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FDICIA: ITS POTENTIAL TO IMPACT REGIONAL FINANCIAL STABILITY

Catharine M. Lemieux¹

On December 19, 1991, after almost a year of debate on banking reform, Congress passed the Federal Deposit Insurance Corporation Improvement Act (FDICIA). Its primary purpose was to provide additional resources to help the industry refinance its own insurance fund. FDICIA also instituted supervisory practices intended to reduce the drain on the Bank Insurance Fund (BIF) so that, with the additional financial support provided by Congress, problems in the industry could be resolved.

Ironically, current economic conditions - specifically, low interest rates, improved asset quality, and high bank liquidity - have reduced the number of bank failures and their overall cost to the insurance fund. The FDIC reported that, as of first quarter 1993, the insurance fund balance was a positive \$1.2 billion. In spite of this improved outlook, the industry must still deal with the legislated changes in bank supervision and resolution intended to reduce the cost of bank failures.

One fundamental change brought about by FDICIA is a movement toward depositor discipline, while at the same time changing part of the safety net that promotes stability. FDICIA cuts back or eliminates several tools that provided much of the financial stability in banking during the problems of the 1980s. This article explores the FDICIA provisions that have the most potential for affecting financial stability. Three of these are highlighted: prompt corrective action, liquidity support, and least-cost resolution. The following sections address the origins of the provisions, what they contain, and how they could accentuate liquidity pressures.

Where Did It Come From?

Why did Congress feel that it was necessary to impose strict regulation on banking? The short answer is, to reduce the cost of bank failures to the insurance fund and ultimately taxpayers. According to FDIC statistics, the balance in the insurance fund was a negative \$7 billion (net of reserves) as of year-end 1991.

The ongoing savings and loan bailout heightened Congress' sensitivity to the issue of providing taxpayer assistance to failed financial institutions. Practices identified as factors contributing to the high cost of the savings and loan clean-up were targeted for tight regulation by FDICIA. Regulatory forbearance, regulatory accounting, lax capital standards, rapid loan growth, and high interest rates on brokered deposits were some of the factors identified by the General Accounting Office (GAO) as contributing to thrift industry losses.

Banking regulators were criticized for allowing institutions to remain open long after unsafe and unsound conditions had been identified. Barth, Brumbaugh, and Litan reported that the average length of time a failed bank had been on the regulators' problem list increased from 15 months in 1980 to 28 months in 1989. Meanwhile, FDIC resolution costs increased from 12 percent of failed bank assets in mid-decade to 22 percent in 1989. Forbearance was costly.

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Bank resolution policies, particularly "Too Big to Fail" which provided 100 percent coverage for uninsured depositors at large banks, came under fire. In 1991, the Treasury estimated that the cost of the "Too Big To Fail" policy for six large bank resolutions that occurred prior to 1991² was approximately \$3 billion.³ When the FDIC began raising insurance premiums to replenish the insurance fund, banks objected to the policy of paying off uninsured depositors at these large institutions.

In 1991, Congress was faced with yet another appropriations request for the savings and loan bailout as well as a request for funding for the bank insurance fund. In an effort to contain industry losses borne by the taxpayers, Congress passed FDICIA with the intention of minimizing the taxpayers' future liability for failed banks. FDICIA contains significant changes in Federal Reserve discount window lending, the bank supervision process, and bank resolution practices. The following section describes these changes and analyzes the potential implications for the banking system.

Overview of FDICIA

FDICIA contains many sections, but this article will concentrate on changes in the bank supervision process, liquidity support for troubled banks, and requirements for ensuring the least-cost resolution of failing institutions. These sections contain the essence of the "new order" for bank depositors. The following sections briefly review each of these provisions.

Bank Supervision

FDICIA initiates a capital-based supervisory system known as prompt corrective action. This framework consists of mandatory and discretionary supervisory actions that become increasingly severe as institutions reach specified capital "tripwires", eventually resulting in closure if a bank's tangible equity becomes two percent or less of total assets. The prompt corrective action framework makes three major changes to regulators' traditional approach to bank supervision. First, capital is singled out as the primary indicator of a bank's condition; second, supervisory actions are mandated as a bank's capital declines; and third, early closure is instituted. Capital ratios that define each "tripwire" are presented in Table 1.

The combination of capital requirements and activity restrictions is not a new approach to bank supervision. The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 tied these two approaches by limiting certain activities such as asset growth and holdings of brokered deposits based on bank capital levels. FDICIA expands this approach by combining mandatory activity restrictions and capital requirements in the prompt corrective action framework. The mandatory and discretionary supervisory actions associated with each capital level are detailed in Table 2.

The activity restrictions contained in FDICIA center around curtailing risk-taking and preventing management from depleting an undercapitalized institution's equity capital. FDICIA limits potentially risky activities of undercapitalized banks by restricting asset growth; requiring divestiture of any subsidiary that poses a significant risk to the insured institution, or is likely to cause a dissipation of its assets or earnings; and limiting access to high cost deposits by limiting

² The resolution of BancTexas, First City (the first time), First Republic, MCorp, Texas American Bancshares, and National Bancshares Corporation were six of the largest bank resolutions that occurred from 1987 through 1990.

³ The figures on the cost of "Too Big to Fail" are gross figures and do not include such things as offsets against loan balances that would have reduced depositor losses. Thus, the cost should be viewed as a maximum estimate.

interest rates to prevailing rates and prohibiting brokered deposits. Restrictions on the payment of management fees, dividends, inter-affiliate transactions, capital distributions, and bonuses and raises to senior executive officers, are some of the restrictions that curtail management's ability to deplete the equity of undercapitalized institutions.

Table 1. Capital Zones for Prompt Corrective Action

Capital Zone	Total Risk-Based Ratio ^a		Tier 1 Risk-Based Ratio ^b		Leverage Ratio ^c
Well Capitalized	10 or above	and	6 or above	and	5 or above
Adequately Capitalized	8 or above	and	4 or above	and	4 or above ^d
Undercapitalized	Under 8	or	Under 4	or	Under 4 ^e
Significantly Undercapitalized	Under 6	or	Under 3	or	Under 3
Critically Undercapitalized ^f					

^a Ratio of qualifying total capital to weighted risk assets.

^b Ratio of Tier 1 capital to weighted risk assets.

^c Ratio of Tier 1 capital to average total consolidated assets.

^d The standard is three percent or above for a bank with a composite CAMEL rating of one in its most recent report of examination.

^e The standard is under three percent for a bank with a composite CAMEL rating of one in its most recent report of examination

^f The only criteria is a tangible equity to assets ratio that is equal to or less than two percent. Tangible equity includes core capital, plus cumulative perpetual preferred stock, minus all intangible assets except purchased mortgage servicing rights (up to a specified limitation). The denominator is quarterly average total assets minus the deductions made in the numerator.

Table 2. Supervisory Actions Applicable to Institutions In Various Capital Categories

Well Capitalized

Mandatory Actions

May not make any capital distribution or pay a management fee to a controlling person that would leave the institution undercapitalized.

Discretionary Actions

None

Adequately Capitalized

Mandatory Actions

May not make any capital distribution or pay a management fee to a controlling person that would leave the institution undercapitalized.

Must obtain a waiver from the FDIC to accept brokered deposits. The rates paid for such deposits cannot significantly exceed the rate paid on deposits of similar maturity in the institution's normal market area or the national rate for deposits accepted outside the institution's normal market area.^a

May not provide insurance on pass through deposits unless the bank has permission to offer brokered deposits.^b

Discretionary Actions

None

Undercapitalized

Mandatory Actions

May not make any capital distribution or pay a management fee to a controlling person that would leave the institution undercapitalized.

Must cease paying dividends.

Subject to increased monitoring.

May not accept brokered deposits or offer pass through insurance.^c

May not solicit deposits by offering rates of interest that are significantly higher than the prevailing rates of interest on insured deposits (1) in the institution's normal market areas; or (2) in the market area in which such deposits would otherwise be accepted.^d

Must submit an acceptable capital restoration plan within 45 days and implement the plan.

Growth of total assets must be restricted.

Approval from the appropriate agency is required prior to acquisitions, branching, and new lines of business.

Discretionary Actions

The agency may, if it determines that such action is necessary to carry out the purposes of prompt corrective action, take any of the following additional actions:

Order the institution to recapitalize by issuing equity or debt (including voting stock) or acceding to acquisition or merger.

Restrict inter-affiliate transactions.

Restrict the interest rates the institution pays on deposits.

Order a new election of the board of directors, dismissal of certain senior executive officers, or hiring of new officers.

Prohibit acceptance of deposits from correspondent depository institutions.

Require a company that controls the institution to obtain its regulator's approval before making any capital distribution.

Require the institution to divest or liquidate any subsidiary that poses a significant risk to the institution, or is likely to cause dissipation of its assets or earnings.

Require any controlling company to divest any affiliate that is in danger of insolvency and poses significant risk to the institution, or is likely to cause dissipation of its assets or earnings.

Require any controlling company to divest the institution.

Require the institution to take any other action that would carry out the purposes of prompt corrective action more effectively than the above actions.

Significantly Undercapitalized

Mandatory Actions

Subject to all provisions applicable to undercapitalized institutions.

Bonuses and raises to senior executive officers prohibited without prior written approval.

The agency will take the following actions unless it determines that doing so will not further the purposes of prompt corrective action:

Must raise additional capital or arrange to be merged with another institution.

Transactions with affiliates must be restricted by requiring compliance with section 23A of the Federal Reserve Act as if exemptions of that section did not apply.

Interest rates paid on deposits must be restricted to prevailing rates in the region.

Subject to at least one of the discretionary actions for undercapitalized institutions.

Discretionary Actions

Subject to additional discretionary actions for undercapitalized institutions if they will better carry out the purpose of prompt corrective action.

Subject to any of the supervisory restrictions for critically undercapitalized banks if such action is necessary to carry out the purposes of prompt corrective action.

Subject to conservatorship or receivership if the institution fails to submit or implement a capital restoration plan or to raise capital pursuant to agency order, if such action is necessary to carry out the purposes of prompt corrective action.

Critically Undercapitalized

Mandatory Actions

Must be placed in receivership within 90 days unless the appropriate agency and the FDIC concur that other action would better achieve the purposes of prompt corrective action.

Must be placed in receivership if it continues to be critically undercapitalized on average during the fourth calendar quarter after it initially became critically undercapitalized, unless the primary regulator and the FDIC certify that the institution is still viable and determine that it has a positive net worth, is in substantial compliance with its capital restoration plan, and is profitable or has a sustainable upward trend in earnings.

Within 60 days, must stop making any principal or interest payments on subordinated debt.

If not closed, the institution's activities must be restricted. At a minimum, it may not do the following without the prior written approval of the FDIC:

Enter into any material transaction other than in the usual course of business.

Extend credit for any highly leveraged transactions.

Amend the institution's charter or bylaws.

Make any material change in accounting methods.

Engage in any "covered transactions" as defined in section 23A of the Federal Reserve Act, which concerns affiliate transactions.

Pay excessive compensation or bonuses.

Pay interest on new or renewed liabilities at a rate that would cause the weighted average cost of funds to significantly exceed the prevailing rate in the institution's market area.

Discretionary Actions

Additional restrictions (other than those mandated) may be placed on activities.

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- ^a This provision of FDICIA is in section 301, Limitations on Brokered Deposits and Deposit Solicitations, rather than section 131, Prompt Corrective Action.
 - ^b This provision of FDICIA is in section 301, Limitations on Brokered Deposits and Deposit Solicitations, rather than section 131, Prompt Corrective Action.
 - ^c This provision of FDICIA is in section 301, Limitations on Brokered Deposits and Deposit Solicitations, rather than section 131, Prompt Corrective Action.
 - ^d Included in the FDIC's final rule on brokered deposits which implements section 301, Limitations on Brokered Deposits and Deposit Solicitations, of FDICIA effective June 16, 1992.

The ultimate activity restriction is closure. For the first time, FDICIA allows regulators to close banks before equity capital reaches zero. Closing banks when they hit the two percent capital tripwire concentrates more of the risk of failure on equity holders.

The important difference between previous supervisory efforts and the provisions contained in FDICIA is that supervisory discretion is reduced. FDICIA grants few new powers for federal banking supervisors; however, Congress has now mandated when supervisory powers are to be exercised. This contrasts with the pre-FDICIA concept of reliance on internal supervisory guidelines that could be adapted to meet particular situations.

Prompt corrective action is intended to limit losses to the bank insurance fund by (1) increasing the "cushion" available to absorb losses at problem institutions, (2) reducing the time problem institutions remain open, thereby limiting the flight of uninsured depositors, and (3) restricting risk-taking by undercapitalized banks.

Liquidity Support

Traditionally, the Federal Reserve discount window has served as a source of emergency liquidity for banks because of its role as a lender of last resort. However, a report prepared by the House Committee on Banking, Finance, and Urban Affairs argued that during the 1980s, discount window credit funded the flight of uninsured depositors and allowed problem banks to remain open longer, increasing losses to the Bank Insurance Fund. Because discount window loans are collateralized, their position in the event of closure is equal to that of insured depositors. When discount window loans are used to replace uninsured deposits, the effect on resolution is to leave fewer creditors to share in the losses and less collateral available for recovery. FDICIA provisions affecting the discount window are detailed in Table 3.

Table 3.

Discount Window ProvisionsUndercapitalized Institutions^a

To avoid liability, lending is limited to 60 days in any 120-day period.

If the Federal Reserve Board or the appropriate federal regulator determines, with due regard to economic conditions and market circumstances, that the institution is viable, the 60-day limitation may be extended for additional 60-day periods upon receipt of a written certification.

Critically Undercapitalized

If any discount window borrowings remain outstanding 5 days after the institution becomes critically undercapitalized, the Federal Reserve Board will be liable for any "increased loss" to the FDIC.

The Federal Reserve Board's liability for increased losses is limited to the lesser of (1) the amount that the Board or a Federal Reserve Bank would have lost on any increases in the amount of advances after the expiration of the applicable lending period if those advances had been unsecured, or (2) the amount of interest received on the increased amount of the advances.

^a In this section only, FDICIA defines undercapitalized institutions to include any institution so classified on the basis of the capital ratios presented in Table 1 or any institution having a composite CAMEL rating of five under the Uniform Financial Institutions Rating System as of the most recent examination.

In addition to limiting discount window funds, FDICIA also prevents troubled banks from shifting to volatile funds to meet liquidity needs. **Adequately Capitalized** banks may only accept brokered deposits⁴ or offer pass-through insurance⁵ if they obtain a waiver from the FDIC. **Undercapitalized** banks may not accept brokered or pass-through deposits and cannot offer interest rates on any deposit that exceed prevailing market rates.

FDICIA has reigned in the "lender of last resort" function served by the discount window and bank participation in the brokered deposit market with the intention of reducing insurance fund losses. It is argued that losses will be reduced for two reasons: (1) the flight of uninsured depositors increases the likelihood that these depositors will not be around to share in BIF losses, and (2) problem banks will no longer be able to avoid the consequences of depositor discipline by offering high interest rates on, or even accepting, brokered deposits.

Least-Cost Resolution

Traditionally, the FDIC covered all uninsured depositors. The Treasury described pre-FDICIA resolution policies as follows:

"One would expect a policy that protects only insured depositors, with an occasional extension of coverage in rare circumstances to uninsured depositors.

⁴ Brokered deposits are funds received by depository institutions through third party intermediaries.

⁵ Pass-through insurance occurs when a fiduciary such as a pension fund deposits funds for a large number of beneficiaries, with \$100,000 of deposit insurance "passing through" to each of the beneficiaries.

Instead, the policy has been to protect uninsured depositors whenever possible, with exceptions occurring only in those few instances when the FDIC cannot find an acquirer for the failed institution." (pg. 18)⁶

In contrast, FDICIA now requires that the resolution alternative chosen must result in the least cost to the Bank Insurance Fund. The cost of transferring insured deposits must now be compared with the cost of transferring all deposits and any other resolution alternatives available. Costs must be compared on a present-value basis using a realistic discount rate to account for the time it takes to dispose of the assets and pay off the liabilities. Already this has led to a drop in the number of bank resolutions where all deposits are "assumed" or covered from 83 percent in 1991 to approximately 13 percent during the first eight months of 1993.

FDICIA also specifies that the least-cost evaluation be calculated as of the date the bank first enters receivership or conservatorship, regardless of when the resolution takes place. The cost of liquidation may not exceed the difference between insured deposits and the present value of the net recovery the FDIC reasonably expects as its share on the disposition of the bank's assets. As a result, the FDIC is limited in the steps it can take to protect uninsured depositors. To further reinforce the fact that resolution methods must consider the cost to the insurance fund, FDICIA states that after December 31, 1994, the FDIC may not take any action that would increase losses to the insurance fund by protecting uninsured depositors or creditors other than depositors.

An exception to the least-cost alternative is permitted only if it is determined that (1) liquidation of a troubled bank could cause serious adverse effects on economic conditions or financial stability, and (2) FDIC actions could mitigate these adverse effects. Invoking this exception requires written recommendations from two-thirds of the Board of Directors of the FDIC, two-thirds of the Board of Governors of the Federal Reserve System, and the Secretary of the Treasury in consultation with the President of the United States. The cost of these actions must be repaid by a special assessment on all members of the insurance fund. So, although FDICIA does provide a legal basis for "Too Big to Fail", it appears unlikely that these requirements would be met except in the most dire circumstances.

This section of FDICIA spells out to the FDIC that its first priority is to resolve problem banks at the least cost to the insurance fund. Peripheral considerations such as the impact on other financial institutions are secondary and can only be factored into the resolution decision under specified circumstances.⁷ These provisions put uninsured depositors on notice that they can no longer expect full restitution from the insurance fund.

Where Will It Take Us?

Will this piece of legislation accomplish the intended objective of reducing the cost of bank resolutions? Experts are certainly divided on this issue. Limitations on the "Too Big to Fail" doctrine, promptly closing critically undercapitalized banks, and requiring failed banks to be resolved in the manner that results in the least cost to the fund should accomplish this purpose. However, FDICIA has altered the supervisory system, the liquidity support available for troubled banks, and the traditional system of bank resolution. Changes of this magnitude will alter the way depositors,

⁶ During this time period, the FDIC's preferred resolution method was a purchase and assumption where the purchasing bank acquired all deposit liabilities of the failed institution. This method of resolution was less costly than liquidation, as required by law. However, existing regulations did not require the FDIC to request bids on only the insured deposits and compare them to the bids for all deposits.

⁷ FDICIA requires the FDIC to evaluate the impact of the means of resolution on the viability of other insured depository institutions in the same community. They must then "take such evaluation into account" when deciding which resolution method to use.

investors, and bank management operate. The remainder of the paper will explore the potential impact of these changes.

Bank Supervision

Lawmakers adopted capital-based regulation as an answer to the increased cost of bank resolutions because of both the number of bank failures and the cost of resolving these failures. Without a doubt, capital reduces the likelihood of failure. This is true for any business, but has special implications for banks. In a world where there is deposit insurance, the more capital a bank has, the greater the bank's potential to absorb losses and the lower insurance fund losses in the event of failure. The concept of capital-based supervision presumes that:

- banks will engage in more risky behavior as capital declines, contributing to bank failures, and
- reported capital ratios are leading indicators that accurately reflect a bank's condition. Early supervisory intervention based on these leading indicators can reduce the number of bank failures.

The following sections discuss these assumptions and examine the potential effectiveness of these new regulations.

Capital as an incentive to reduce risky behavior. Business owners with little equity have an incentive to engage in risky investments that offer high returns. As equity declines, owners have less to lose and more to gain on high-risk, high-yield investments. For banks, the existence of deposit insurance limits the downside risk of failure. If investments turn sour, the insurance fund pays off the insured depositors and bank owners lose their equity. If the investment succeeds, bank owners will have generated a high return on their investment. As their "at risk" equity in the bank declines, management's incentive to take risks increases.

But the "real world" is not this simple. If bank supervision is effective, undercapitalized banks will be prevented from engaging in risky activities, even if deposit insurance provides incentives for such behavior. FDICIA addresses the risk-taking incentives inherent in deposit insurance by imposing mandatory supervisory restrictions on bank activities as bank capital declines. But the question is, will mandatory restrictions be superior to the historical discretionary approach in curtailing risky behavior of undercapitalized banks?

The GAO contended that if capital-based regulation with mandatory restrictions and higher capital standards had been in effect in the 1980s, the banks comprising the Bank of New England Corporation would have had restrictions on asset growth in the mid-1980s and formal enforcement actions by 1986 or 1987. They concluded that "such interventions could have compelled the banks to correct problems before they adversely affected earnings and capital." (pg. 20)

While supervisory intervention based on capital levels may have been warranted in the case of the Bank of New England Corporation, studies that looked at a large number of bank failures over several years did not find evidence that supervisory intervention based on capital levels would have altered the outcome for these institutions. Gilbert (1992) focused on two risky behaviors, rapid asset growth and excessive dividend payments, and did not find that these activities occurred to any great extent. None of the banks in his 854-bank sample that had equity capital below five percent for five or more consecutive quarters before failure had asset growth or dividend payments in their last year. Additionally, banks in the sample that were responsible for disproportionately high losses to the insurance fund did not have above average asset growth or dividend payouts.

In another study, Gilbert (1993) found that supervisors were effective in slowing the asset growth and reducing the dividends of problem banks. Also, banks that were examined in the 12

months prior to failure had significantly lower insurance fund losses as a percent of total bank assets when compared to banks that were not examined. These results demonstrate that, at least during the second half of the 1980s, bank supervisors were effective in constraining the activities of undercapitalized banks and mandatory supervisory restraints would most probably not have changed the outcome for these institutions.

Capital as a leading indicator. For capital-based regulation to be effective in reducing insurance fund losses, declining capital must serve as an accurate and early indicator of bank problems. Clearly, declining capital is indicative of problems. But, studies of capital levels at failed banks have found that deteriorating conditions were often times not signaled by a decline in capital ratios. In a sample of 206 banks that failed in 1989, the Treasury found that only 41 percent had capital ratios below regulatory minimums as of June 30, 1988, and only 48 percent had capital ratios below regulatory minimums by year-end 1988. These numbers indicate that, at least for a majority of the banks that failed in 1989, reported capital levels gave no warning of impending failure less than four quarters prior to failure. Similar results were reported by Gilbert (1991). In his study, only 44 percent of his sample of 854 banks that failed between 1985 and 1990 had capital consistently below regulatory minimums for five or more quarters prior to failure. These results illustrate the problem with relying on capital ratios to identify troubled banks.

Traditional regulatory supervision, which focuses on asset quality, management, earnings, and liquidity, in addition to capital, has historically had a better record for identifying problem banks than the results reported above. For example, in Gilbert's 1993 study 66 percent of the 854 failed banks would have been identified as troubled banks using the composite CAMEL rating, the traditional supervisory tool which reflects all five aspects of a bank's condition, at the examination prior to failure. This compares favorably with the 44 percent that would have been identified by capital ratios alone.

Similar conclusions can be drawn from comparing the number of banks on the FDIC problem bank list with the number of banks subject to prompt corrective action based on capital ratios alone. According to December 31, 1992, Reports of Condition, less than 1.4 percent of all U.S. banks were undercapitalized. The FDIC classified more than seven percent of U.S. banks as problem banks in need of close supervision as of year-end 1992. If it is argued that mandatory supervisory actions are the major changes contained in prompt corrective action, then only a small percent of U.S. banks will be affected by this provision. Traditional supervisory methods - focusing on capital, asset quality, management, earnings and liquidity - identified more than five times the number of institutions needing close supervision. Therefore, it is not obvious that focusing on capital as an indicator of bank soundness will provide additional insights over what is already covered in the supervisory process.⁸

Part of the drawback to relying on capital measures alone is the difficulty in accurately measuring capital. A bank's reported capital can be significantly overstated if the loan loss reserve has not been adequately funded. For example, Lemieux described what would have happened to the capital ratios of banks that failed during the 1980s if they had funded reserves to cover average loan losses. Based on unadjusted reported capital, only 24 percent of sample banks would have had capital below the early closure "tripwire" in FDICIA, at the examination prior to failure. However, when capital measures were adjusted for losses inherent in the loan portfolio, 83 percent would have hit the early closure tripwire at the examination prior to failure. This study demonstrates that accurate measurement of capital is critical to the identification of troubled banks under capital-based supervision.

⁸ FDICIA does not ignore the traditional supervisory process. Procedures were included in the law that allow a regulator to downgrade a bank's capital zone for a less than satisfactory supervisory rating on asset quality, management, earnings, or liquidity.

An added complication of accurately measuring capital is the magnifying effect of regional economic downturns on loan losses. Economic downturns can cause capital shortfalls when declining loan performance and/or declining collateral values force banks to write down the value of their loan portfolio. In a review of loans classified substandard at a sample of Kansas and Oklahoma agricultural banks, Lemieux and Spong found that loss rates on these loans reached 52 percent of substandard loans in 1983 when real per farm income in Kansas and Oklahoma bottomed out.⁹ By 1989, agricultural income had improved, and losses on substandard classifications dropped to 22 percent of substandard loans. Over a ten-year period, charge-offs on substandard loans averaged 36 percent for these sample banks. This actual loss rate was significantly higher than the 20-percent rate traditionally used as a "rule of thumb".

Given the impact of the economy on loan values, reserve allocations should be increased when economic conditions deteriorate. Results of the previous study suggest that this is not done as aggressively as it should be. The banks in the study were healthy and not in danger of failing. However, if their reserves had been adjusted in line with the sample's average historical loss rate, their reported capital ratios would have fallen at least two percentage points during the height of the farm crisis. By the end of the decade when the agricultural economy improved, there was little difference between reported capital and capital measures that were adjusted for the sample's average historical losses.

The accuracy of the loan loss reserve, and consequently capital, could improve with more frequent examinations and more consistent policies on valuation reserves for impaired loans. However, the impact of loan loss provisions on earnings, and in turn capital, will still provide an incentive to minimize the recognition of loan losses.

The write-down of a loan portfolio sufficient to affect bank capital will likely occur only after asset quality problems become severe. For this reason, bank capital is more likely to serve as a lagging indicator of bank performance rather than a leading indicator.

Liquidity Support

FDICIA increases the economic incentive depositors have to monitor the soundness of their banks. If more uninsured depositors consistently suffer losses, they will place their funds in banks that are better capitalized. In this way, liquidity could constrain a weakened bank before capital levels cause regulators to consider closure.

This has already been proven. *The Wall Street Journal*, in reporting on the January 29, 1993 failure of First National Bank of Vermont, Springfield, Vermont said, ". . . because of publicity about the tough new rules taking effect Dec. 19 [the prompt corrective action provisions of FDICIA], the bank was hit by waves of withdrawals." The Merchants Bank, Kansas City, Missouri, experienced deposit outflows after negative publicity about the bank's owners and the closing of its sister bank.¹⁰ Both of these banks ended up being closed because of liquidity problems - not capital insolvency.¹¹ If uninsured depositors are to share in the losses of troubled institutions, banks must be closed when these depositors are still around.

⁹ These states are particularly relevant because more than 55 percent of the banks that failed during the 1980s were located in Texas, Oklahoma, Kansas, or Louisiana, states affected by regional economic downturns in the agriculture and energy sectors.

¹⁰ For more information see the Appendix.

¹¹ The First National Bank of Vermont was closed January 29, 1993, and The Merchants Bank was closed November 20, 1992.

In addition, liquidity problems could affect BIF losses. For example, limitations on discount window assistance could force troubled banks to sell assets to meet liquidity needs. If the proceeds from asset sales are used to fund uninsured depositor flight, FDIC resolution costs will increase because fewer uninsured depositors will be left to share losses with the FDIC and the volume of quality assets passing to the FDIC will be less.

Moreover, what will be the impact on the financial system when many institutions in the same geographic area are experiencing troubles? During periods of regional economic problems, improvement in bank performance may not be possible until the economy improves. Enforcing certain FDICIA provisions during adverse economic conditions could increase BIF losses rather than reduce them. Mandatory early closure rules could increase the number of bank failures during an economic downturn if economic conditions erode bank capital to the point that viable banks hit early closure tripwires. In addition, closing banks during a recession is more costly. If banks are closed that could have survived, BIF losses will increase.

It should be noted that FDICIA does contain some provisions that serve to limit or alleviate system-wide liquidity pressures. For example, provisions that restrict interbank liabilities reduce the interdependence among banks. This limits the likelihood that isolated bank problems could roll through the financial system. However, restriction of correspondent deposits may further weaken an undercapitalized bank and contribute to a liquidity crisis.

"Too Big To Fail" is another example of a FDICIA provision intended to alleviate system-wide liquidity pressures. If a widespread loss of depositor confidence leads to contagious depositor runs, if a deterioration of correspondent banking relationships causes widespread bank failures, or if there is a breakdown in the payments mechanism, "Too Big to Fail" would allow the FDIC to cover all uninsured depositors. However, the approval process required to invoke "Too Big to Fail", reduces the likelihood that this provision will ever be used. It appears that these built-in safeguards to preserve financial stability might be found lacking under certain circumstances.

Least-Cost Resolution

While requiring the FDIC to resolve problem banks in the least costly manner will reduce losses to the BIF, least-cost resolution in conjunction with early closure could have some unintended effects during an economic downturn. The pool of potential buyers with the necessary capital to acquire troubled banks ebbs with the economy. A reduced pool of potential buyers can reduce the bid price offered to the FDIC or force the FDIC to liquidate rather than transfer the assets of a troubled bank. Either of these alternatives increases the cost of bank resolution for the FDIC. In fact, FDIC statistics show that losses on bank resolutions were 13 percent of assets in 1988 when the economy was relatively strong but jumped to 22 percent of assets in 1989 and 1990 when the economic downturn began.

Conclusion

So far the FDIC has been able to handle bank failures and impose losses on uninsured depositors without serious repercussions for other banks. Falling interest rates have boosted bank profitability and liquidity, and failures have declined. However, FDICIA regulations have yet to be tested in an environment similar to that of the Midwest during the mid-1980s or the East Coast during the late 1980s, when many banks in the same geographic region experienced problems. The question then becomes, can the banking system under FDICIA withstand similar economic stress without a taxpayer bailout? Or has it produced a system that will be vulnerable to economic downturns?

The costs of adjusting to this new order may be significant. FDICIA has altered the liquidity support for troubled banks and the traditional system of bank resolution. Changes of this magnitude will alter the way depositors, investors, and bank management operate. There will be more liquidity insolvent banks. Viability and liquidity support decisions will have to be made at an

earlier stage in a bank's deterioration. This increases the difficulty in gauging when individual bank problems could spread to other parts of the banking system, especially during economic downturns.

In addition, historical data does not clearly support that supervisory intervention based solely on capital levels will be more effective than traditional supervisory methods in curtailing risky activities at undercapitalized banks. There is also the question that capital ratios alone may not be the best indicator of a bank's condition. Historical studies show that capital tends to be a lagging - not a leading - indicator of bank problems. Further, the complexities of adequately assessing loan losses can significantly impact the accuracy of reported capital, particularly for troubled banks or banks impacted by regional economic downturns. In light of the difficulty in accurately measuring bank capital and reserving for expected losses and the accompanying reporting burden for the banking industry, capital-based regulation may not provide enough benefits to outweigh its costs. However, overall, FDICIA may offer some benefits in encouraging banks to maintain adequate capital and promptly correct problems.

A repeat of the economic conditions of the last decade could raise questions about the ability of FDICIA to promote financial stability. There are no easy answers to bank reform, but recognition of potential problems will help policymakers in their efforts to create a financial system that contains the economic incentives necessary to promote safety and soundness in the banking system.

Appendix 1

Chronicle of the Merchants Bank

During the 1980s, The Merchants Bank developed its niche as a real estate lender in the Kansas City metropolitan area and subsequently expanded into the national market. Merchants' strategy was one of growth driven by aggressive lending practices, including the purchase of loans originated at affiliated banks.¹² To fund these loans, the bank competed aggressively for deposits, both locally and through deposit brokers. The bank operated with limited liquidity in its balance sheet: its loan-to-deposit ratio remained above 85 percent from 1986 through 1990 and often exceeded 100 percent for short periods of time.

In the three years from 1983 through 1986, Merchants increased its asset base by a factor of eight primarily through loan growth.¹³ This growth was due in part to the boom in real estate development resulting from the favorable tax treatment available for real estate investment under the 1981 tax act. Merchants' rapid growth and concentration in real estate lending contributed to its operating risk. However, this high risk strategy also initially generated high returns: the bank's return-on-assets averaged 1.7 percent from 1984 through 1986, placing it among the top performers in the industry. Capital growth was also favorable during this period and actually exceeded asset growth.

However, the strategies that were so effective for Merchants in the mid-1980s, were disastrous in the changed environment of the late 1980s. Chart 1 presents selected financial ratios that illustrate Merchants' financial condition from 1987 through the third quarter of 1992. Real estate overbuilding and the tax law changes in 1986, followed by a recession in the early 1990s, radically altered the profitability of real estate lending. Merchants' net loan losses mounted, increasing from \$12 million in 1986 to over \$42 million in 1990. The continued decline in the health of the real estate industry increased Merchants' need for capital. In an effort to maintain capital ratios, Merchants' asset base steadily shrank after 1989.

The passage of the Federal Deposit Insurance Corporation Improvement Act (FDICIA) in December 1991 made several changes that were to significantly affect Merchant's ability to survive. First, changes in the brokered deposit regulations impacted Merchants' ability to continue to aggressively acquire the deposits that were essential to its funding structure. In anticipation of becoming subject to the brokered deposit restrictions, Merchants began to reduce its reliance on these deposits. In 1989, brokered deposits accounted for eight percent of total deposits, yet by year-end 1992 brokered deposits were down to four percent of deposits. To replace these funds, Merchants offered higher rates on its insured deposits. This strategy worked until June 16, 1992, when the brokered deposit regulations became effective. In addition to limiting the banks that could accept brokered deposits, the new FDIC regulations clarified the fact that undercapitalized banks were subject to interest rate caps on all deposits not just brokered deposits. With Merchants' weakened capital position, its ability to compete for deposits by offering high interest rates was curtailed.

¹² Merchants' affiliated depository institutions included Metro North State Bank in Kansas City, MO.; Bank of St. Joseph in St. Joseph, MO.; Citizens Bank & Trust in Smithville, MO.; First Bank of Gladstone, MO.; Home Savings Association in Kansas City, MO.; Valley View State Bank in Overland Park, KS.; Industrial State Bank in Kansas City, KS.; The Mission Bank in Mission, KS.; and Security Bank of Kansas City, KS. The entire banking chain controlled approximately \$8 billion in assets as of year-end 1989.

¹³ Total assets were \$157 million at year-end 1983. By year-end 1986 total assets had reached \$1367 million. Acquisitions of other banks accounted for 30 percent of the growth in assets.

Chart 1. The Merchants Bank

	1987	1988	1989	1990	1991	1992 ^a
Real Estate Loans to Total Loans (%)	.43	.43	.48	.46	.50	.50
Loan Losses to Total Loans (%)	.01	.01	.02	.03	.02	.04
Brokered Deposits to Total Deposits (%)	.10	.08	.08	.06	.02	.04
Loans to Deposits (%)	.99	.96	.89	.87	.82	.80
Return on Average Assets (%)	1.25	1.74	1.40	.10	-1.10	-4.62
Total Capital to Average Assets (%)	7.24	8.35	8.74	9.11	8.46	5.97
Asset Growth (%)	.07	.13	.11	-.10	-.01	-.12
Equity Growth (%)	.27	.29	.17	-.04	-.17	-.56

^a As of September 30, 1992.

Source: Reports of Income and Condition.

Second, FDICIA put uninsured depositors on notice that the Bank Insurance Fund could not be expected to cover losses on uninsured deposits anymore. The change in Merchants' deposit structure, in addition to its continued high loan-to-deposit ratio, increased its vulnerability to a loss of depositor confidence. From mid-1992 on, negative publicity concerning fraud charges against some of the principal stockholders; publication of Merchants' losses during 1991; and the closing of Home Savings, an affiliated thrift, heightened depositors' concerns about Merchants' soundness. When the affiliated Metro North State Bank failed on November 13, 1992 and uninsured depositors were offered 50 cents on the dollar, depositors' concerns about Merchants escalated into a silent run. Although long lines never developed in the bank lobby, wire transfers drained the bank of most of its large deposits. In total, over \$200 million left the bank during its last month, with over 50 percent of that leaving in the last week after the failure of Metro North. When the bank closed on November 20, 1992, few uninsured depositors remained.

Merchants' whole strategy had been based on the ready access to liquidity from the deposit market and a continuation of high returns on real estate. FDICIA's changes to coverage of uninsured deposits and limitations on brokered deposits eliminated the deposit market as a source of liquidity for Merchants.

In a last ditch effort to meet its liquidity needs, Merchants began to market its assets. Loan sales to competitors allowed the bank to meet deposit outflows for the three days prior to closing. But on November 20, 1992, the bank was unable to meet the continued deposit outflow. As reported in the *Kansas City Business Journal*, the bank was ineligible for discount window assistance because regulators, "didn't see Merchants continuing as a viable bank because of its non-performing loans, its low capital levels and the run." As a result, the bank was closed. In a news release, Earl Manning, Commissioner of Finance for the State of Missouri, identified liquidity problems as the critical factor in the failure of the bank:

"It was the result of a higher than normal level of deposit withdrawals where too many customers demanded their money. The Merchants Bank simply ran out of cash."

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