

EVALUATING FDICIA

by

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I.

Introduction

It has been five years since the passage of one of the most important pieces of banking legislation, the Federal Deposit Insurance Corporation Act (FDICIA) of 1991. In the aftermath of the savings and loan debacle which came to a head in the late 1980s and the problems in the commercial banking industry, FDICIA was passed to reform the deposit insurance system which had helped create many of the problems in the thrift and banking sectors. FDICIA's provisions were designed to serve two basic purposes: 1) to recapitalize the Bank Insurance Fund of the FDIC and 2) to reform the deposit insurance and bank regulatory system so that taxpayer losses would be minimized. With the advantage of five years of hindsight, we can ask how well FDICIA has worked and whether it is likely to be successful in preventing the kind of thrift and banking crisis that we experienced in the 1980s and early 1990s.

To this end, this paper provides my views on the success of FDICIA by examining its provisions with regard to recapitalization of the Bank Insurance Fund, risk-based deposit insurance premiums, prompt corrective action, reform of too-big-to-fail, and increased prudential supervision. Before providing an evaluation of FDICIA by discussing each of these provisions in detail, the paper first provides background on why legislation was needed to reform deposit insurance by discussing the asymmetric information problems associated with deposit insurance. The paper then looks beyond FDICIA to new directions in bank supervision and concludes with an overall evaluation of the effectiveness of the Act.

II.

Asymmetric Information and Deposit Insurance

In order to understand why deposit insurance exists, we must first understand how asymmetric information creates the need for a government safety net for the banking system. However, the creation of a government safety net, such as deposit insurance, creates another set of moral hazard problems that can expose taxpayers to substantial losses and can even make the financial system more fragile.

Why is a Government Safety Net Needed?

A government safety net for the banking system is needed because of the existence of asymmetric information in the banking system: that is, banking institutions (defined here as including both commercial banks and thrift institutions) engage in activities such as making private loans that are not transparent to depositors. Thus asymmetric information exists because the banking institution knows more about the riskiness inherent in its activities than do its depositors. As a result, depositors' lack of information about the quality of bank assets or the market risk exposure it is carrying can lead to bank panics which can have serious harmful consequences for the economy.

This can be easily understood by considering the following situation. Suppose there is no deposit insurance, and an adverse shock hits the economy. As a result of the shock, 5% of the banks have such large losses on loans that they become insolvent (have a negative net worth and so are bankrupt). Because of asymmetric information, depositors are unable to tell whether their bank is a good bank or one of the 5% of banks that are insolvent. Depositors at bad and good banks recognize that they may not get back 100 cents on the dollar for their deposits and will want to withdraw them. Indeed, because banks operate on a sequential service constraint (a first-come, first-served basis), depositors have a very strong incentive to show up at the bank first because if they are last in line, the bank may run out of funds and they will get nothing. Uncertainty about the health of the banking system in general can lead to runs on banks both good and bad, and the failure of one bank can hasten the failure of others producing a contagion effect. If nothing is done to restore the public's confidence, a bank panic can ensue.

Indeed, bank panics were a fact of American life in the nineteenth and early twentieth centuries, with major ones occurring every 20 years or so in 1819, 1837, 1857, 1873, 1884, 1893, 1907, and 1930_1933. Bank failures were a serious problem even during the boom years of the 1920s, when the number of bank failures averaged around 600 per year.

A government safety net for depositors can short circuit runs on banks and bank panics, and by protecting the depositor can remove their reluctance to put their funds in the banking system. One form of the safety net is deposit insurance, a guarantee such as that provided by the Federal Deposit Insurance Corporation (FDIC) in the United States in which depositors are paid off in full on the first \$100,000 they have deposited in the bank no matter what happens to the bank. With

fully insured deposits, depositors don't need to run to the bank to make withdrawals even if they are worried about the bank's health because their deposits will be worth 100 cents on the dollar no matter what. From 1930 to 1933, the years immediately preceding the creation of the FDIC, the number of bank failures averaged over 2000 per year, producing a severe banking crisis that is now viewed as the source of the worst contraction in economic activity in U.S. history.¹ After the establishment of the FDIC in 1934, the United States has been free of bank panics. Indeed, bank failures averaged less than 15 per year until 1981, but then rose to the 200 level in the late 1980s.

It is important to recognize that deposit insurance is not the only way in which governments provide a safety net to depositors. In other countries, governments have often stood ready to provide support to domestic banks when they face runs even in the absence of explicit deposit insurance. This support is sometimes provided by lending from the central bank to troubled institutions, and is often referred to as the "lender-of-last-resort" role of the central bank. In other cases, funds are provided directly by the government to troubled institutions, or these institutions are taken over by the government and the government then guarantees that depositors will receive their money in full.

Moral Hazard and Deposit Insurance

Although a government safety net has been successful at protecting depositors and preventing bank panics, it is a mixed blessing. The most serious drawback of the government safety net like deposit

¹See Friedman and Schwartz (1963), Bernanke (1983) and Calomiris (1993).

insurance stems from moral hazard, the incentives of one party to a transaction to engage in activities detrimental to the other party. Moral hazard is an important concern in insurance arrangements in general because the existence of insurance provides increased incentives for taking risks that might result in an insurance payoff.

Moral hazard is a prominent concern in government arrangements to provide a safety net. Because with a safety net depositors know that they will not suffer losses if a bank fails, they do not impose the discipline of the marketplace on banks by withdrawing deposits when they suspect that the bank is taking on too much risk. Consequently, banks with a government safety net have an incentive to take on greater risks than they otherwise would.

Too Big to Fail

The moral hazard created by a government safety net and the desire to prevent bank failures have presented bank regulators with a particular quandary. Because the failure of a very large bank makes it more likely that a major financial disruption will occur, there is a natural reluctance to allow a big bank to fail and cause losses to its depositors. Indeed, when Continental Illinois, one of the ten largest banks in the United States, was rescued by the FDIC in May 1984, not only did the FDIC guarantee depositors up to the \$100,000 insurance limit, but also it guaranteed accounts exceeding \$100,000 and even prevented losses for Continental Illinois bondholders. Shortly thereafter, the Comptroller of the Currency testified to Congress that the FDIC's policy was to regard the 11 largest banks as too big to fail in other words, the FDIC would bail them out so that no

depositor or creditor would suffer a loss. (Note that too big to fail is a somewhat misleading term because when a too-big-to-fail bank is closed or merged into another bank, the managers are usually fired and the stockholders in the bank lose their investment.)

One problem with the too-big-to-fail policy is that it increases the moral hazard incentives for big banks. If the FDIC would close an insolvent bank and pay depositors only up to the \$100,000 limit, large depositors with more than \$100,000 would suffer losses. Thus they would have an incentive to monitor the bank by examining closely the bank's activities and then pulling their money out if the bank were taking on too much risk. To prevent such a loss of deposits, the bank would be less likely to engage in risky activities. However, once large depositors know that a bank is too big to fail, they have no incentive to monitor the bank and pull out their deposits when it takes on too much risk: No matter what the bank does, large depositors will not suffer any losses. The result of the too-big-to-fail policy is that big banks might take on even greater risks, thereby making bank failures more likely. Recent evidence in Boyd and Gertler (1993) suggests that large banks did take on riskier loans than smaller banks and that this has led to higher loan losses for big banks.²

The Principal-Agent Problem and Bank Supervision

²Another serious problem with the too-big-to-fail policy is that it is basically unfair. Small banks are put at a competitive disadvantage because they will be allowed to fail, creating potential losses for their large depositors, while big banks' large depositors are immune from losses.

Because a government safety net like deposit insurance creates moral hazard incentives for banking institutions to take on too much risk, bank regulation and supervision must take steps to reduce these moral hazard incentives. These steps take several forms. First regulations have been imposed on banks which restrict their asset holdings and the activities they can engage in. Banking regulation put strict limitations on banks holdings of risky assets such as common stock and limits the amount of loans in particular categories and to individual borrowers as a percentage of bank capital. Second, regulation imposes bank capital requirements, as represented by the Basle risk-weighted capital requirements or the imposition of minimum leverage ratios (the ratio of equity capital to assets). Bank capital requirements serve two purposes: 1) they provide a cushion that makes it less likely that the bank will be insolvent, thus making it less likely that the deposit insurer will incur losses in bad states of the world, and 2) they increase the incentives for banks to take on less risk because a bank with a large amount of capital has more to lose when it fails. Third, chartering of banks is used to screen potential owners of banks to increase the likelihood that they are unlikely to engage in highly risky activities that could put the bank in jeopardy. Fourth, regulatory authorities engage in prudential supervision by conducting regular examinations of banking institutions to monitor whether the bank is complying with capital requirements and restrictions on risky activities, and also to see whether it has proper management controls in place to reduce risk taking.

Although the above steps to reduce the moral hazard problem created by deposit insurance are crucial to a well functioning banking system, they are not always taken. The reason for this is another form of moral hazard referred to as the principal-agent problem. Regulators are ultimately

agents for voter-taxpayers (principals) because in the final analysis, taxpayers bear the cost of any losses by the deposit insurance agency. The principal-agent problem occurs because the agent (regulator) may not have the same incentives to minimize costs to the economy as the principal (the taxpayer). Bank regulators might not do their jobs properly because the principal-agent problem creates incentives for the regulators to engage in regulatory forbearance, the allowance of institutions to continue operating even if they do not fully comply with regulations such as minimum capital requirements, . For example, regulators might engage in regulatory forbearance in order to escape blame for poor performance by their agency. By shading the calculation of capital to meet requirements and pursuing regulatory forbearance, regulators can hide the problem of an insolvent bank and hope that the situation will improve. Kane (1989) characterizes such behavior on the part of regulators as “bureaucratic gambling.” The principal-agent problem is particularly severe if the regulatory agency does not have sufficient insurance funds to close down insolvent institutions, as was the case for the FSLIC in the mid 1980s, or does not have sufficient independence from the political process. Then the regulatory agency is likely to allow insolvent institutions to stay in business by pursuing regulatory forbearance in which capital requirements are in effect loosened. Because these insolvent institutions then have little to lose, they are more likely to "bet the bank" by taking enormous risks which can and has resulted in huge losses to the taxpayer.

III.

Evaluating the FDICIA Provisions

We have seen that although deposit insurance has solved one problem -- it has substantially reduced the probability of a banking panic -- it has created the other moral hazard problems outlined above. FDICIA has several types of provisions which have been intended to reduce the severity of these moral hazard problems and we examine each of these in turn.

Recapitalizing the FDIC

As we have seen, a lack of resources in the insurance fund makes it very likely that the deposit insurance agency will engage in regulatory forbearance and not close down insolvent institutions. The results of this were disastrous in the case of the savings and loans industry, where regulatory forbearance led to dramatic risk taking on the part of S&Ls which resulted in losses to the taxpayer of over \$100 billion. Because of the losses incurred by the FDIC in closing down insolvent institutions, by 1991 the FDIC was severely undercapitalized. To deal with this situation, FDICIA recapitalized the Bank Insurance Fund by increasing the FDIC's ability to borrow from the Treasury to \$30 billion (up from \$5 billion). FDICIA also allowed the FDIC to borrow \$45 billion for working capital money that would be repaid as the FDIC sold the assets of failed banks. FDICIA also mandated that the FDIC assess higher deposit insurance premiums until it could pay back its loans and achieve a level of reserves in its insurance funds that would equal 1.25% of insured deposits within 15 years, a goal that was reached for the Bank Insurance Fund (BIF) more than ten years early in 1995 because of the return to health of the commercial banking industry.

The rapid recapitalization of the Bank Insurance Fund of the FDIC should be seen as a major

success of the FDICIA legislation. However, despite a return to profitability of most S&Ls, the Savings Association Insurance Fund (SAIF) was still far from the mandated goal. Insurance premiums from the S&Ls which would otherwise be used to beef up the Savings Association Insurance Fund first had to be used to pay off the interest on the FICO bonds (issued to finance S&L bailouts under the Competitive Equality Banking Act of 1987). The result was that the funds in SAIF were well below the mandated level so that insurance premiums for even the best capitalized S&Ls remained at 23 cents per \$100 of deposits, a level more than five times the premium of 4 cents for well capitalized commercial banks. Clearly the higher premiums for S&Ls put them at a serious competitive disadvantage and this caused a substantial shrinkage of S&Ls' deposits relative to commercial banks. Indeed, the shrinkage of S&L deposits was so severe that there was fear that there would not be enough insurance premiums collected to cover the FICO bond payments, with the result that these bonds could default.

The SAIF problem was resolved by legislation passed in late 1996 that taps not only savings institutions but also commercial banks for the needed funds to make the FICO bond payments and to beef up SAIF. The financial health of the FDIC now seems assured. This is extremely important because it now gives the FDIC the wherewithal to close down insolvent savings institutions if the need arises in the future.

Prompt Corrective Action

Among the most important features of FDICIA is its prompt corrective action provisions,

which require the FDIC to intervene earlier and more vigorously when a bank gets into trouble. Banks are now classified into five groups based on bank capital. Group 1, classified as “well capitalized,” are banks that significantly exceed minimum capital requirements and are allowed privileges such as insurance on brokered deposits and the ability to do some securities underwriting. Banks in group 2, classified as “adequately capitalized,” meet minimum capital requirements and are not subject to corrective actions but are not allowed the privileges of the well-capitalized banks. Banks in group 3, “undercapitalized,” fail to meet risk-based capital and leverage ratio requirements. Banks in groups 4 and 5 are “significantly undercapitalized” and “critically undercapitalized,” respectively, and are not allowed to pay interest on their deposits at rates that are higher than average. Regulators still retain a fair amount of discretion in their actions to deal with undercapitalized banks and can choose from a smorgasbord of actions, such as: restrictions on asset growth, requiring the election of a new board of directors, prohibiting acceptance of deposits from correspondent depository institutions, prohibiting capital distributions from any controlling bank holding company, and termination of activities that pose excessive risk or divestiture of non-bank subsidiaries that pose excessive risk.³ On the other hand, FDICIA mandates that regulators must require undercapitalized banks to submit an acceptable capital restoration plan within 45 days and implement the plan. In addition, the regulatory agencies must take steps to close down critically undercapitalized banks (tangible equity capital less than 2% of assets) by putting them in receivership or conservatorship within ninety days, unless the appropriate agency and the FDIC concur that other action would better achieve the purpose of prompt corrective action. If the bank

³See Spong (1994) for an outline of the prompt corrective action provisions in FDICIA.

continues to be critically undercapitalized it must be placed in receivership, unless specific statutory requirements are met.

Critics of the prompt corrective action provisions of FDICIA, for example Kaufman (1995), believe that the prompt corrective action provisions in FDICIA are too weak. The numerical values for the capital ratios in the classifications are viewed as too low, particularly when compared to the capital ratios that seem to be demanded for noninsured financial institutions by the market. In addition, regulators are still given substantial discretion in dealing with troubled banks, leaving open the possibility of regulatory forbearance.

However, my view is that these criticisms of FDICIA are too harsh. An extremely important part of FDICIA that is often overlooked is that FDICIA requires a mandatory review of any bank failure that imposes costs on the FDIC. This report is prepared by the inspector general of the appropriate regulatory agency and must explain the regulatory agencies' actions and make recommendations for preventing such losses in the future. The resulting report must be made available to the Comptroller General of the United States (the head of the General Accounting Office) and to any member of Congress upon request, and the General Accounting Office must do an annual review of these reports and recommend improvements to the supervisory process. These provisions of FDICIA are extremely important because they increase the incentives of regulators to prevent costly bank failures. Opening up the actions of the regulators to public scrutiny will make regulatory forbearance less attractive to them, thereby reducing the principal-agent problem. It will also reduce the incentives of politicians to lean on regulators to relax their regulatory supervision of banks.

Although capital requirements are below capital levels held by other financial institutions which compete with banks, in the aftermath of FDICIA banks raised record amounts of new capital in the period 1992 to 1995. Bank capital as a percentage of assets for insured commercial banks has risen from 6.4 percent in 1990 before FDICIA to 8 percent by the end of 1995.⁴ Even more dramatic is what has happened to capital ratios for the so-called megabanks (those with over \$100 billion in assets). As pointed out in Berger, Kashyap and Scalise (1995), equity to assets of megabanks has risen from 3.9 percent in 1979, to 5.6 percent in 1990, to 7.0 percent in 1994. Currently, less than 0.15 percent of all banks (with a 0.03 percentage of total assets in the banking system) are classified as undercapitalized, compared to 4.5 percent (with one-quarter of total bank assets) at the end of 1990. Because of the very favorable conditions in recent years for the banking industry which has faced high net interest margins and record profitability, it is not entirely clear that all of this increase in bank capital has been due to FDICIA. However, there is anecdotal evidence that banks, and the markets, do fear the sanctions specified in FDICIA and this has encouraged them to increase their capital. This seems to have been especially true for the megabanks, which had much lower capital in the past.

Risk-Based Insurance Premiums

FDICIA also instructed the FDIC to come up with risk-based insurance premiums. The system the FDIC has put in place uses the bank capital classifications just outlined and other

⁴Federal Reserve *Bulletin*, June 1996, Table A.2, page 496

supervisory criteria to assess these premiums. For example, after a reduction in insurance premiums in September 1995 when the Bank Insurance Fund reached its mandated level, well-capitalized banks with the best supervisory rating (well over 90% of the banks) only had to pay an insurance premium of 4 cents per \$100, while the most undercapitalized banks with a low supervisory rating had to pay 31 cents per \$100. (The current premium ranges from 0 cents to 27 cents with 94% of banks with over 96% of total deposits paying zero.) However, because the Savings Association Insurance Fund had not yet reached its mandated level, S&Ls continued to pay higher premiums.

Risk-based insurance premiums are intended to reduce the moral hazard incentives for banks to take on higher risk because if they do so, they will have to pay higher premiums. In addition, the fact that risk-based premiums drop as the bank's capital increases encourages the bank to hold more capital, which creates further incentives for banks to reduce their risky activities.

The problem with risk-based premiums is that the scheme for determining the amount of risk at a bank is unlikely to be very accurate. For example, it is hard for regulators to determine an accurate, quantitative estimate of credit risk in a bank's portfolio. This is one reason why the risk-based premiums put in place rely on simple measures like capital ratios. There are two problems with the risk-based premiums as implemented. First, is that bank capital may not provide a very accurate measure of the riskiness of the banks. Second, is that as implemented, the risk-based premiums are not very discriminating. Since well over 90% of banks pay the same insurance premium at the lowest rate, the risk-based premiums do not create much incentive for risk reduction.

Increased Supervision

One reason that losses to taxpayers were so high in the resolution of the savings and loan crisis was that many of these institutions were examined infrequently. As a result, by the time regulators examined some of the troubled institutions, they had already incurred colossal losses. Provisions of FDICIA require regulators to perform annual on-site examinations and mandate stricter and more burdensome reporting requirements. The act also requires the regulatory authorities to address the modification of existing risk-based capital standards, which focus solely on credit risk, to take account of interest-rate risk as well. After making attempts to come up with capital standards that reflect interest-rate risk, the agencies elected not to pursue an explicit capital charge for interest-rate risk in a policy statement in June 1996. Instead, they decided to place a significant emphasis on interest-rate risk exposure and the quality of a bank's risk management process when evaluating the bank's capital adequacy.⁵

FDICIA also includes the Foreign Bank Supervision Enhancement Act (FBSEA), which in the wake of the BCCI scandal gives supervisory responsibility for foreign banks to the Federal Reserve and gives the Fed increased powers to acquire information on the foreign banks' activities. In addition, the Fed now has the right to prevent the operation of a foreign bank in the United States if it feels that the home country's supervision is not adequate or if the foreign bank is engaging in unsound banking practices.

FDICIA's requirements that regulators perform bank examinations at least once a year are

⁵Department of the Treasury, Federal Reserve System, Federal Deposit Insurance Corporation (1996).

necessary for monitoring banks_ compliance with bank capital requirements and asset restrictions. After the problems in the 1980s, it is likely that the regulators would have conducted these examinations this frequently in any case. Similarly, beefing up the ability of the Federal Reserve to monitor foreign banks might help dissuade international banks from engaging in undesirable activities.

Least-Cost Resolution

FDICIA also has provided important new legislative guidelines for the resolution of bank failures to minimize costs to the taxpayer. FDICIA generally requires that the FDIC resolve bank failures using methods which produce the least cost to the deposit insurance agency. In its report to the Comptroller General, it must document the assumptions used in evaluating the different alternatives for resolution of the failure and show that it chose the least-cost method. This has resulted in substantial changes in the resolution methods pursued by the FDIC. As pointed out in Kaufman (1995), in 1991 the FDIC imposed losses on uninsured depositors of only 17 percent of failed banks undergoing costly resolutions (which held only 3 percent of total assets in failed banks). By 1993, the percentage of failed banks with costly resolutions in which uninsured depositors suffered losses had climbed to 88 percent (with the percentage of total assets equaling 95 percent). In 1990, uninsured depositors at all large banks that failed were fully protected, while in 1993 all of uninsured depositors at the largest of the banks that failed -- none were particularly large -- were subject to losses.

These changes in resolution methods do alter the incentives for depositors with over \$100,000 in an account to monitor banks because they are now subject to losses. This may in part help explain why banks have increased their capital in recent years. On the other hand, the FDIC did not have lower losses as a percentage of failed bank assets in 1992 and 1993, possibly because of losses incurred by the banks before the establishment of these new procedures.

Even before FDICIA, the Federal Reserve incurred no losses from lending to failing banks because it only accepts the best quality collateral for its discount loans. Some critics took the view that because the Fed could lend to a bank and help keep it afloat, its discount lending might impose bigger losses on the FDIC because it provided time for uninsured depositors to pull out of the bank. It is not clear whether this was an important factor in FDIC losses, but provisions in FDICIA have been designed to limit the Fed's discount lending to troubled banks. FDICIA limits Fed lending to undercapitalized banks to 60 days within any 120 day period unless the bank is certified as viable by the Fed or the primary regulator. The Federal Reserve is instructed to demand repayment within five days for critically undercapitalized banks, and if the five day limit is violated, the Fed is liable for part of the increased losses to the FDIC and must notify Congress of any payments to the FDIC as a result.

Although it is not clear how important discount lending has been to FDIC losses in the past, these provisions of FDICIA do encourage better incentives for the Federal Reserve to not prop up weak banks. This restriction on Fed lending, along with the least-cost resolution provisions of FDICIA, make it less likely that regulators will pursue procedures for dealing with failing banks that will raise costs to the taxpayer.

Reform of Too Big to Fail

As mentioned earlier, the too-big-to-fail doctrine produces increased moral hazard incentives for large banks to take on excessive risk. FDICIA weakens these incentives by its least-cost resolution provisions which are to be applied to large as well as small banks. However, FDICIA does provide a systemic-risk exception to least-cost resolution. A bank can be declared too big to fail so that all depositors, both insured and uninsured, would be fully protected, only if not doing so would _have serious adverse effects on economic conditions or financial stability._ Furthermore, to invoke the too-big-to-fail policy, a two-thirds majority of both the Board of Governors of the Federal Reserve System and the directors of the FDIC, as well as the approval of the secretary of the Treasury, would be required. The Secretary of the Treasury must also document evidence that a systemic-risk exception was necessary, and the General Accounting Office must review the actions taken to comment whether they appeared to be necessary.

Another feature of FDICIA is that it requires the banking industry to pay the cost of a too-big-to-fail bailout through an emergency assessment to the FDIC as a proportion of each bank's tangible assets. This special assessment produces incentives for the industry to question the abandonment of least-cost resolution, thus encouraging them to monitor the regulators to make sure that they do not invoke the systemic-risk exception too often.

The systemic-risk exception of too-big-to-fail has been criticized by those who believe that this loophole can be used in cases where no systemic risk is present. The debate here is quite similar

to the rules versus discretion debate that has been prominent in macroeconomics. Advocates of rules argue that discretion leads to the time-inconsistency problem of Calvo (1977), Kydland and Prescott (1977) and Barro and Gordon (1983) in which optimal discretionary policies at a given point in time lead to a sequence of policies that are suboptimal. The reason is that the discretionary policies lead to expectations that they will continue to be used in the future, which leads to undesirable behavior on the part of economic agents. This is exactly the same argument used by those who criticize the use of discretion in exercising least-cost resolution or prompt corrective action. If least-cost resolution or prompt corrective action are not exercised in some cases, banks and markets will expect that they will not be exercised in the future, thus increasing the incentives for banks to take on more risk. Another way of saying this is that prompt corrective action and elimination of the too-big-to-fail policy create greater incentives for banks to reduce risk taking because they know that they are more likely to pay a price for this risk taking in the future.

Advocates of discretion counter that rules are often too rigid because there are often circumstances which could not be predicted, requiring the exercise of discretion. Thus they oppose rules because strict adherence to them has the potential for disaster. Financial crises and systemic risk stem from events which are highly unpredictable and which have highly unpredictable consequences. Indeed, the study of financial crises shows that systemic risk situations which are unexpected can be very damaging to the economy and thus require measures to contain them.⁶ Thus there is apparently a strong case for discretion.

As discussed elsewhere (Mishkin [1991a] and Bernanke and Mishkin [1996]), the

⁶See, for example, Bernanke (1983) and Mishkin (1991b, 1994, 1996).

dichotomy between rules and discretion may be misleading. Time inconsistency can be avoided even if rules are not rigid, as long as the exceptions to them are infrequent because they are not easy to implement, and policymakers are accountable to credibly explain why an exception has been necessary. This is exactly what FDICIA does. FDICIA makes it hard to invoke the systemic-risk exception because the FDIC, the Federal Reserve and the U.S. Treasury must all agree to do so. Furthermore, the provisions in FDICIA which require documentation of evidence to support the view that a failure of a large bank would lead to systemic risk makes the regulatory authorities accountable when they invoke the systemic-risk exception. Similarly, regulators are held accountable for their discretionary actions in interpreting prompt corrective action in the report that must be filed after a bank has failed.

My view is that FDICIA sensibly allows for regulatory discretion because of the potential for unforeseen circumstances and the potential high cost of a financial crisis. However, FDICIA allows discretion in a clever way so that there are strong incentives for the regulators to follow the least-cost resolution and prompt corrective action rules, except under highly unusual circumstances. The balance between rules and discretion provided by FDICIA seems to me to be quite reasonable and desirable.

Limiting Interbank Risk

With FDICIA's limitations on the use of a too-big-to-fail policy, it has become more important that the contagion from bank failures be restricted. The payments system relies on

substantial extensions of intraday, overnight and longer-term credit between banks. Failure of a large bank or one that is intimately involved in the large-dollar payments system could then lead to a systemic shock that could cause the payments system to freeze up or, at a minimum, lead to substantial losses at other banks. To reduce potential payment system and contagion problems, FDICIA contains provisions to limit interbank risk if a large bank fails.

FDICIA directed the Board of Governors of the Federal Reserve to develop a regulation which would limit interbank credit exposure, and the Board of Governors has adopted in Regulation F, which restricts the interday exposure to a not adequately capitalized correspondent to less than 25% of the bank's capital.

If a large bank fails, many other financial institutions might encounter severe liquidity problems because they might not have immediate access to their funds at the failed bank. To prevent a systemic liquidity problem from developing, FDICIA authorizes the FDIC to make a final settlement with creditors when it assumes receivership of a failed bank. The settlement rate is based on the FDIC's average recovery experience. In addition, FDICIA explicitly recognizes contractual netting agreements and holds them legally binding. This provision reduces short-term credit exposure, making the clean up after a bank failure substantially easier.

The FDICIA provisions to limit interbank risk are an important step forward because they make it more likely that a large bank failure will not produce a systemic problem. Not only does this have direct benefits of making a banking panic less likely, but it also improves the incentives for the regulatory agencies to use least-cost resolution methods to close banks because a bank failure has less potential to do damage to the banking system. This directly reduce costs to taxpayers, and but

because resolution of a failed bank is more likely to impose losses on depositors and other creditors, it also increases incentives for the market to monitor banks.

Overall Evaluation

Although far from perfect, FDICIA has changed the incentives for both regulators and banking institutions, making it less likely that the banking problems of the 1980s will be repeated. FDICIA has helped make banks healthier by encouraging them to increase the amounts of their capital and has changed the behavior of the regulatory authorities, encouraging them to incur lower costs in the resolution of bank failures, which should decrease potential losses to taxpayers. From today's vantage point, FDICIA looks like a success story.

However, before we become complacent, we need to be aware that FDICIA may not have solved all the problems inherent in our system of deposit insurance. Most important in this regard is that FDICIA has never really been tested. Since its passage in 1991, the economy has been in a business cycle upswing, with banks earning record profits. When times are good, it is rare that problems in the banking system come to light. Only after a good performance of the banking system during the next business cycle downturn can we breathe easier and be more assured that FDICIA has created a healthier regulatory environment.

Recent research has also indicated that the prompt corrective action provisions which are based on capital ratios may have been oversold. Bank capital is extremely hard to measure and thus capital measures may not accurately reflect whether a bank is likely to become insolvent. Jones and

King (1995) find that from 1984 through 1989, most banks with a high probability of insolvency would not have been considered undercapitalized and thus would not have been subject to prompt corrective action under FDICIA. Peek and Rosengren (1996a) come to a similar conclusion: they find that problem institutions often delayed reporting low capital ratios and adding to loan-loss provisions until after bank examinations found there was a problem. In another study, Peek and Rosengren (1996b) find that the prompt corrective action provisions of FDICIA would not have led to earlier intervention on the part of regulators in New England in the period from 1989 to 1992 before the prompt corrective actions of FDICIA went into effect. The problem here may be that current standard accounting procedures for calculating bank capital, which rely on historical-cost accounting, produce poor measures of true capital. Thus although FDICIA has the benefit of encouraging prompt corrective action, capital ratios as calculated currently may not be the best way to trigger prompt corrective action.

IV.

Beyond FDICIA: New Trends in Prudential Supervision

FDICIA takes the traditional approach to bank supervision by focusing on the quality of the bank's balance sheet at a point in time and whether the bank complies with capital requirements. Although the traditional focus is important for reducing excessive risk-taking by banks, it may no longer be adequate. First is the point made above that capital may be extremely hard to measure. Furthermore, in today's world, financial innovation has produced new markets and instruments

which make it easy for banks and their employees to make huge bets quickly. In this new financial environment, a bank that is quite healthy at a particular point in time can be driven into insolvency extremely rapidly from trading losses, as has been forcefully demonstrated by the failure of Barings in 1995 which, although initially well capitalized, was brought down by a rogue trader in a matter of months. Thus an examination which focuses only on a bank's position at a point in time may not be effective in indicating whether a bank will in fact be taking on excessive risk in the near future.

This change in the financial environment for banking institutions since the passage of FDICIA has resulted in a major shift in thinking about the bank supervisory process throughout the world. Bank examiners are now placing far greater emphasis on evaluating the soundness of bank's management processes with regard to controlling risk. This shift in thinking was reflected in a new focus on risk management in the Federal Reserve System's 1993 guidance to examiners on trading and derivatives activities. The focus was expanded and formalized in the Trading Activities Manual issued early in 1994, which provided bank examiners with tools to evaluate risk management systems. In late 1995, the Federal Reserve and the Comptroller of the Currency announced that they would be assessing risk management processes at the banks they supervise. Now bank examiners give a separate risk management rating from 1 to 5 which feeds into the overall management rating as part of the CAMEL system. Four elements of sound risk management are assessed to come up with the risk management rating: 1) The quality of oversight provided by the board of directors and senior management, 2) the adequacy of policies and limits for all activities that present significant risks, 3) the quality of the risk measurement and monitoring systems, and 4) the adequacy of internal controls to prevent fraud or unauthorized activities on the part of employees.

This shift toward focusing on management processes is also reflected in recent guidelines adopted by the U.S. bank regulatory authorities to deal with interest-rate risk. As required by FDICIA, U.S. regulators were contemplating requiring banks to use a standard model to calculate the amount of capital a bank would need to have to allow for the interest-rate risk it bears. Although bank examiners will continue to consider interest-rate risk in deciding on the bank's capital adequacy, the regulatory agencies decided to adopt guidelines for how banks manage interest-rate risk, rather than a one-size-fits-all formula. These guidelines require the bank's board of directors to establish interest-rate risk limits, to appoint officials of the bank to manage this risk and to monitor the bank's risk exposure. The guidelines also require senior management of a bank to develop formal risk management policies and procedures, to ensure that the board of director's risk limits are not violated and to implement internal controls to monitor interest-rate risk and compliance with the board's directives.

Another direction taken by bank regulators is to beef up disclosure requirements. More public information about the risks incurred by banks and the quality of their portfolio can better enable stockholders, creditors and depositors to evaluate and monitor banks, and so act as a deterrent to excessive risk-taking. This view is consistent with a recent position paper issued by the Euro-currency Standing Committee of the G-10 Central Banks, which recommends that estimates of financial risk generated by firms' own internal risk management systems be adapted for public disclosure purposes.⁷ Such information would supplement disclosures based on traditional accounting conventions by providing information about risk exposures and risk management that is

⁷See Euro-currency Standing Committee of Central Banks of Group of Ten Countries (1994) and a companion piece to this report, Federal Reserve Bank of New York, (1994).

not normally included in conventional balance sheet and income-statement reports.

V.

Conclusion

FDICIA has improved the regulatory environment and is an important step in the right direction. Its prompt corrective action provisions and requirements for regulators to make themselves accountable by submitting reports on the resolution of failed banks are important principles to guide the bank regulatory process. However, because of the limitations of using bank capital as the linchpin of prompt corrective action, the regulatory/supervisory process needs to keep up with the more dynamic financial system by going beyond FDICIA's focus on bank capital and paying increased attention to the quality of internal controls and risk management in banking institutions.

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Evaluating FDICIA

ABSTRACT

This paper provides an evaluation of the Federal Deposit Insurance Corporation Act (FDICIA) of 1991 by examining its provisions with regard to recapitalization of the insurance fund, risk-based deposit insurance premiums, prompt corrective action, weakening of too-big-to-fail, and increased prudential supervision. The analysis suggests that FDICIA is an important step forward because it improves incentives in the bank regulatory system with its prompt corrective action provisions and requirements for regulators to make themselves accountable by submitting reports on the resolution of failed banks. However, because of the limitations of using bank capital as the linchpin of prompt corrective action, the regulatory/supervisory process needs to keep up with the more dynamic financial system by going beyond FDICIA's focus on bank capital and paying increased attention to the quality of internal controls and risk management in banking institutions.

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