investors will be unwilling to extend to nonbanks the funds needed for such risky investments, because of deposit insurance, banks can gather funding. Consequently, the failure to close a troubled bank quickly, affords bank owners and managers the ability and incentive to undertake risky, high-loss investments.

2. WHO LOSES WHEN BANKS FAIL?

When nonbank firms fail, creditors often are not repaid in full and can suffer large losses as a proportion of their investment. When banks fail, insured depositors, who provide the largest portion of the typical banks' liabilities, are protected against losses by the FDIC. Bank shareholders are not insured by the FDIC and will normally suffer losses, and uninsured depositors, to be discussed in more detail later, also may lose.

The FDIC promises to insure deposits up to \$100,000 per account. Backing the promise is the FDIC's reserve fund, which, as of the end of 2002, summed to \$32 billion, or 1.27 percent of all insured deposits in banks. The fund was accumulated and is maintained from insurance premiums charged banks and from the interest earned on the reserves. A separate reserve is maintained by the FDIC for savings associations. Relative to insured deposits, it is of a similar size to the bank fund and is also funded by premiums charged these associations. If the bank reserve fund falls below a specified minimum relative to insured deposits—1.25 percent of insured deposits—banks are required to rebuild the fund through higher premiums, as are savings associations.

But what if payments necessary to protect depositors grow so large that they deplete the entire fund? In this case the FDIC can draw on a \$30 billion line of credit from the U.S. Treasury, to be repaid by future premiums. Beyond this amount, taxpayers would make up the difference. During the savings and loan crisis of the 1980s, the reserves backing savings association deposit insurance were depleted. In 1987, a statute was enacted promising Treasury backing, and therefore taxpayer backing, for insured deposits. Over the next several years taxpayers provided over \$100 billion to protect depositors in savings associations from any losses.

3. WHO CLOSES BANKS?

So, if deposit insurance gives creditors little incentive to foreclose on a troubled bank or force it into bankruptcy, who does force its closure? The answer is

that a troubled bank is closed by the agency which granted the bank a charter to operate. The agency appoints an entity, typically the FDIC, to act as a receiver or conservator. This entity then takes control of the bank's assets and liabilities and ultimately divides the assets among liability holders. For national banks, charters are granted and the closure decision made by the Office of the Comptroller of the Currency—a bureau of the U.S. Department of the Treasury—which also supervises national banks. For state-chartered banks, charters are granted, and supervision is provided, including the decision to close troubled banks, by an agency of the state government. Similarly, some savings associations have a federal government-granted charter and are supervised and closed by the Office of Thrift Supervision, also a bureau of the Treasury; others have state charters.

In the case of national banks and federally chartered savings associations, federal law requires that the receiver be the FDIC (12 U.S. Code 1821c). Most states also require their banking agencies to name the FDIC as receiver (FDIC 1998b, 69).

While state banks are typically placed in receivership by a state banking agency, in some cases a federal bank supervisor can make the decision to appoint a receiver for a state-chartered bank. The Federal Reserve or the FDIC, neither of which grant bank charters, share with state banking agencies the duty of supervising state-chartered banks, including the authority, under federal law (discussed below), to appoint a receiver. The backup authority granted the federal agencies could be attributed to the fact that only the federal agencies answer to the federal legislature, which must appropriate the funds to protect depositors should the reserve funds be depleted. On occasion the FDIC has used its authority. For example, over the decade from 1993 through 2003, out of a total of 54 state-chartered bank failures, the FDIC closed three state-chartered banks without the concurrence of the state banking agency. Such closures can imply a disagreement between the state agency and the FDIC concerning the severity of the troubled bank's problems; the state agency concludes that the bank is viable, while the FDIC concludes that the bank is not.

4. CLOSURE POLICIES

Policy guiding regulators' approach to troubled banks is established by the *Prompt Corrective Action* (PCA) rules, found in Section 131 of the FDICIA. The rules primarily focus on the level of bank capital, meaning the dollar amount by which assets exceed liabilities, i.e., the net worth or solvency of the bank. According to the PCA rules, the federal bank regulatory agencies are required to appoint a receiver or conservator for the bank within 90 days of the time the bank's capital-to-assets ratio falls below two percent (12 U.S. Code 1831o). In other words, if a bank becomes insolvent, or close to it, a

receiver must be appointed. Alternatively, the federal agencies can choose another course, such as granting the bank additional time or injecting funds to prop up the troubled bank, but such a decision must be reviewed every 90 days until the bank has recovered. After 270 days, if the bank remains undercapitalized, a receiver must be appointed unless the bank has positive net worth and its financial health is clearly improving.

Other provisions of federal law provide additional grounds by which agencies may step in. For example, a banking agency may appoint a receiver even though the bank may not currently have weak capital if the agency determines that the bank is likely to incur losses that will deplete substantially all of its capital. Outside of capital considerations, a receiver may be appointed if the bank has willfully violated a cease and desist order (12 U.S. Code 1821c).

5. CLOSURE IN PRACTICE

But how do the state or federal regulators learn of declining health of banks, and what steps do they typically take on the way to determining that the bank is no longer viable? Two means are typically employed by banking agency examiners to measure the health of a bank, namely off-site monitoring and on-site examination. Off-site monitoring involves analyzing data assembled both from financial statements produced by the bank and from information gathered in the most recent on-site examination. Further, information on local economic conditions, the health of industries to which the bank lends, and market indicators of the bank's own well-being are reviewed. For example, the review may include investigation of local indicators such as bankruptcies, unemployment, housing prices, and vacancy rates (OCC 2001, 6). The review typically involves computer programs that tabulate and produce ratios based on financial data. By providing warning of a bank's declining health prior to a regularly scheduled on-site examination, off-site monitoring can point up the need to quickly conduct an on-site examination. Data from off-site monitoring can also guide examiners to problem areas during an on-site examination.

In principle, the combination of off-site and on-site reviews will reveal a bank's condition. However, in practice, declining bank health is often difficult to assess and involves subjective judgements by examiners. These judgements must be discussed with bank managers and directors, who might be unduly optimistic about the bank's viability. Further, examiner decisions can later be contested in lawsuits. The difficulties of correctly identifying problems were illustrated by the 1999 failure of First National Bank of Keystone, West Virginia. Reportedly, Keystone's management hid the bank's insolvency from banking agency examiners for an extended period directly before examiners closed the bank (Office of Inspector General 2000).

When off-site monitoring or initial indicators from an on-site review raise suspicions that a bank's health may be deteriorating, on-site examiners focus

especially on certain indicators or red flags of declining health. These red flags include especially rapid asset growth, risk management deficiencies, asset quality deterioration, liquidity difficulties, and the bank's unwillingness to cooperate with examiners (OCC 2001, 3–18). During the on-site review of a bank thought to be experiencing trouble, special emphasis will be placed on careful valuation of the bank's assets. For banks that later fail, the valuation often reveals that the bank was unrealistically optimistic when valuing assets in its financial statements.

Following the examination of a seriously troubled bank, examiners will meet with the bank's management and its board of directors, notifying them of negative findings from the examination. Other regulators are also typically notified. For example, state bank examiners are likely to notify the FDIC, or the Federal Reserve if the bank is a Federal Reserve member bank (since the Fed supervises state member banks along with state agencies). If the asset valuation proves that the bank is undercapitalized (capital-to-assets ratio less than 4 percent), and especially if it is found to be critically undercapitalized (ratio below 2 percent), examiners will inform bank management and directors, in writing, of the amount of capital that must be injected to recapitalize the bank. The bank is given the opportunity to produce a plan to gather the necessary capital, and if critically undercapitalized, is warned that it will probably have no more than 90 days in which to gather the needed capital. During this meeting with the bank's board of directors and its management, representatives of the FDIC may be present. They are there to obtain the board's authorization for the FDIC to begin seeking bidders for the bank (OCC 2001, 61–62).

If the bank is successful in raising additional capital, it can continue to operate and avoids closure. On the other hand, if investors are unwilling to provide the needed equity, the bank will be closed and placed into receivership.

6. TREATMENT OF CLOSED BANKS

Since the FDIC not only is receiver, but also deposit insurer, its responsibility surpasses a typical receiver; it must make insured depositors whole. It does so either by repaying depositors out of its insurance reserves or, far more frequently, by transferring the deposits to another bank. The bank that acquires the deposits must be compensated since deposits are simply liabilities representing future payments to be made by the bank acquiring the deposits. Such compensation also is drawn from the FDIC's reserves. The FDIC collects the failed bank's assets by selling them to a healthy bank or other investor, or by holding them and collecting them as they mature. The proceeds of the asset collection are retained by the FDIC, offsetting its insurance losses, and are used to repay other creditors of the failed bank.

The FDIC as Receiver

The FDIC typically employs one of two techniques when acting as the receiver for a failing bank: deposit payoff or purchase and assumption. A deposit payoff involves 1) repaying insured depositors, 2) liquidating assets of the bank, and 3) dividing the proceeds from asset liquidation between itself and uninsured bank creditors. In a purchase and assumption transaction “a healthy institution *purchases* some or all of the assets of a failed bank . . . and *assumes* some or all of the liabilities” (FDIC 1998b, 19). When deciding which of these techniques to employ, the FDIC is guided by the least-cost requirement of the FDICIA. The requirement states that whenever it is named receiver, the FDIC must choose the option that was *least* costly in terms of the FDIC expenditures. The rule was a prominent feature of the FDICIA.²

The FDIC's Analysis

The FDIC's role begins when a bank chartering agency determines that the bank is no longer viable and notifies the FDIC. The FDIC then begins a multistep process generally lasting 90 to 100 days, but which can proceed much more quickly. While technically the FDIC is named receiver at the end of the process—on the day the bank is closed—it begins performing many of the activities one expects of a receiver long before this date.³

Immediately following the agency's notification of the FDIC, the FDIC performs a careful analysis of the bank's assets and liabilities to estimate the cost the FDIC will incur implementing a deposit payoff. The process involves estimating the market value of the assets. Since there is no secondary market for many loans, the asset valuation is based in part on likely cash flows, discounted to the present, minus costs of holding or selling the loans.

The FDIC also determines the amount of insured deposits, since it is this amount that the FDIC is responsible for repaying. One might imagine then that if the value of assets is smaller than the value of insured deposits, the FDIC simply subtracts the market value of assets from the amount of insured deposits, and the difference is the cost to the FDIC of a deposit payoff. Instead the calculation is somewhat more complicated. The FDIC must divide the proceeds of the asset sale between itself and uninsured depositors. The division is based on the share of total deposits held by insured and uninsured depositors. For example, if insured deposits account for 75 percent of total deposits, then

² An excellent historical review of the FDIC's work as receiver during the banking and thrift crisis of the 1980s can be found in Volumes 1 and 2 of FDIC (1998a). For a broad historical review of the crisis see Volumes 1 and 2 of FDIC (1997).

³ See Chapter 2 of FDIC (1998b), which provides a thorough, readable review of the process by which the FDIC closes out the operation of a troubled bank.

the FDIC receives 75 percent of the ultimate proceeds of collecting the assets. Uninsured depositors receive 25 percent (Thomson 1994).

If the value of assets exceeds the amount of total deposits, then the bank's general creditors are next in line to receive payments, followed by subordinated debt holders.⁴ Last in line are equity holders. Payments to general creditors, subordinated debt holders, and equity holders only occur if the FDIC and uninsured depositors suffer no losses. Therefore, payments to these creditors and to equity shareholders do not raise the FDIC's cost.⁵

Whether a deposit payoff or purchase and assumption is ultimately chosen, this estimation of the FDIC's cost of deposit payoff gives the FDIC a required baseline as it prepares to sell the bank. No bids can be accepted at a price that yields a closure cost to the FDIC higher than the cost of a deposit payoff because of the least-cost rule.

Bidding

Next the FDIC draws up a detailed description of the assets and liabilities of the troubled bank. Once completed, the FDIC offers the bank for sale, providing the description, known as the *information package*, to interested bidders. Interested bidders are allowed the opportunity to perform a due diligence analysis on the troubled bank, involving on-site review of the bank's books.

Following due diligence, each interested party submits a bid. The bid includes two figures. The first figure is the bidder's estimate of the collectable value of the troubled bank's assets or that portion of the assets that the bidder plans to acquire. When calculating this figure, the bidder deducts his expected collection expenses. The second, the intangible asset portion of the bid, is the bidder's estimate of what is often called the bank's franchise value. Here the bidder is attempting to estimate the future earnings flows that might emanate

⁴ There are two scenarios under which a failed bank's assets might exceed deposits. First, the FDICIA authorizes bank regulators to appoint a receiver when a bank's capital falls to 2 percent. In such a case, total assets exceed total liabilities, so assets will certainly exceed deposits which can be no greater than total liabilities. For most banks deposits are significantly smaller than total liabilities (on average deposits account for about 72 percent of bank liabilities). Second, the value of the troubled bank's assets might be smaller than the value of total liabilities, such that the bank has negative capital and must be closed, yet the value of assets exceed the value of all deposits.

⁵ The priority of payment is based on a provision of federal law normally referred to as the depositor preference rule, established by Title III of the Omnibus Budget Reconciliation Act of 1993 (Public Law 103-66). Prior to its enactment, general creditors had a claim on the failed bank's assets equivalent to that of the FDIC and uninsured depositors. The law placed the FDIC and uninsured depositors ahead of general creditors. See Thomson 1994 for a review of the changes produced by the depositor preference law. General creditors are all bank creditors except those holding 1) bank deposits or 2) subordinated notes and bonds issued by the bank. Subordinated notes and bonds are bank debts which contractually specify that they are repaid only after other bank creditors are repaid.

from the long-term deposit and loan relationships developed with the failed bank's customers. The bid is based on this estimate (FDIC 1998b, 13–17).

Several factors are important when estimating franchise value. One such factor is the proportion of core deposits in the failed bank's liability portfolio. Core deposits—checking and savings accounts held by individuals and small businesses—tend to pay below-market interest rates. Further, the depositors holding these core deposits are often deemed unlikely to withdraw their funds when a new bank takes over because of the inconvenience and costs of doing so. Acquirers are willing to pay more for a bank with a high proportion of this long-term source of low-cost funding. Another factor likely to be an important determinant of franchise value is the expected economic growth of the bank's market area. The relationships established by a bank with its retail and business customers, whether the bank is healthy or failing, are far more valuable in a vibrant local economy than in one in decline.

While the potential acquirers' bids are made up of two figures, one for the value of assets acquired and one for the franchise value acquired, another figure also plays an important role in the bid amount. Winning bidders typically assume the failing bank's insured deposits, and these deposits often exceed the value of assets purchased. Therefore, the acquirer will not pay the FDIC to buy the bank but instead must, on net, be compensated to take over the failing bank. As a result, one might assume that in total an acquirer's bid would be a negative dollar amount. But by convention, bids are calculated as if the FDIC were to pay the winning bidder dollar-for-dollar to assume insured deposits. For example, consider the case of Comatose National Bank. At the time of its failure the book value of its assets was \$200 million, and it had \$220 million in insured deposits. The amount bid by the winning bidder, Acquisitive National, was \$130 million, its estimate of the collectable value of the assets, and \$10 million for franchise value.

Though Acquisitive's bids together summed to \$140 million, it did not pay this amount to the FDIC at consummation. Instead, the FDIC paid Acquisitive \$80 million (\$220 million minus \$140 million), since Acquisitive had to be compensated for assuming \$220 million in Comatose deposits.

Once the bidding closes, the FDIC accepts the bid that produces the least cost to the FDIC. As long as one of the bids exceeds the FDIC's estimate of the cost of liquidating assets and repaying insured depositors—the deposit payoff method of disposing of the troubled bank—then the FDIC will employ the purchase and assumption method.

Uninsured Depositors Often Lose

Under either the deposit payoff or purchase and assumption method, uninsured depositors and other bank creditors stand to suffer losses. Losses have not always been imposed on such depositors. Prior to the FDICIA the FDIC could choose any resolution with a cost below the cost of a deposit payoff.

As a result, the FDIC had the leeway to make uninsured depositors whole even if doing so was not least cost, allowing it to protect the majority of these depositors from loss. The least-cost rule makes covering uninsured depositors much less likely, so that since the FDICIA, most have suffered losses. Even today, when the least-cost bidder wishes to take the uninsured deposits, uninsured depositors can be protected.

Frequency with Which the Disposition Methods Have Been Used

The FDIC employs three methods to handle failing banks. The first, purchase and assumption transactions, have predominated throughout the FDIC's history, accounting for 66 percent of all transactions since the FDIC was formed (FDIC 2003). During the 1980s, in exchange for taking on certain failing banks, purchasers often benefited from relaxed regulatory treatment. For example, the Garn-St. Germain Act of 1982 authorized the FDIC to sell failing banks to banks located outside the failing bank's home state. At the time, interstate banking was largely prohibited, so the opportunity to move into an attractive state by purchasing a failing bank in that state was especially appealing to acquisitive banks. Acquirers, in turn, were willing to pay more, diminishing the failed bank's drain on the FDIC's reserves, bank insurance premiums, and the chance that taxpayers would be called on to bailout deposit insurance. The second, deposit payoff transactions, have amounted to 20 percent of all FDIC transactions. A third transaction type, open bank assistance, accounts for 6 percent of all FDIC transactions.⁶ In an assistance transaction, the FDIC provides cash or loans to an insolvent bank to return it to solvency, thereby preventing its failure.

Congress authorized the FDIC to engage in open bank assistance in 1950, but only if the troubled institution was deemed essential to its community (FDIC 1998b, 48). The FDIC assisted only six banks from 1950 until 1982, when the Garn-St. Germain Depository Institutions Act dropped the essentiality test. Instead, Garn-St. Germain authorized the FDIC to provide open bank assistance as long as doing so was less expensive than a deposit payoff. A payoff is usually quite costly to the FDIC, especially when the failing bank is large, since the FDIC must manage payouts to all insured depositors and affect either the sale or collection of all of the bank's assets, a process that can proceed for years. Between 1982 and 1992 the FDIC provided assistance to 120

⁶ A fourth type of transaction, the insured deposit transfer, has also been employed. It is a hybrid between a purchase and assumption and a deposit payoff, making up 8 percent of all FDIC transactions. The FDIC began using the deposit transfer in 1983. Under this method a healthy bank acquires the insured deposits of a failed bank but typically none of its assets. In return for taking on these liabilities, the bank receives a payment of cash from the FDIC. The healthy bank benefits from new deposit customer relationships, and, therefore, the FDIC's payment to the acquiring bank is lower than the FDIC would otherwise pay out to depositors (FDIC 1998b, 45).

banks. But in 1991, the FDICIA restricted the ability of the FDIC to choose to assist banks. The Act required that the FDIC always choose the transaction that was least costly in terms of the FDIC expenditures and, should FDIC reserves be depleted, least costly to taxpayers. Further, in 1993 the Resolution Trust Corporation Completion Act (Public Law 103–204) prohibited the use of any FDIC funds to provide assistance if such assistance would benefit shareholders of the troubled institution. The combination of FDICIA's restriction and the Completion Act's prohibition meant that (except in a special case discussed later) the FDIC could no longer provide open bank assistance. Ultimately, this change meant that Congress reduced the FDIC's discretion to use funds from reserves built by bank-paid premiums or taxpayers' dollars for objectives other than closing banks at minimum cost.

Since 1993, therefore, the FDIC has used only purchase and assumption and depositor payout to dispose of failed bank assets and liabilities. Purchase and assumption dominates since it is typically the least-cost method. It is least costly because a purchaser is normally willing to pay more for assets (or equivalently, require lower compensation to assume liabilities) if they are delivered together with associated liabilities. When a significant portion of a failed bank's assets and liabilities are sold as a bundle, the buyer acquires the benefits of continuing relationships with the failed bank's customers. Developing these relationships could only be accomplished at a significant cost otherwise.

7. WHAT DID THE IMPROVEMENT ACT IMPROVE?

The Federal Deposit Insurance Corporation Improvement Act was intended to ensure that 1) bank closures be accomplished at the minimum cost possible to the deposit insurance fund, and 2) that bank supervisors quickly close banks that are no longer viable. Closure policies whereby uninsured depositors were protected from loss came to be viewed as unacceptably expensive to the insurance fund as well as damping any incentive these depositors might have to monitor their banks. During the 1980s, bank supervisors had been slow to close banks and thrifts that were in serious trouble, betting that the institution would recover if given time. Such delay was viewed by many observers as contributing to considerably higher closure costs and to excessive risk-taking by the troubled banks. Further, acting slowly meant that financial resources were locked away in poorly run operations.

The Act appears to have gone a long way toward accomplishing these two goals. First, as mentioned earlier, the FDICIA has meant that uninsured depositors suffer losses much more frequently. In the years immediately before implementation of the FDICIA, meaning 1986 through 1992, in 78 percent of bank failures uninsured depositors suffered no losses. Since the FDICIA became effective, (i.e., from 1993 through 2002), in 76 percent of bank failures

uninsured depositors were repaid less than 100 percent of the value of their deposits (Benston and Kaufman 1997, Table 3; *FDIC Annual Report*, various years). As a result, these depositors now share some of the bank failure costs previously borne by the FDIC. Uninsured depositors are those with more than the FDIC coverage limit of \$100,000 in an account and depositors with funds in foreign offices of U.S. banks.

As an additional advantage, because depositors are no longer protected from loss, those with more than \$100,000 in an account or with funds in a bank's foreign office can be expected to exercise some market discipline over banks. In other words, these individuals will make an effort to monitor the health of their banks since they know that depositors in failed banks have experienced losses. They will demand higher interest rates or remove their funds if the bank is perceived as too risky. Bank risk-taking will be reduced, lowering the frequency and cost of bank failures.

The monitoring benefit may be limited, however. The FDICIA appears to have increased the likelihood that large banks' uninsured depositors may suffer losses in a failure, and large banks are the greatest recipients of uninsured deposits. Prior to the FDICIA, these depositors were uniformly protected (Benston and Kaufman 1997, 30). However, in the case of several fairly large banks, depositors have suffered losses since the FDICIA. Yet, FDICIA contains a provision that allows supervisors in some cases to protect all depositors in large banks, a fact which will certainly damp depositors' incentives to monitor large bank health. Further, uninsured deposits make up a fairly small fraction of the total deposits of small banks, so for these banks the significance of depositor monitoring is also limited. As of the end of the first quarter of 2003, on average, uninsured deposits accounted for only 23 percent of small banks' deposits. Here a small bank is defined as one with assets less than \$1 billion.

Second, the FDICIA set in place a mechanism to lower the likelihood that supervisors will forbear, i.e., wait to close a bank that is clearly no longer viable. Since 1993, when the prompt corrective action provisions took effect, supervisors generally have had 90 days, and at most 270 days, to close a critically undercapitalized bank. While the requirement is straightforward, measuring a bank's capital—meaning valuing assets and liabilities—often is not. Any failure by supervisors to quickly force a bank to “write down” the value of uncollectible assets will diminish the effectiveness of these prompt corrective action requirements.

Placing a dollar value on assets and liabilities always involves subjective judgements. One of the primary roles of bank supervision is measuring this value. If the bank has overstated capital, examiners from the bank's supervisory agency should require the bank to reduce its reported level of capital, in some cases enough to indicate that the bank is insolvent or nearly so. Ensuring that these examiner judgments are made in an unbiased manner—at times when the management of the troubled bank and interested parties might bring

pressure to be lenient—is critical to the effectiveness of prompt corrective action.

The FDICIA established a mechanism intended to encourage unbiased judgments by bank supervisors. If the supervisor does not lower the value of capital when doing so is appropriate, the troubled bank is likely to increase its losses, ultimately expanding the FDIC's losses when the bank is closed. Whenever the FDIC loses an amount equal to the greater of \$25 million or 2 percent of the failed bank's assets, the inspector general of the failed bank's federal supervisor must prepare a report on the failure. The report describes the reasons for the loss and how such losses might be prevented in the future. These reports, scrutinized by the General Accounting Office, are available to Congress and to the public. The threat of public scrutiny and censure provided by an inspector general report is intended to offset any pressures to be inappropriately lenient.

The inspector general reports appear to have had a positive influence on banking agency enforcement of the prompt corrective action portions of the FDICIA. According to Benston and Kaufman (1997, 21, 26) several critical reports were produced soon after the FDICIA requirement became effective. As a result, the agencies modified their procedures and received more favorable reports subsequently.

8. LIMITS ON DISCOUNT WINDOW LENDING

The FDICIA's least-cost requirement successfully changed FDIC behavior so that uninsured depositors are much less frequently protected. Yet, these depositors might still avoid losses, and so have little incentive to monitor. As a bank's financial health deteriorates, depositors may become aware of this deterioration, and those with deposits not protected by the FDIC will seek to withdraw them. The bank might attempt to meet depositors' demands for repayment by borrowing from the Federal Reserve. If the Fed lends, depositors can escape and avoid losses. Consequently, if depositors expect Fed discount window lending to flow, they have a reduced incentive to monitor bank risk-taking.

Further, uninsured depositors' gain is met by an equivalent FDIC loss. Fed lending that allows these depositors to escape, increases FDIC losses because, while uninsured depositors bear losses in a bank failure, the Fed does not. The Fed bears no losses since it lends only if the bank provides, as collateral, assets worth more than the Fed loans. Therefore, funding from depositors who are likely to share some of the failed bank's losses, is replaced by funding from the Fed, which is protected against losses. Losses that might have been borne by depositors are transferred to the FDIC, and the vehicle making this transfer possible is Fed lending.

Legislators designing the FDICIA saw the danger and placed limits on Fed lending. In general, the Act allows lending for only 60 days to banks that are undercapitalized. Even more restrictive is the limitation on lending to critically undercapitalized banks. For such banks, the Fed can only lend for five days. So the FDICIA restricts the potential for Fed lending to allow uninsured depositors to escape.

The Act's limitations may not be perfect, however. For as Broaddus (2000) and Goodfriend and Lacker (1999) note, depositors may escape before the limitations are brought to bear. Depositors may have become aware of financial problems before the bank's reported capital has fallen. In other words, while the bank's true capital position may be quite weak, reported capital levels may not have declined. Examiners may not yet have forced a revaluation of the bank's assets. If so, Fed lending might occur, allowing uninsured depositors to escape from a weak bank.

Yet even if FDICIA's limitations prevent Fed lending from facilitating the escape of depositors, some may still escape. For even without any Fed loans, the bank could meet the demands of depositors and creditors by selling the same assets it would otherwise release to the Fed as collateral. The assets might be sold to other banks or to secondary market participants. The development during the 1990s of secondary markets for a number of bank loans improves the opportunities for such sales. Consequently, regardless of Fed lending, some uninsured depositors can be expected to escape.⁷

9. AID FOR BANKS THAT MIGHT POSE A SYSTEMIC RISK

Section 141 of the Act requires the FDIC to determine and employ the least-costly resolution method. Further, this section of the Act prohibits the FDIC, when acting as receiver for a troubled bank, from protecting uninsured depositors and the bank's other creditors if doing so adds to the expense of resolution. Yet, Section 141 grants an exception to these rules. The Act itself calls this the "systemic risk" exception, and observers typically refer to it as the "too-big-to-fail" exception. The least-cost rule can be bypassed if the FDIC determines that closing the troubled bank without protecting uninsured depositors or creditors would have serious effects on economic conditions or financial stability. In other words, an exception to the rule is allowed if a bank's closure with losses to uninsured depositors might lead to the spread of financial problems widely through the banking system.

⁷ A troubled bank might also repay uninsured depositors by raising new insured deposits. Insured depositors will be willing to provide funding to a troubled bank since they are insensitive to the bank's financial condition. Raising new deposits may take some time. The process can be quickened by employing a deposit broker. The broker can offer a bank's insured CDs to a wide audience of potential investors. However, Section 301 of FDICIA restricts financially weak banks' use of brokered deposits.

Only when the FDIC's Board of Directors, the Board of Governors of the Federal Reserve, and the Secretary of the Treasury in consultation with the President agree to the too-big exception is the latter allowed. Any decision to employ the exception must be reviewed by the General Accounting Office. If the exception is granted, the FDIC must recover its losses from a special assessment on insured banks beyond normal deposit insurance premiums.

Because of the possibility that the exception might be invoked and all depositors protected, investors in those banks that might be granted the exception have a reduced incentive to monitor and are likely to charge less than completely risk-adjusted interest rates. In response, such banks are likely to engage in an inefficiently high level of risk-taking, wasting financial resources.

10. CONCLUSION

During the 1980s, regulators were slow to close troubled thrifts, leaving many such institutions open long after they were clearly insolvent. Rather than forcing ineffectual institutions to disgorge their financial assets so that they might be reemployed in more profitable uses, regulators allowed these assets to remain under the institutions' control. In 1991, legislators passed the Federal Deposit Insurance Corporation Improvement Act. The intention was to reduce the likelihood that taxpayers would again be called on to bail out the deposit insurance fund as they had following the thrift failures of the 1980s. But the Act also established a process more likely to produce an efficient allocation of financial assets. Under the regime introduced by FDICIA, a troubled bank's management must either gather new equity funding or be closed. The requirement that it gather new funding forces the bank to face a market test similar to that faced by troubled nonbank firms. If investors can be convinced that the bank is viable, they will advance new equity, and the bank continues to control its assets. If not, the bank is taken over by a receiver, and its assets are sold to others.

The FDICIA cannot guarantee that the mistakes made during the 1980s will not be repeated, but it has implemented a more market-like set of closure procedures. Further, the Act places limits on regulator discretion and establishes disclosure requirements that encourage regulators to move quickly to force the recapitalization or closure of troubled banks. As a result, the events of the 1980s in which numerous insolvent thrifts were allowed to remain open for extended periods are less likely to be repeated. Still, the Act allows exceptions for certain banks, those deemed to pose a systemic risk. In such cases the Act tolerates a process that differs greatly from the one the market imposes on troubled nonbank firms.

Deposit insurance blunts the default mechanism that disciplines prompt closure of nonbank firms. Therefore supervisors must play a critical role ensuring that insolvent banks are closed promptly. Prompt closure is necessary

to minimize distortions to financial markets and to control the cost of deposit insurance to the banking system and ultimately to the public.

REFERENCES

- Benston, George J., and George G. Kaufman. 1997. "FDICIA after Five Years: A Review and Evaluation." Working Papers Series. Issues in Financial Regulation. WP-97-1. Federal Reserve Bank of Chicago. Chicago, IL. (July).
- Broaddus, J. Alfred, Jr. 2000. "Market Discipline and Fed Lending." Remarks before the Bank Structure Conference Sponsored by the Federal Reserve Bank of Chicago. Chicago, IL. 5 May. Also available online at <http://www.rich.frb.org/media/speeches/show.cfm?SpeechID=21> (accessed November 10, 2003).
- Federal Deposit Insurance Corporation (FDIC). 1997. *History of the Eighties, Lessons for the Future* 1, 2. Washington, D.C.
- _____. 1998a. *Managing the Crisis: The FDIC and RTC Experience* 1, 2. Washington, D.C.
- _____. 1998b. "Resolutions Handbook: Methods for Resolving Troubled Financial Institutions in the United States." Washington, D.C. Also available online at <http://www.fdic.gov/bank/historical/reshandbook/index.html> (accessed November 10, 2003).
- _____. 2003. Historical Statistics on Banking Table CB02. "Changes in Number of Institutions, FDIC-Insured Commercial Banks, United States and Other Areas." Washington, D.C. Also available online at www2.fdic.gov/hsob (accessed November 10, 2003).
- _____. Various years. *Annual Report*. Washington, D.C.
- Goodfriend, Marvin, and Jeffrey M. Lacker. 1999. "Limited Commitment and Central Bank Lending." Federal Reserve Bank of Richmond *Economic Quarterly* 85 (Fall): 1–27.
- Thomson, James B. 1994. "The National Depositor Preference Law." Federal Reserve Bank of Cleveland *Economic Commentary* (15 February).

U.S. Department of the Treasury, Office of the Comptroller of the Currency. (OCC). 2001. "An Examiner's Guide to Problem Bank Identification, Rehabilitation, and Resolution." Washington, D.C. (January). Also available online at www.occ.treas.gov/prbbnkgd.pdf (accessed November 10, 2003).

_____, Office of the Inspector General. 2000. "Material Loss Review of The First National Bank of Keystone." Report OIG-00-067. Washington, D.C. March 10. Also available online at www.treasury.gov/offices/inspector-general/audit-reports/2000/oig00067.pdf (accessed November 10, 2003).