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IMPLICATIONS OF LARGE BANK PROBLEMS AND INSOLVENCIES FOR THE BANKING SYSTEM AND ECONOMIC POLICY

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It has long been recognized, both before and after the introduction of federal deposit insurance, that large, money center bank failures are different from small bank failures. Nevertheless, the available evidence suggests that bank regulators were not prepared to deal with a failure the size of the Continental Illinois National Bank. There were no blueprints on the shelf! This most likely affected both the regulators' handling of the bank before the final agreement and the nature of the final agreement itself. In addition, there also appears to be widespread agreement that, at least in theory, the introduction of federal deposit insurance broke the close link between the failure of an individual bank and that of the banking system. Yet, many of the statements made by regulators during the Continental affair noted dangers to other banks. The fall of the Continental might bring down other banks through a "domino" or chain reaction effect and increase depositor losses further. After discussions with the Federal Reserve, FDIC and Treasury Department, Comptroller of the Currency Conover warned that, if the "Continental had failed and been treated in a way in which depositors and creditors were not made whole, we could very well have seen a national, if not an international, financial crisis the dimensions of which were difficult to imagine. None of us wanted to find out."¹ This paper will reexamine why and when large bank troubles are more serious than those of smaller banks; what the problems caused by such financial troubles are; the implications for other institutions, the financial sector, and the economy as a whole; and possible efficient corrective actions by bank regulators.

Business firms of any kind fail economically when the market value of their assets (including goodwill, franchise value, deposit insurance value, and other legitimate intangibles) falls below that of their liabilities. If liquidated or sold as a unit before this occurs, losses are experienced by shareholders, but not by creditors. In addition, there is likely to be disruption to employees, suppliers, and customers, who must scurry around to locate new affiliations. Unless the firm's products are unique, the greatest discomfort

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may be expected to be felt by the employees, who may lose their jobs, seniority arrangements. In perfect labor markets, however, any unemployment should be brief and other losses minimal. But insolvent firms need not be closed. If the firm were permitted to operate in bankruptcy and experience further losses, the immediate losses to the employees may be reduced, but losses will now accrue to creditors. The longer the firm's losses are permitted to continue or the larger they are, the larger will be losses to creditors. If the firm's fortunes do not reverse, losses will eventually accrue to all parties.

Failure plays an important role in maintaining economic efficiency. It effectively is the economy's way of saying that the firm's products no longer pass the market test and that its resources should be transferred to other firms. Thus, changes in consumer tastes and supplier technology are transmitted throughout the economy. Barriers to exit create barriers to entry and interfere with efficiency. Although painful, the losses associated with failure are a lesson that may be expected to influence the behavior of market participants. The greater the penalty for failure, the more reluctant will those involved be to try again and the less likely will others be to follow the same strategy. Conversely, the smaller the penalty, the more likely is it that history will repeat itself.

Commercial banking is no exception. Failure is as important in banking as anywhere else. But history has demonstrated that, at times, bank failures may generate larger losses than failures of nonfinancial firms of comparable size. Thus, bank failures need to be analyzed separately.²

Many of the reasons that bank failures are both more serious and more difficult for regulators to handle were spelled out some 10 years ago by Paul Horvitz and Thomas Mayer.³ Much of the argument is familiar and will not be repeated here. Primarily, it deals with the greater likelihood of spillover to other banks that ignites a chain reaction of bank failures. But Horvitz also noted in passing that some more recent evidence suggested that the spillover may not be as great as frequently believed. The spillover was precisely what deposit insurance was designed to prevent. Full federal insurance coverage for all deposits certainly avoids any form of bank run; the banks can effectively issue U. S. Treasury securities and there is no incentive for depositors to withdraw funds for reasons of safety. But it is also likely to reduce market discipline on banks and, in the absence of explicit risk-sensitive cash insurance premiums, implicit noncash risk-sensitive premiums through regulation and examination or other risk-sensitive schemes, such as mandatory minimum short-term subordinated debt, encourage them to be riskier than otherwise.⁴ In case of failure, only shareholders will experience losses and only up to the amount of their investment. We will restrict our analysis to the current system of *de jure* maximum \$100,000 insurance on private deposits. Thus, potential losses may, in theory, extend

to large creditors (including depositors) and the penalty for failure be more severe.

Why, in contrast with the pre-FDIC environment, has there appeared to be little, if any, spillover for large, uninsured deposits in the post-FDIC establishment environment that enlarged losses beyond those already suffered at the initial distressed bank, even in the aftermath of the failures of large institutions in a market area? Perhaps because large depositors viewed their funds as *de facto*, although not *de jure*, fully insured. And, at least equally important, what can large depositors do with the funds? A careful analysis of U. S. banking crises, up to and including the 1929-33 crisis, shows clearly that the primary reason for the severity of the spillover effects was the attempt by depositors to convert first, notes and later, deposits, first into gold and later into currency.⁵ Under a fractional reserve banking system, an aggregate loss of reserves in the form of gold or of currency causes a multiple contraction in deposits and thus money and bank credit. In addition, such a contraction is likely to cause forced, hurried "fire" sales of assets by banks at below equilibrium market value and ignite a chain reaction of bank failures. Spillover is said to exist when one bank failure sets off failures in other banks. This is difficult to measure directly. Because chain reaction failures may reasonably be expected to decrease aggregate bank deposits and money supply more than other bank failures, we can use reductions in the money supply associated with a currency outflow—that is, a jump in the currency-money ratio—as a proxy for chain-reaction bank failures.

Unfortunately, the literature is not clear on whether large depositors withdrew funds in gold and currency or shifted their funds to other, presumably more secure, banks upon receiving unfavorable information on the financial condition of their bank.⁶ In contrast, the evidence is quite clear that, in recent bank crises, large depositors shifted their deposits to other banks. They have not withdrawn and held their funds in the form of currency. Nor have the difficulties experienced by banks ignited currency drains by smaller, insured depositors. There were no lines to speak of at the Continental or other depository institutions in Chicago. Possibly, this is because large bank difficulties are becoming old hat in Chicago. Only two years earlier, the two largest savings and loan associations (SLAs) in the city—the First Federal and Talman Home—were effectively taken over by the federal government. Again, there were no lines at that time.

In between, a number of smaller banks and SLAs had closed their doors and had been merged away.⁷ (The lack of currency runs in these instances is, of course, related to the maximum *de jure* deposit insurance coverage. The lower this amount, the more likely is a currency run. If deposit insurance were reduced to, say, \$1,000 or even \$5,000, net currency runs would very likely have developed. The question of what is the minimum coverage

that is consistent with both preventing currency runs and preserving market discipline warrants further research).

If there is no currency outflow, then the spillover to other institutions may be expected to be significantly smaller and any destruction of total deposits and credit almost insignificant in the aggregate. Some reductions may occur from losses on uninsured deposits and write-offs against net worth. Thus, it is highly unlikely that the Continental crisis would have ignited a significant contraction in aggregate money and credit as in earlier American banking crises.⁸ Instead, the run on the Continental caused other problems. Assume, for the moment, that the Continental was the only bank rumored, correctly or incorrectly, to be in financial difficulties. Corporate treasurers would reasonably be expected to shift deposit balances that are not required at the Continental for loan and service compensation to other large banks as soon as possible. What occurs at the Continental depends on a number of factors including its liquidity and, most importantly, whether it is actually or perceived to be solvent in terms of the market value of its assets exceeding that of its liabilities other than net worth.

The greater the liquidity, the faster can a bank sell off assets to meet deposit losses without loss below their true market values and, thereby, preserve its capital. For an individual solvent bank that marks to market, deposit runoffs present little problems other than relatively small losses from hurried sales. If the bank is actually or is perceived to be solvent, the problem for the banking system is basically a recycling problem—that is, a problem of cycling the funds back to the stricken bank. Throughout U. S. history, this has been undertaken by other large banks operating in a common interest. Although the central bank's lender of last resort function traditionally applies primarily to the banking system as a whole, it includes providing assistance to solvent individual large banks experiencing runs for one reason or another. While funds are lost to the Continental, they are not lost to the banking system. However, what if whatever started the run on the Continental also affected some other large banks, for example, fear of default by a single large borrower whose loans are concentrated in a few large banks. Large depositors may be less willing to transfer their deposits to the other banks. But where will they park their funds? If they shift them to European or other out-of-country banks, the funds still do not leave the U. S. banking system. The receiving bank would acquire the dollar balances at the paying bank or some other domestic bank. If they use them to purchase Treasury securities or other high quality debt, the balances are transferred to the seller of the securities, who will buy other securities or redeposit the funds in the perceived safest banks. Again, no funds are lost to the system, they are just redistributed.

The "flight-to-quality", however, will affect interest rate spreads, lowering interest yields on Treasury securities and raising yields on bank CDs and

related securities. Such changes will change the profitability of institutions depending upon both the duration and quality composition of the two sides of their balance sheets. In addition, in reaction to the crisis that ignited the depositor's flight to quality, banks are likely to restructure their portfolios to emphasize Treasury and other safe securities. This will reinforce the widening of the risk premia on "risky" securities and make it costlier for most but the Treasury to borrow and may dampen private investment spending. Even though the recycling and spread problems are real, they are unlikely to be nearly as serious as the net reserve outflow and multiple deposit contraction problem, and require different solutions. Some banks and borrowers may be losers, but others will be winners. The assets sold by the losers should be bought by the winners at near their market values, although there will be some decline in the value of securities other than Treasury securities from before the start of the initial run. Riskier borrowers are more likely to be rationed out of the market. The flights to quality that have occurred after the failure of the Franklin National, Continental Illinois National Bank, and other large depository institutions in recent years had no noticeable effects on aggregate economic activity.

The potential magnitude of depositor losses may be estimated by examining depositor losses from bank failures before the introduction of the FDIC. From 1865 through 1933, commercial banks were estimated by the FDIC to have experienced losses of \$12.3 billion.⁹ Of this amount, \$7.7 billion (62 percent) was charged against net worth, \$2.5 billion (20 percent) was borne by shareholders, including \$0.5 in assessments on national bank shareholders under provisions for "double-liability", and \$2.2 billion (18 percent) was borne by depositors. As a percent of total deposits, total depositor losses were 0.21 percent. But \$1.3 billion, or 60 percent, of the \$2.2 billion losses occurred between 1930 and 1933. This reduced depositor losses to only 0.08 percent in the 65 years from 1865 to 1929. Even in the 1920s, when, on average, more than 500 banks failed per year, depositor losses accounted for only 0.14 percent of total bank deposits. Depositor losses between 1930 and 1933 averaged 0.81 percent of total deposits, close to the average 0.78 percent loss in 12 years classified by the FDIC as "crises" years between 1865 and 1940. In the 64 "noncrisis" years, depositor losses averaged only 0.07 percent. These losses appear small in comparison to losses by bond holders from price movements or defaults, even on short-term bonds. Thus, bank failures, particularly when not accompanied by a currency outflow, may not have been as serious as popularly believed.

So far, we have abstracted from the thorny question of how many large banks can be or be perceived to be in trouble at the same time without igniting a currency run or, more likely, a very severe flight to quality. The public may perceive concurrent problems at a number of banks if the banks have similar loans, for example, loans to foreign countries or, less likely, to major firms experiencing severe financial difficulties.¹⁰ A currency drain can

be envisioned if the public doubts the ability of the federal insurance funds to pay off fully insured deposits at failed banks. When this is likely to happen is uncertain because the public is unlikely to understand that the cost to the insurer is only the difference between the insured deposit value and the market value of the bank's assets, which for large, nearly solvent banks should be quite small; e.g., 10 cents or less on the dollar. The cost is the total uninsured size of the bank only if the bank is totaled, a highly unlikely event. Moreover, some part of any loss is charged against the bank's remaining net worth. Thus, the public may envision exhaustion of the fund well before there is any serious threat. If the public acts on this, the collapse will become a self-fulfilling prophecy. This threat could be defused most easily by changing the deposit insurance system to a deposit guaranty system backed by the full faith and credit of the federal government as Congress started to do with its Joint Resolution in 1982.

Confusion about the relationship of the size of the insurance fund and potential losses from bank failures is also prevalent among bank renovators and public policy officials. C. T. Conover stated in his testimony on the Continental crisis before the House Banking Committee that:

Sixty-six banks ... had deposits in Continental in amounts in excess of the total net worth of the bank. Another 113 banks had deposits in Continental amounting to between 50 and 100 percent of their net worth. If Continental had failed and been treated as a payoff, certainly those 66 banks would have failed and probably a goodly number of the other 113 would have failed.¹¹

Deposits include Fed funds sold to the Continental. The Working Group of the President's Cabinet Council on Economic Affairs concluded in its recent report that the present size of the federal deposit insurance funds were too small and:

it seems rational that the funds should be able to handle at least ongoing operations and the potential failure of one or two of the largest depository institutions. Yet, the largest depository institutions' deposits are many times the size of the funds, giving rise to concern about the funds' adequacy. For example, as of year-end 1983, 6 FSLIC-insured and 13 FDIC-insured institutions' deposits each exceeded the size of their respective fund ... Increasing the size of the funds should increase the perception of stability compared with the status quo.¹²

These interpretations are not only incorrect but are dangerous as they reinforce the very public concerns and anxieties of self-feeding cumulative bank failures that these officials are trying to prevent. Although an exact accounting cannot be made without access to the books of the bank, it appears doubtful that, excluding Latin American loans, the market value of Continental's overall asset portfolio was much less than 90 cents on the

dollar. Some of this loss would be charged against Continental's remaining net worth. A study by the staff of the House Committee on Banking, Finance and Urban Affairs concluded that if a 90 percent recovery rate is assumed, no banks would have suffered losses in excess of their net worth and only two banks would have suffered a loss of between 50 and 100 percent of their net worth amounting to a total loss of \$1 million.¹³ The FDIC insurance funds were very adequate to absorb FDIC losses of this magnitude to insured depositors. On the other hand, the FSLIC fund may not be large enough to absorb insured depositor losses at SLAs if assets and liabilities at these institutions were marked to market and the negative net worth charged to the fund. Yet, the public has not panicked because of their faith in the Treasury's ultimate guarantee. But without formal legislation this faith may on occasion be shaken and concern over the size of the funds could ignite net currency runs.

With a large number of large banks under suspicion, corporate treasurers would experience significant difficulties in selecting banks above suspicion that could also satisfy their needs in terms of service quality. They may search out strong regional banks to supplement the remaining strong money center banks, but the number suitable is likely to be relatively small. They are also likely to invest more heavily in Treasury securities. How well could the private banking sector deal with the recycling of deposits? To the extent that the deposit-losing institutions have sufficient marketable investments, there should be little trouble. If the deposit-losing banks have to sell loans, larger losses from hurried sales may be expected and the problem becomes more severe. The more tailored the loan, the more severe the problem. These are not easily nor cheaply sold to other banks even in the same market area. It is possible that without remedial action a liquidity problem could develop into a solvency problem for some banks. In addition, banks build up expertise in servicing loan accounts that their customers expect and pay for and, in the process, acquire information about the financial condition of the borrower. The breaking of bank-customer credit relationships is likely to have substantial undesirable implications for economic activity even in the absence of a contraction in the money supply.¹⁴

Of course, as long as the deposit-losing banks are perceived to be solvent—that is, are experiencing liquidity and not solvency problems—the deposit-receiving banks could redeposit the funds back into those banks through the Fed funds market, possibly at somewhat higher interest rates, rather than purchase their loans and investments. Unlike in the 1930s, such lending could be supplemented by the central bank making funds available through the discount window. The Fed would offset the effect of the increase on total reserves through open market sales. There should be no net effect on monetary policy.

Thus, it would appear that even with doubts about a number of large banks, deposit losses need not result either in spillover effects to other banks nor in further financial problems for the banks in question as long as they are perceived to be solvent.¹⁵ The banking system, with the support of the central bank, should be able to recycle the funds or assets. If loans have to be sold, more disruption may be expected, but it should not be of crisis proportions. Nor is it likely that with appropriate action by the other banks or the central bank a run would transform a solvent bank (in terms of market value) into an insolvent bank. Truly, "unfounded" rumors that ignite runs are likely to be self-defeating as the recycling occurs. For the solvent bank, asset and liability management and core and purchased funding appear to carry equivalent risks. The ability to fund with purchased funds depends on the perceived quality of the bank's assets. It has little to do with any characteristic of "hot" money other than that such money takes risks into account in evaluating returns. Liability funding is an asset quality problem!

But, what if the original bank, say, the Continental, was operating but was neither solvent nor widely perceived to be solvent? It could continue to operate if and as long as the federal government guaranteed all of its deposit liabilities. But recycling would be more difficult. Losses after the depletion of the market value of a bank's capital are borne by the federal deposit insurance agency. Maintaining a facade of solvency is at least as likely to produce further losses as gains.¹⁶ Thus, there appears to be no reason for not declaring the institution insolvent, regardless of its size, and turning it over to its chief creditor—the FDIC—for further disposition. This may be viewed as not vastly different from bankruptcy court control of insolvent nonfinancial firms. Indeed, because the public may view the financial position of the bank as strengthened, this strategy may have fewer unfavorable ramifications for the banking system as a whole than continuation of the insolvent institution. (Unlike bankruptcy for nonfinancial firms, legal insolvency for banks is not a clear-cut event, and its timing is subject to considerable discretion on the part of the chartering agency.) Nor is it likely to be viewed by the public as "nationalization" in the narrow sense. The largest creditor just happens to be an insurance company owned by the federal government. (My reading is that the public did not appear to view the "phoenix" SLAs established by the FSLIC as nationalized institutions.) As long as there are doubts about a bank's solvency, the recycling process engaged in by other private banks, discussed earlier, breaks down. Only the Fed, other government agencies, or other creditors who could secure their loans (deposits) would risk such recycling. The regulatory agencies' delays in dealing decisively with the Continental, Seattle First National, Penn Square and others appear to have created larger rather than smaller losses borne by old creditors. Management generally did not change their strategies materially and, on occasion, particularly at thrift institutions, actively increased their risk exposure in the hope of recouping

their losses in one shot before it was too late. As Stanley Silverberg, Director of Research at the FDIC, has noted:

If a bank becomes insolvent but remains liquid and open, it is generally in the interest of managers and owners to gamble in an effort to recoup, especially if that can be done legally. If the bank rolls the dice and loses, the FDIC typically bears the loss. Keeping an insolvent bank open, furthermore, allows uninsured depositors to flee. By the time a bank is closed, the FDIC is the only creditor. It thus becomes academic whether deposits are paid off or a P&A (purchase and assumption) is effected.¹⁷

Once a bank is perceived, correctly or incorrectly, to be insolvent in an environment of less than 100 percent deposit insurance, the choice of asset or liability management and core or purchase funding becomes critical. All deposits in excess of \$100,000 not otherwise committed will leave as quickly and quietly as possible (demand deposits immediately and time deposits at the earliest permissible date of withdrawal). If the perception is incorrect according to market values, then those in the know may be able to correct the situation. The bank regulators, or even the bank itself, could invite other banks to review the books and draw their own conclusions. Alternatively, the regulatory agency could inform the Fed of the bank's true solvent condition and request the Fed to accommodate fully the bank's request for funds at the discount window. Such action should change the market's perception. However, for these strategies to be effective, it is necessary that both the banks' books and the regulators' evaluations be in terms of market values and that disclosure be as complete as possible to reduce the likelihood of later, larger, unpleasant surprises.¹⁸

What are the implications of one or more large banks being declared insolvent and temporarily operated by the FDIC in trusteeship while awaiting liquidation, merger, or reestablishment as an independent entity? Liquidation is obviously not an efficient solution, nor is it generally practiced for larger nonfinancial bankrupt firms. Large banks are no longer, if they ever were, physically closed and boarded up. It is not that large banks are too large to fail, but that they are too large to liquidate or to merge or sell immediately. Thus, continued operation by the FDIC is the most likely temporary solution. It would appear reasonable that the FDIC would not elect to involve itself in day-to-day operations, but would limit its role to oversight and guidance. Unless the reasons for a bank's insolvency are totally outside the bank's control, it stands to reason that the FDIC would prefer to make changes in senior management and possibly on the board of directors. The pain of failure would be spread beyond shareholders and large creditors.

The transfer of the insolvent bank to FDIC trusteeship should be completed as quickly as possible for two reasons. One, the quicker the transfer, the

smaller the losses of the FDIC. Indeed, if the bank were declared insolvent as soon as the true market value of its net worth came to zero, there would be no losses whatsoever to any depositor or creditor and, therefore, also no losses to the FDIC.¹⁹ Two, any interruption in banking services either on the loan or deposit side is disruptive and costly to the community. If the chartering regulatory agency declared the institution insolvent and the FDIC was able to intervene as soon as the market value of net worth became zero but before it turned negative, no losses would accrue to uninsured depositors or creditors and the institution would effectively reopen the next day without any changes on the balance sheet.

If, however, the bank were declared insolvent after its true net worth became negative, losses accrue to uninsured depositors and creditors equal to the differences between the market value of the bank's assets and its liabilities. At the transfer of ownership, say, at the close of business of the day insolvency is declared by the chartering regulatory agency, the value of these deposits would be written down by the prorata amount, say, five cents on the dollar. The bank would reopen the next morning with uninsured liabilities at their new, lower values. The bank would be solvent and in business. Most bank customers would be almost totally unaffected by the transfer. Bank relations would be uninterrupted and continue as they were.²⁰ Uninsured depositors would have full and complete access to the current value of their deposits. Nothing is frozen. This transaction may be referred to as a "modified trusteeship" analogous to the "modified payout" arrangement used by the FDIC in some financially assisted purchase and assumptions in which uninsured depositors are guaranteed only a percentage of their deposit balances based on estimated equation values.

Three problems may be raised with such an arrangement. One, it is difficult to value all asset and liability accounts at market to determine the accurate value of net worth. This problem, however, confronts all firms, nonfinancial as well as financial, although it may be more difficult for financial firms. Nevertheless, it generally is solved. Many bank asset and liability accounts have reasonable marketable counterparts and most that do not can have their market values estimated within a reasonable margin of error with some creativity. More creativity may be required for some loans, such as dollar loans to foreign governments. But all mutual funds, even junk bond funds, have to mark to market daily. Errors are bound to occur, but it is unlikely that the estimated number value will be further from the true market value than is book value. The faster banks move to market value accounting, the more accurate will recorded balance sheet values be at any time in the future. It should be noted that the problem entails not only market value accounting but also appropriate monitoring to obtain timely and current observations. Most bank failures, particularly for smaller banks, result from fraud or theft which are both difficult to detect and change the values of accounts quickly.

Two, there may be legal challenges to the estimates of the market value made and thus to the amounts by which the noninsured liabilities are marked down. This is a major reason for declaring the bank insolvent as soon as possible so that losses to uninsured creditors are nonexistent or as small as possible. But such legal challenges are normal occurrences in all failing bank arrangements in which uninsured creditors suffer losses, e.g., FDIC assisted "haircut" mergers.

Three, does the FDIC have the legal authority to undertake such an arrangement? Although I am not a lawyer, the language of Section 13 (c) appears to me sufficiently broad to support such an action. In addition, the FDIC has frequently been creative and imaginative in its interpretation of this Section, e.g., in its handling of the First Pennsylvania (1980) and the Bank of the Commonwealth (1972).²¹ Even the Continental Bank arrangement could be considered innovative and imaginative. These arrangements have, on the whole, withstood numerous court challenges and legislative inquiries. Moreover, Sections 11(h) through (1) authorize the FDIC to "organize a new national bank to assume the insured deposits of such closed banks and otherwise to perform temporarily the functions herein provided for" for a maximum of two years.²² The permissible powers of such a bank appear to be under the control of the Comptroller of the Currency.

Because the federal government's credibility is on the line, it appears reasonable that the value of uninsured deposits and all new deposits received after the takeover will not decline. This guaranty may give such banks a competitive advantage over solvent banks. To minimize the implications of such an advantage, it may be useful to constrain the future deposit size of the bank to a level no greater than on the day of the takeover, to a growth rate no greater than, say, average for banks in the same geographical area, or by some similar rule. (Some such rule was apparently imposed on the Continental Bank.) It is also understood that FDIC regency is only temporary until alternative arrangements can be completed under less hectic conditions. Insolvency appears to have a number of other potential advantages relative to the arrangement used at the Continental; it eliminates the old common stock and does not establish a low-cost speculative vehicle; it prevents bank management from plunging and betting the bank in the form of the FDIC's and the taxpayers' monies; it separates support of the bank from support of the holding company; it may permit abrogation of "excessive" severance or guaranteed future employment contracts; and so on. (Indeed, one may reasonably speculate whether considerations such as these were not in the minds of those involved in the Continental negotiations, particularly of those representing Continental management. Also, in the case of the Continental, it would have avoided the need for the circus-like political lobbying that occurred to change Illinois state law to permit out-of-state acquisition of the Continental.

Garn-St. Germain permits such acquisitions for insolvent banks.²³ Undoubtedly, there are disadvantages also, and these need to be carefully defined and compared to the advantages.

Like all difficulties, it is better to prevent bank difficulties before they start. After the start, no solution is perfect for all parties and all objectives. Given both the fragility and importance of banking, it might be wiser in the long-run for regulators to err on the side of caution.²⁴ Excessive caution is likely to encourage entry and/or evasion that should, through time, produce a second-best solution. Insufficient regulatory caution, on the other hand, may produce serious harm that is not as easily offset by market forces. This is particularly true for forces that affect a number of large banks, such as the sanction of heavy concentrations of loans to risky foreign countries. The private banking system is not an efficient tool for pursuing foreign macroeconomic or political policy. If problems occur, they are likely to be relatively severe and perceived to be even more so. In such an environment, bank regulators and policymakers are likely to act quickly according to gut feeling and intuition, rather than to the logic of the situation and long-run implications of the action. Additional regulation is likely to be the result, regardless of whether regulation, excessive or otherwise, was a contributing factor to the crisis.²⁵ Such a response to the crisis of the early 1930s has been, in significant measure, responsible for many of banking's recent ills.

Conclusions

This paper has argued that, while the existence of less than 100 percent federal deposit insurance still leaves large bank difficulties more important than small bank failures, it has dramatically changed the consequences of such difficulties. Post-FDIC, bank runs no longer take the form of currency drains out of the system which, pre-FDIC, had led to multiple contractions in aggregate deposits (money) and credit. Rather, they consist of the redeployment of deposits to other, presumably less risky, banks of similar characteristics. A run on a bank no longer translates into a run on the banking system and instability at one or a group of banks does not translate into instability for the financial system as a whole. The adverse externalities of bank failure are based on pre-FDIC days and appear to be significantly overestimated.²⁶ If the deposit-losing banks are in actuality or in perception viewed as solvent, the banking system itself with possible support from the central bank should be able to recycle the funds back to the original banks. This is likely to be accompanied, however, by a widening of interest rate spreads between high and low quality credits, reflecting a flight to quality. The magnitude of the flight depends on the number of deposit-losing banks. While serious, the problem of widening spreads is

less serious than that of cumulative deposit contraction and requires different solutions. There appears to be little need for a tightly held safety net that catches all large banks regardless of financial condition or prospects. Likewise, the destabilizing aspects of partial *de facto* as well as *de jure* deposit insurance on aggregate economic activity may not outweigh the stabilizing market discipline aspects.

Disclosure plays an important role in maintaining an efficient private banking system. If the public's perception of one or more banks' solvency were incorrect, then the error can be corrected relatively easily by granting public access to the banks' books. Then, the previous solution process should start. If, however, the banks are in fact insolvent, then there may be advantages to having them declared so quickly and having the FDIC, in its role of major creditor, install new senior management, provide oversight, search for lasting solutions that may involve either merger or the banks' maintenance as independent entities, and effectively guarantee all deposit values from that date until a permanent solution is achieved. This option needs to be explored more thoroughly, particularly for dealing with a larger number of troubled banks.

What is clear is that, contrary to regulatory folklore, failure to disclose accurately the financial situation of a large bank is more likely to create uncertainty and shifting of funds than certainty. The old adage about accountants being willing to let two plus two sum to anything the client wants it to sum is probably true but such playing with numbers is unlikely to fool people for very long. Certainly, in the case of the Continental, the alleged "unfounded" rumors that were widely thought to have ignited the initial well-publicized deposit run turned out to be rather well-founded. (It is also likely that some of the deposit withdrawals were motivated by the FDIC's increasing use of "haircuts" on large deposits at failed institutions and depositor fears that their deposits at large banks might be *de facto* as well as *de jure* uninsured.) This is not to argue that there are no technical nor strategic problems with full disclosure whatsoever, but that they may be less serious than the problems associated with no or partial disclosure.²⁷ But a society that safely sends persons into space should be able to estimate the market value of almost all assets and liabilities reasonably accurately.

As soon as the public correctly believes one or more large banks to be insolvent, it appears preferable to declare the bank such and transfer its operation to the FDIC (or a new federal government agency organized for this purpose). This should prop up the bank's credibility and buy valuable time to search for a more lasting solution. It also sends a valuable signal to the market that, at minimum, bank shareholders will be held at risk and should increase their precautionary monitoring to reduce their risk of loss.

Although not the subject of this paper, the role of less-than-full deposit insurance without risk sensitive insurance premiums needs urgent thought. It is this premium structure, as Professor Kane has convincingly argued, that is largely responsible for the high risk exposures assumed by depository institutions and possibly also for the almost sloppy monitoring of risk.²⁸ The risk monitoring systems of both the institutions and regulators are in need of careful reassessment and modernization. What is certain is that considerably more thought should be given to developing an optimal solution to large, money center bank difficulties so that an efficient blueprint will be on the shelf when the next large bank(s) experiences major financial problems. The longer the delay, the harder it will be to implement efficient solutions. Each solution, whether ad hoc or well thought out, transmits signals to the market that affects the behavior of the market, institutions, and depositors. Large bank failures are traumatic and serious events that require careful public policy attention. But little is gained by blowing the consequences of such failures out of proportion and sending misleading and potentially dangerous signals through the economy.

¹ C. T. Conover, "Testimony" in U.S. Congress, Subcommittee on Financial Institutions Supervision, Renovation and Insurance of Committee on Banking, Finance and Urban Affairs, *Inquiry into Continental Illinois Corp. and Continental Illinois National Bank: Hearings*, 98th Cong., 2nd Sess., p. 287-288.

² George Kaufman, Larry R. Mote, and Harvey Rosenblum, "Consequences of Deregulation for Commercial Banking," *Journal of Finance* (July 1984) and "Consequences of Deregulation for Commercial Banks," *Staff Memoranda*, 84-5 (Federal Reserve Bank of Chicago), May 1984.

³ Paul M. Horvitz, "Failures of Large Banks: Implications for Banking Supervision and Deposit Insurance," *Journal of Financial and Quantitative Analysis* (November 1975); and Thomas Mayer, "Should Large Banks Be Allowed to Fail?", *Journal of Financial and Quantitative Analysis* (November 1975).

⁴ A review of this literature appears in G. O. Bierwag and George G. Kaufman, "A Proposal for Federal Deposit Insurance with Risk Sensitive Premiums," *Staff Memorandum*, 83-3 (Federal Reserve Bank of Chicago), 1983.

⁵ Milton Friedman and Anna J. Schwartz, *A Monetary History of the United States, 1867-1960*, (Princeton; Princeton University Press), 1963; and Bray Hammond, *Banks and Politics in America: From the Revolution to the Civil War*, (Princeton; Princeton University Press), 1957.

⁶ At least one large bank depositor, Henry Ford, threatened in 1907 to "build a vault to take our money out of the banks and put it in the vault, so we can pay out men in cash." Quoted in Susan E. Kennedy, *The Banking Crisis of 1933*, (Lexington; University Press of Kentucky), 1973, p. 92.

⁷ No evidence of contagious effect of the failure of the Franklin National Bank (1974), The United States National Bank of San Diego (1973), and the Hamilton National Bank of Chattanooga (1976) on the stock value of other banks is reported by Joseph Aharony and Iszhak Swary, "Condition Effects of Bank Failures: Evidence from Capital Markets," *Journal of Business*, July 1983, pp.

305-322. Contagiousness has been observed, however, where failed thrift institutions were insured by state rather than federal agencies, e.g., Nebraska (1984) and Ohio (1985); and depositors realized that, unlike the federal government, states do not own the printing presses.

⁸ Moreover, it is reasonable to assume that, unlike in the 1930s, the Federal Reserve would replace any aggregate flight to currency that might occur to maintain the money supply.

⁹ Federal Deposit Insurance Corporation, *Annual Report, 1940* (Washington, D.C.), pp. 61-73. The data include recoveries but no accounting is made either for injury before recovery nor the length of time that the deposit accounts may have been frozen before payoff. Thus, these figures understate the severity of depositor and loan customer injury.

¹⁰ For savings and loan associations, the most likely common cause of financial difficulties is unexpected increases in interest rates. On a market value accounting basis, almost all SLAs have been insolvent throughout much of the 1980s.

¹¹ Conover, "Testimony", pp. 287-288.

¹² The Working Group of the Cabinet Council on Economic Affairs, *Recommendations for Change in the Federal Deposit Insurance System*, (Washington, D.C.), January 1985, pp. iv and 53.

¹³ *Continental Illinois National Bank Failure and Its Potential Impact on Correspondent Banks*, Staff Report To Subcommittee on Financial Institutions Supervision, Regulation and Insurance, Committee on Banking, Finance and Urban Affairs, October 4, 1984, pp. 16-18.

¹⁴ Ben S. Bernanke, "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression," *American Economic Review* (June 1983).

¹⁵ Because almost all accounts are fully insured, most SLAs suffered neither currency or deposit runs when they experienced solvency problems in the late 1970s.

¹⁶ In his testimony before the House Banking Committee on October 4, 1984, William Isaac, Chairman of the FDIC, stated that the "Continental was not and is not insolvent in the sense of its liabilities exceeding its assets... the bank had severe ... liquidity problems." If this were so, one may wonder why he implied a less than 100 percent recovery rate for interbank deposits at the Continental or why an assistance program was, in fact, necessary. William M. Isaac, "Statement on Federal Assistance to Continental Illinois Corporation and Continental Illinois National Bank", Subcommittee on Financial Institutions Supervision, Regulation and Insurance; Committee on Banking, Finance, and Urban Affairs; U.S. House of Representatives, October 4, 1984, pp. 2-3.

¹⁷ Stanley C. Silverberg, "Restricting Brokered Deposits," *Housing Finance Review*, January 1984, p. 100. Term in parenthesis mine.

¹⁸ It is apparent that Isaac's reaffirmation of the solvency of the Continental (see footnote 15) was not shared by the market. This paper will not deal with the substantial problem of marking all accounts, such as nonmarketable assets and, particularly, deposits, to market. Correct procedures involve marking both sides of the balance sheet to market. Many ongoing bank accounting practices are, at minimum, misleading and, at maximum, economic fraud. For example, banks may accrue unpaid interest on loans past due until the loans are declared nonperforming. Only recently did the bank regulators define nonaccruing as no more than 90 days past due. However, these loans may continue to be valued at book. An excellent analysis of such accounting practices for LDC loans on bank income appears in Suzanna Andrews, "Accounting for LDC Debt," *Institutional Investor*, August 1984, pp. 189-194.

¹⁹ G. O. Bierwag and George G. Kaufman, "A Proposal for Federal Deposit Insurance with Risk Sensitive Premiums" in *Bank Structure and Competition: Conference Proceedings*, Federal Reserve Bank of Chicago, May 1983, pp. 223-242. Accurate market values incorporate all expected further losses.

²⁰ This appears to have been the case with FSLIC's takeover of the SLAs turned into phoenixes.

²¹ Federal Deposit Insurance Corporation, *The First Fifty Years*, Washington, D.C.; 1984, pp. 81-108.

²² Federal Deposit Insurance Act, 1983.

²³ For a good discussion of some of the FDIC's concerns in the Continental saga by a high FDIC official directly involved, see Stanley C. Silverberg, "Resolving Large Bank Problems and Failures," paper presented at Symposium on Issues and Options in Dealing with Large Banks' Problems and Failures, August 20, 1984.

²⁴ This may also be true for economists. A review of the academic literature in banking over the past two decades reveals that economists both in and outside academe tended, on the whole, to believe that bankers were overly risk averse, bank capital was too high, and the FDIC's and FSLIC's reserves were higher than necessary.

²⁵ It is also inappropriate for a regulatory agency to justify its powers on the basis of exaggerated public fear of perceived spillover crisis. In a paper prepared for the Bush Commission, Fed Chairman Volcker argued that:

A crisis in one limited part of the banking system can quickly affect the strength and well-being of other parts and the system as a whole In our view, it would not be workable or reasonable—indeed, it would be dangerous—to look to the Federal Reserve to "pick up the pieces" in a financial crisis without also providing the Federal Reserve with the tools to do the job and with adequate "leverage" in shaping the system so as to reduce the likelihood of a crisis arising.

Paul A. Volcker, "The Federal Reserve Position on Restructuring of Financial Regulation Responsibilities," *Federal Reserve Bulletin* (July 1984), pp. 548-549.

²⁶ I have argued elsewhere that most of our fears and concerns about system-wide contagious bank failures and domino effects are based on the experiences of the massive bank failures in 1931-33 rather than on the broad sweep of U.S. banking history which is far less chilling. George Kaufman "Consequences of the Failure of One or More Banks on Other banks, the Stability of Financial Markets, and Regional and National Economic Activity," Draft chapter for a study on Bank Safety and Soundness prepared for the American Bankers Association, March 1985.

²⁷ It is more than unfortunate when a bank regulatory agency acquiesces in a practice that ties the compensation of bank officers to changes in the book value of the bank's net worth rather than in the market value, as the FDIC has done for the Continental. Such a system can only create incentives for the bank's accountants to use techniques to increase the bank's book net worth, such as deferring loan loss reserves (a practice that contributed to the severity of the Continental's crisis), regardless of the true (market value) situation. A description of this compensation arrangement appears in Jeff Bailey, "Continental Illinois' Auditor Revises Its Opinion, Qualifies Results for 1983," *The Wall Street Journal*, August 28, 1984, p. 4.

²⁸ See, for example, Edward J. Kane, "The Role of Government in the Thrift Industry's Net-Worth Crisis," in George J. Benston, ed., *Financial Services: The Changing Institutions and Government Policy* (New York; Prentice-Hall), 1983, and: _____, *The Gathering Crisis in Deposit Insurance* (Cambridge, Ma.; MIT Press), Forthcoming.