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S&L INDUSTRY IN CRISIS

Higher Ceiling Leads To Collapse

In May, the House of Representatives passed a bill (What happened to it? now before the Senate? Is it dead? Perhaps you could give us a few more details at the end of the article.) that would change deposit insurance...

which is currently set at \$100,000 per account. On the one hand, the case for raising the ceiling in 1980... On the other hand, following an increase in the ceiling in 1980... economic episodes - banking... from all banks... simply chose to... (bankers) banks...

case for raising the ceiling... requires an... the argument for... place. The... for deposit insur... the belief that mo... information... Isn't this because... CAMELS... distinguish... failure... implies that a ba... exceed... When a bank... some or... Small... deposits... sophisticated depositor... loss dispropor... concerns... the advent of... 1933, the... a major bank... triggered deposite... and for quote... of a... Because... good... see the need for the qu... sim... draw their deposits from... severe episod... of feder... cut the... and... all of w... for econ... occur... 20... Because depos... in good... sparked... coverage... currently set at \$100,000... the case... limit seems... years... the real... years... coverage over the... 22 years... eroded the real value of insur... the number of... industry nearly collapsed. Was... rose dramatically and the... following an increase... the ceiling in 1980... the number of... the limit seems... failures... the number of... failures... have something to do... quick look at the history...

TOO TEMPTING

SEEM TO EXAGGERATE THE RISK OF BANK FAILURES

The '80s: A decade of failures

Ceiling Too High?



DEPOSIT INSURANCE REFORM

Is It Déjà Vu All Over Again?

By Mark D. Vaughan and David C. Wheelock

Deposit insurance reform is on Congress' agenda. The House of Representatives passed a bill in May, and the Senate is likely to debate reform this fall. Although the pending reform bill would change federal deposit insurance in many ways, none of its features has sparked more controversy than a proposal to raise the coverage ceiling, currently set at \$100,000 per account, to \$130,000 per account. On the one hand, the case for raising the ceiling seems simple: Inflation has eroded the real value of coverage considerably since the last increase, in 1980. On the other hand, bank failures dramatically rose and the thrift industry nearly collapsed in the wake of that increase. Was the spike in failures a coincidence, or did the higher deposit insurance ceiling have something to do with it? The 20th century U.S. experience suggests that boosting the coverage ceiling may not be such a good idea.¹

Why Insure Deposits?

The economic argument for deposit insurance stems from the macroeconomic fallout from banking panics. In the past, depositors often had difficulty distinguishing financially sound from financially shaky banks. News about a regional economic shock would make depositors nervous because they could not determine the actual condition of their bank. Depositor nervousness grew out of the potential loss of uninsured funds should their bank fail. Before federal insurance, bad economic news would sometimes spook depositors into withdrawing funds from all banks. The U.S. banking system was uniquely prone to mass withdrawals or "runs" because the typical bank was small and its loan portfolio was undiversified. Severe episodes of runs—banking panics—intensified economic downturns by disrupting the payments system and cutting the flow of credit to business firms. Indeed, some economists have attributed the depth and length of the Great Depression to the severe banking panics of the early 1930s.²

Deposit insurance is an antidote to banking panics. When their funds are insured, depositors will not view bad economic news with alarm. And the absence of alarm means the absence of panics.

Following the Panic of 1907, eight states established insurance systems. Then, in response to the panics of the early 1930s, when 9,000 banks—some 30 percent of the nation's total—went under, Congress established the Federal Deposit Insurance Corp. (FDIC). The FDIC offered coverage to all U.S. commercial banks. In 1933, a temporary ceiling on coverage was set at \$2,500; in 1935, a permanent ceiling was fixed at \$5,000. In 1950,

the ceiling was raised to \$10,000; in 1966 to \$15,000; in 1969 to \$20,000; in 1974 to \$40,000; and finally in 1980 to \$100,000. Federal deposit insurance succeeded in stabilizing the banking system; since the 1930s the United States has experienced no banking panics and, until the 1980s, almost no failures of insured institutions.³

So, What's the Problem with Deposit Insurance?

Although deposit insurance eliminated banking panics, it sometimes encouraged imprudent risk-taking. Deposit insurance encouraged bank risk-taking because the price of coverage—premiums and deductibles—was not set by the principles that guide private insurance companies.

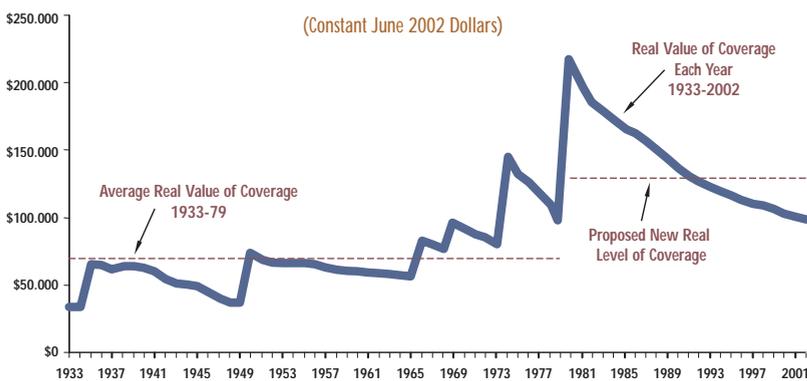
Private insurance companies reduce their risk exposure with premiums and deductibles. In an automobile collision policy, for example, the insurer sets premiums based on expected payouts, which in turn reflect the chance an insured driver will crash and the cost of repairing his car if he crashes. To deter insured parties from driving recklessly because they are covered—a phenomenon that economists call *moral hazard*—private companies charge higher rates to accident-prone drivers and insist on deductibles from all drivers. Deductibles encourage safe driving—that is, they combat moral hazard—because insured parties must bear some of the cost of accidents. Insurers also control risk exposures by pre-screening applicants. Pre-screening prevents reckless drivers from disproportionately obtaining coverage—a phenomenon that economists term *adverse selection*. Deductibles reduce adverse selection as well as moral hazard because reckless drivers will steer clear of policies that force them to share the cost of crashes.

Unlike private insurance, deposit insurance plans typically have not linked premiums to expected payouts. Instead, public plans have used flat premiums—that is, rates set as a fixed percentage of deposits—because they are simple to administer. *Marginal analysis*—a staple in the economist's tool kit—can demonstrate the resulting incentive problems. Bankers take on risk up to the point where the extra, or marginal, benefit of risk-taking equals the marginal cost. The marginal benefit of risk-taking to a banker is the greater prospect of profits. The marginal cost of risk-taking is the increase in interest demanded by uninsured depositors, the increase in premiums demanded by the deposit insurer and the increase in losses from risks that do not pan out. Because covered depositors are shielded from losses, insurance eliminates the incentive to demand higher interest rates from risky banks. So, with flat-rate deposit insurance premiums,

The Wrong Direction?

Even without the proposed increase to \$130,000, the inflation-adjusted ceiling on federal deposit insurance is high by historical standards. The chart tracks the real value of coverage from 1933 to the present. The upward jags correspond to statutory increases in the coverage ceiling; other movements reflect changes in the price level. The thrift debacle followed the 1980 statutory increase, which provided real coverage exceeding three times the level of the 1930s. Inflation since 1980 has brought the real value of coverage closer to the 1933-79 average.

INFLATION-ADJUSTED COVERAGE CEILING ON FEDERAL DEPOSIT INSURANCE



the only check on risk-taking is a bank's net worth. Net worth is the difference between the value of assets and the value of liabilities; it represents the stake the owners have in the bank and operates much like a deductible for insurance coverage. When net worth is high, the owners have much to lose from risks that do not pay off. If net worth falls to zero, however, the owners have nothing to lose, and the marginal cost of risk-taking is essentially zero. Under such circumstances, bankers may yield to the temptation to take imprudent risks—that is, succumb to the moral hazard in deposit insurance.

Government supervision of the banking industry can combat moral hazard in deposit insurance. Bank supervisors can monitor risk-taking with regular on-site examinations and continuous off-site surveillance. Supervisors can also insist that bank net worth remains at high levels. Finally, they can impose sanctions on risky institutions by, for example, prohibiting dividend payments, removing bank officers or denying merger applications. Still, if supervisors fail to spot rising risks or lack the resources to discipline risky banks, then imprudent risk-taking can lead to waves of failures and the collapse of the deposit insurance system.

How the State Systems Fared

The fate of the state deposit-insurance systems in the early 20th century illustrates the consequences of poor design and lax regulation. None of these systems survived more than 20 years. Oklahoma established its deposit-insurance system in 1907; within two years, Kansas, Nebraska, South Dakota and Texas offered coverage. By 1917, Mississippi, North Dakota and Washington were running such pro-

grams. Although details differed, the state systems shared features that contributed to their demise. In particular, premiums did not rise with bank risk; they equaled a fixed percentage of deposits. Banks could be assessed additional premiums should the state's reserve fund run low, but these surcharges were often limited by statute.⁴

Inadequate diversification of the loan portfolios contributed to the problems of the state-run systems. The states offering coverage were mostly rural and agricultural, and the insured banks were mostly small concerns that lent locally. When commodity prices and farm profits soared during World War I, the number of banks and the size of their loan portfolios mushroomed—especially in states with deposit insurance. In 1920-21, however, commodity prices collapsed, farm income plummeted and loan defaults skyrocketed. As bank failures mounted, the reserves of the state deposit insurance funds evaporated. Premiums were raised, but of the eight state insurance systems, only that of Texas had sufficient reserves to cover insured deposits in all failed banks. By 1929, each state had dismantled its deposit insurance system.

The failure of the state deposit insurance systems went deeper than the post-World War I collapse of agricultural prices; adverse selection played a key role. Risky banks were eager to join the state systems because coverage made attracting deposits easier. Easier access to deposits meant fewer barriers to risk-taking. Well-managed, conservative banks had little interest in joining systems that benefited the depositors of their risky competitors. When given the chance, they opted out, leaving the reserve funds to be supported by banks at higher risk of failure. In the end, states with deposit-insurance systems suffered disproportionately high bank failure rates, with insured banks posting the highest failure rates of all. Without contributions from low-risk banks to pay depositor claims from high-risk banks, the reserve funds dried up.

Moral hazard compounded the problems of the state deposit-insurance programs. Because all covered banks paid the same fixed-percentage premiums, the deposit insurance programs did not deter risk-taking. Because insured depositors, confident in their state's program, did not demand higher interest rates from risky institutions, depositor discipline did not deter risk-taking. Because state bank examiners lacked the resources to force banks to act conservatively, government supervision did not deter risk-taking. Insured banks could make risky loans with relative impunity—the marginal cost of risk-taking was

low. Imprudent lending helped produce high default rates, widespread bank failures and bankrupt deposit-insurance funds. As a contemporary commentator noted about one state's program, "It gave the banker with little experience and careless methods an equality with the manager of a strong and conservative institution. Serene in the confidence that they could not lose, depositors trusted in the guaranteed bank. With increased deposits, the bank extended its loans freely."⁵

Did the Feds Do Any Better?

When designing a federal deposit-insurance program, Congress sought to avoid the problems that had brought down the state systems. To combat adverse selection, Congress insisted that all national banks and members of the Federal Reserve System accept coverage—thereby preventing larger, and typically stronger, banks from opting out. The nationwide scope of the program also reduced the likelihood that a geographic or industry shock—like the collapse of agricultural prices in the 1920s—would bankrupt the insurance fund. To combat moral hazard, the new program required that insured banks undergo regular federal safety and soundness examinations. As a further check, Congress limited entry into banking markets. Limits on entry shielded existing banks from competition, allowing them to reap high profits and build up net worth. High net worth, in turn, made bankers think twice about undertaking risky activities. Put another way, close government scrutiny and stiff entry barriers deterred risk-taking by increasing the marginal cost. Federal insurance of thrift deposits also began in the 1930s with the creation of the FSLIC, the Federal Savings and Loan Insurance Corp. The savings and loan deposit-insurance program was similar to the program administered by the FDIC.

Moral Hazard Redux: The S&L Crisis

Although the federal deposit insurance system improved on the state-run programs, it did not eliminate moral hazard. Premiums were, once again, set at a fixed percentage of an institution's deposits. Because premiums were not tied to failure risk, the deposit insurance system imposed no marginal cost on risk-taking. Only the net worth of insured institutions and the watchful eye of bank and thrift supervisors held excess risk-taking in check.

A dramatic rise in interest rates in the late 1970s and early 1980s triggered massive moral hazard in the thrift industry and paved the way for the collapse of the thrift deposit insurance program.

Savings and loans concentrate on taking short-term household deposits and making long-term mortgage loans. Rising rates increased the cost of servicing deposits relative to the revenue from outstanding mortgage loans. Collective losses from the interest rate squeeze wiped out the industry's net worth. The magnitude of the problem—thousands of savings and loans were technically insolvent—prevented supervisors from policing each institution's appetite for risk. Thrift supervisors also came under intense political pressure to keep insolvent institutions open. Inadequate supervision, coupled with the low marginal cost of risk-taking, led thrifts to make highly speculative business and real estate loans with insured deposits. Many of these gambles did not pay off, compounding the losses from the interest-rate squeeze. In 1989, Congress dissolved the FSLIC. But unlike the dissolutions of the state deposit insurance systems, which imposed no cost on state taxpayers, the dissolution of FSLIC cost U.S. taxpayers \$150 billion.

The Federal Deposit Insurance Corp. Improvement Act of 1991 (FDICIA) was designed to prevent another thrift-type debacle. The act beefed up supervision by mandating four things: annual safety-and-soundness exams, prompt corrective action, risk-based deposit insurance and least-cost failure resolution. Frequent exams improve the flow of information between bankers and supervisors so that emerging problems can be addressed quickly and decisively. Prompt corrective action, which mandates specific supervisory responses to deteriorating bank net worth, guarantees that emerging problems will be addressed quickly and decisively. Risk-based premiums, which currently range from zero to 27 cents annually per \$100 of deposits, increase the cost of coverage as bank risk rises, thereby making deposit insurance more like private insurance. Least-cost resolution, which forces the FDIC to clean up failures in the least costly way for the deposit-insurance fund, shifts more of the losses to uninsured depositors. And greater loss exposure increases the incentive to demand higher interest rates from risky institutions. The consensus is that FDICIA has reduced the chances of another deposit insurance meltdown, though the act has not been put to the test by a banking crisis.⁶

If It Ain't Broke, Why Fix It?

The booming economy of the 1990s, with some help from FDICIA, produced the strongest banking conditions in recent memory. Indeed, the decade saw

Advances from Federal Home Loan Banks Could Set Back Insurance Fund

One issue not on the table in the current debate that perhaps should be is the impact of collateralized bank liabilities on the FDIC. Collateralized liabilities are funds that must be secured by bank assets. An example is deposits from municipal governments; state and local law often requires that banks set aside U.S. government securities as backing for municipal deposits. A much more important source of collateralized funding for most U.S. banks is advances from the Federal Home Loan Bank (FHLB) system. These advances increase potential losses to the deposit-insurance fund.

The FHLB system is a government-chartered but member-owned enterprise that works to increase the liquidity of mortgage markets. The FHLB increases liquidity by advancing funds to institutions that originate mortgages; mortgage loans, in turn, collateralize the advances. Congress established the system in 1932 to lend to thrift institutions; membership was opened in 1989 to others in the mortgage-origination business. Now the FHLB offers thrifts, commercial banks and credit unions a wide range of products and services to fund mortgage loans, to manage interest-rate risk and to meet the other challenges of a competitive banking environment. Between 1992 and 1999, total FHLB assets grew by 262 percent. During that same period, community bank membership in the system increased four-fold, and outstanding advances increased 16-fold.



The growing volume of FHLB advances threatens the deposit-insurance fund through two channels. Advances encourage a borrowing bank to take more risk. Also, because advances are collateralized, the FHLB has first crack at the bank's assets should failure occur. The first channel increases the likelihood that a borrowing bank will fail and that the FDIC will have to dip into the reserve fund. The second increases the cost of a failure to the FDIC—that is, the size of any necessary dip into the reserve fund.¹

Advances encourage risk-taking because Home Loan banks have little incentive to demand more interest or to withdraw funding when the credit risk of a borrowing bank increases. Advances are heavily collateralized—the market value of mortgage collateral typically covers 125 to 170 percent of the advance; the FHLB can also lay priority claim to other assets of a borrowing bank should it fail and should mortgage collateral



net worth ratios soar and failure rates tumble. At the same time, the FDIC reserves swelled, allowing a premium cut for healthy banks. By 2000, fewer than 10 percent of U.S. banks paid any premiums at all. With all this good banking news, why would anyone want to fiddle with the federal deposit-insurance system?

Much of the pressure for raising the coverage ceiling comes from community bankers. Community banks are relatively small institutions; the Financial Modernization Act of 1999 set the asset limit for regulatory purposes at \$500 million. They specialize in making loans to and taking deposits from distinct regions, such as small towns or city suburbs.

In the 1990s, large banks merged at a record pace; these mergers produced sizable cost savings and put intense pressure on community banks to cut expenses. At the same time, community banks lost consumer loans and retail deposits to tax-exempt credit unions.

Community bankers argue that a higher coverage ceiling would give them a better shot at luring large household deposits, retirement accounts and municipal deposits away from large banks. Raising the ceiling is only fair, these bankers believe, because large banks enjoy “too big to fail” status, which effectively extends coverage to all deposits.

Finally, they note that rising prices have considerably eroded the real value of coverage since 1980; just compensat-

ing for 22 years of inflation means raising the ceiling to \$218,000.⁷

Reasons Not to Raise the Ceiling

Raising the deposit-insurance ceiling does have a downside—it could exacerbate the moral hazard problem that has plagued 20th century deposit-insurance systems. A higher ceiling would reduce the marginal cost of risk-taking for insured banks because a larger portion of deposits would be shielded from losses. These incentive effects are not just the idle daydreams of theorists; the thrift debacle followed on the heels of the last increase in the coverage ceiling—a hike to \$100,000 per account from \$40,000 in 1980.

There are other reasons why raising the deposit-insurance ceiling may be a solution in search of a problem. For one thing, the current ceiling can already provide much more than \$100,000 in coverage. By one economist's calculation, a family of four could insure up to \$3.2 million in a single institution, thanks to joint and multiple individual accounts.⁸ The case for inflation adjustment is also weaker than it first appears. If the starting point for indexing is the 1935 ceiling of \$5,000, rather than the 1980 ceiling of \$100,000, the current cap should be reduced to \$65,954. Finally, if implicit or explicit subsidies to large banks and credit unions put community banks at a competitive disadvantage, it would be better to level the playing field

prove insufficient. This protection explains the system's stellar record in avoiding loan losses: No Home Loan bank has ever lost a penny on an advance.

Because advances are essentially free of credit risk, the individual Home Loan banks can set terms that are largely independent of the failure risk of the borrower. Put another way, borrowing from the FHLB enables a bank to sidestep any market-imposed penalties for failure risk. As a consequence, banks with a greater taste for risk will be more interested in joining the FHLB and funding growth with advances—an example of adverse selection. Once in the system, member banks can make risky new loans with advances and see little rise in the marginal cost of risk-taking—an example of moral hazard. In short, access to advances could end up increasing the likelihood that a borrowing bank will fail.

Advances could also threaten the deposit-insurance fund by weakening the FDIC's position in failure resolutions. Under U.S. bankruptcy law, collateralized claims like advances are settled first during failure resolution. So when a member bank fails, the FHLB stands first in line for repayment

—even before the FDIC. Other things equal, fewer losses to the FHLB imply greater losses for the FDIC. In short, even if FHLB funding does not encourage risk-taking, losses to the insurance fund will be higher when a failure occurs because the FHLB gets first shot at the assets of the failed bank.

One solution might be for the FDIC to factor FHLB advances into the premiums charged for deposit insurance. Each time an insured bank would borrow from the FHLB, the FDIC could re-price coverage based on the new likelihood of failure and the new likely cost of any failure that did occur. Under current law, however, risk-based premiums reflect only the financial condition of the insured bank, not any additional losses to the FDIC from FHLB advances. Also, most observers believe that the current cap on premiums—27 cents a year per \$100 of deposits—is too low to deter risk-taking, much less to cover any additional losses from collateralized funding.

¹ Stojanovic, Vaughan and Yeager (2000) provide more details about the FHLB system.

by eliminating those subsidies rather than introducing more distortions.

A look back at the economic justifications for deposit insurance strengthens the case against raising the ceiling. Even if there were no insurance, the U.S. banking system today would be less vulnerable to panics than it was before the creation of the FDIC. The banking system is less vulnerable because the typical U.S. bank is larger and, as a result of extensive branching, better diversified than earlier in the century. In 1934, for example, the United States had 14,146 banks and the average bank held \$43.2 million in assets (expressed in 2001 dollars). Collectively, these banks operated 17,237 branches. By 2001, the total number of banks had dropped to 8,080, the size of the average bank had jumped to \$813 million and the sum total of branches had multiplied to 73,644. Larger, more diversified banks mean that economic shocks are less likely to undermine depositor confidence in the banking system. Even if shocks did unnerve depositors, the Federal Reserve has learned from the experiences of the 1930s and will intervene when necessary to prevent banking problems from threatening the macroeconomy.

Other Changes

Other proposed reforms in deposit insurance make a great deal of sense. The House bill would consolidate the

reserve funds for the bank and thrift deposit insurance programs, a move that wisely reflects the narrowing differences among depository institutions. Also, proposed changes in the method of replenishing the reserve fund would allow the FDIC to better prepare for a rainy day. Under current law, the fund must be kept at 1.25 percent of total insured deposits. The House bill would give the FDIC some flexibility to move the percentage when reserves run low.

Still, economic theory and historical experience suggest that boosting the coverage ceiling is a bad idea. It is possible that the final bill will include the FDIC's proposal to make risky institutions pay much higher premiums for insurance coverage.⁹ It is also possible that other FDICIA safeguards, together with memories of the thrift debacle, will prompt bank supervisors to counter any imprudent risk-taking. The history of the eight state deposit-insurance systems and the thrift deposit-insurance system points to a more likely outcome—an increase in moral hazard. As Yogi Berra has phrased George Santayana's warnings about the lessons of history—it may be like déjà vu all over again.

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ENDNOTES

- 1 See Furlong and Kwan (2002) for more on other aspects of reform.
- 2 See Calomiris and White (2000) for more on the economic rationale for deposit insurance.
- 3 See Bradley (2000) for more on the history of federal deposit insurance.
- 4 Calomiris and White (2000) provide more details about the various state-run systems. See Wheelock and Kumbhakar (1995) for an in-depth look at incentive problems in the Kansas system.
- 5 Harger (1926, p. 278).
- 6 See Benston and Kaufman (1998) for more on the thrift debacle and FDICIA.
- 7 See ICBA (2000).
- 8 See Thomson (2001).
- 9 See FDIC (2001) for more details.

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