## FRBSF Economic Letter

Number 2005-20, August 19, 2005

# Credit Union Failures and Insurance Fund Losses: 1971–2004

Over the past few decades, assets in the credit union industry have grown considerably and have grown relative to banking. As with banking, the credit union industry has experienced considerable structural change that, in part, involved failures. While the data on failures in the banking industry have been analyzed at length, the same has not been true for credit unions, so far.

This *Economic Letter* presents newly produced data on losses in the federal insurance program for credit union shares and on the rates at which federally insured credit unions (FICUs) failed. (Shares in credit unions are analogous to deposits in banks.) We compare these data to data for institutions insured by the Bank Insurance Fund (BIF) of the Federal Deposit Insurance Corporation (FDIC). We also briefly review the macroeconomic and microeconomic factors that likely contributed to credit union failures and the losses they entailed.

#### Transformation of credit unions

Credit unions are member-owned, nonprofit, financial institutions that serve circumscribed fields of membership. Many of the differences in products, services, and regulations that formerly distinguished credit unions from banks have become less pronounced. For instance, many credit unions are switching from narrow fields of membership, such as the employees in a single company, to broader geographically based fields of membership, such as the people who live or work in specified counties. Also, many regulations that historically limited credit unions' offerings of deposit and loan products have been relaxed.

In recent decades, mergers, liquidations, and the formation of relatively few new credit unions combined to reduce the number of credit unions from a peak of 23,866 in 1969 to 9,274 in 2005. At the same time, the average size of credit unions grew rapidly enough to boost total credit union shares considerably. The number of FICUs with over \$100 million in assets (in 2004 dollars) increased from 192 in 1980 to 1,155 in 2004. The share of FICU assets in these larger FICUs increased from 31% in 1980 to 79% in 2004. Assets in credit unions grew from less than 1% of the dollar amount of assets in all depositories in 1939 to 2% in 1971 and to 6% in 2004.

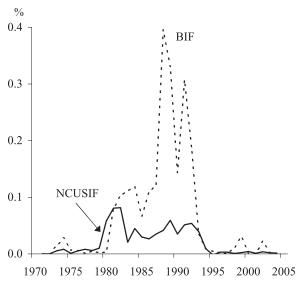
Insurance fund losses in credit unions and in banks

Federal insurance for credit unions, which began in 1971, nearly 40 years after federal insurance began for banks, has been operated by the National Credit Union Administration, an independent agency. So far, FICUs have funded the National Credit Union Share Insurance Fund (NCUSIF) via insurance premiums and required deposits.

NCUSIF losses include the payments that it makes to those who have insured shares in failed credit unions. Figure 1 displays annual insurance fund losses as a percent of shares insured by the NCUSIF and of deposits insured by the BIF for 1971–2004. During this period, losses imposed on the NCUSIF totaled \$953 million (\$1,474 million in 2004 dollars), averaged 0.018% of insured shares, and peaked at 0.082% in 1982. NCUSIF loss rates exhibit three distinct regimes: averaging 0.006% during 1971–1979, 0.041% during 1980–1994, and 0.002% during 1995–2004.

From 1971 through 2004, losses imposed on the BIF totaled \$38,254 million (\$59,283 million in 2004 dollars), averaged 0.073% of insured deposits, and peaked at 0.395% in 1988. Thus, BIF losses were

Figure 1
Loss rates at the NCUSIF and at the BIF



Sources: NCUA, NCUSIF, and FDIC.

considerably larger, both in dollars and per dollar of insured deposits, than NCUSIF losses.

#### Failures of credit unions and commercial banks

Failed FICUs and federally insured commercial banks (FICBs) were those involved in involuntary liquidations, assisted mergers, purchase and assumptions (P&As), and cases of receipt of government assistance to avoid liquidation. The 4,371 FICU failures identified during 1971–2004 consisted of 2,314 involuntary liquidations (including P&As), 1,087 assisted mergers, and 970 cases of government assistance.

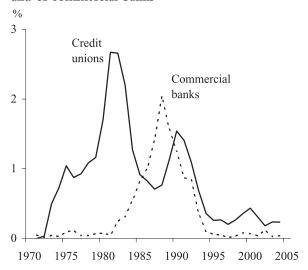
We computed annual failure rates (i.e., the percent of institutions failing) for FICUs and for FICBs of different asset sizes. Smaller FICUs and FICBs failed more often than larger ones. For instance, average annual failure rates during 1981–2004 were 1.24% for FICUs with under \$1 million in assets (in 2004 dollars), 0.42% for those with \$1–10 million, 0.17% for those with \$10–100 million, and 0.05% for those with over \$100 million. (We were unable to compute failure rates for FICUs by size before 1981.)

Compared with FICBs of similar size, FICUs typically had lower failure rates. For instance, the failure rate for FICUs with over \$10 million in assets averaged 0.15% during 1981–2004 and peaked at 0.68% in 1991, while FICBs of that asset size averaged 0.52% during the period and peaked at 1.53% in 1989. Though often less well-diversified than banks, FICUs may have had lower failure rates because they generally made loans, such as (collateralized) auto loans, that on average have imposed smaller losses on lenders.

Figure 2 displays annual failure rates for FICUs and FICBs for 1971–2004. The FICU failure rate averaged 0.95% per year and peaked at 2.67% in 1981. The failure rate for FICBs averaged 0.40% per year and peaked at 2.04% in 1988. Despite having lower failure rates than similarly sized FICBs, the failure rate across all FICUs was higher than that for FICBs because (1) FICUs are typically smaller than FICBs and (2) smaller institutions have higher failure rates. In fact, 47% of FICUs held under \$10 million in assets in 2004, while fewer than 2% of FICBs were that small.

During the 1970s and 1980s, high and volatile unemployment, inflation, and interest rates adversely affected depositories of all kinds. Some analysts argue that bank and thrift regulators often delayed closing seriously troubled institutions (Kane and Hendershott 1996, Hanc 1998). If delaying closures increased eventual insurance losses, then artificially low recorded FICB failure rates in the early 1980s may have both delayed BIF losses and raised their eventual total amounts.

Figure 2
Failure rates of credit unions and of commercial banks



Sources: NCUA, NCUSIF, and FDIC.

Conversely, less delay in closing troubled FICUs may have led to high recorded FICU failure rates in the early 1980s, but avoided larger eventual total losses imposed on the NCUSIF.

#### Other measures of failures and insurance losses

Failure rates are based on the numbers of failures, rather than the dollar losses that failures impose. However, uninsured depositors, unsecured creditors, and deposit insurers are interested not just in whether depositories fail, but also in how severe their losses might be. Two additional measures of the severity of losses are (1) losses imposed on an insurance fund per dollar of assets in failed depositories and (2) assets in failed depositories in all depositories.

NCUSIF losses per dollar of assets in failed FICUs averaged 14% annually from 1984–2004 and ranged from 7% in 1999 to 43% in 1997. In contrast, BIF losses per dollar of assets in failed FICBs averaged 15% annually over the same period and ranged from 7% in 1991 to 79% in 1998. Since the claims of insured accountholders have priority over those of bondholders and tended to be larger than the remaining assets of failed FICUs or FICBs, bondholders would have been unlikely to recover much of their investments in either FICUs or FICBs that later failed.

Assets in failed FICUs per dollar of assets in all FICUs averaged 0.08% from 1984 through 2004 and peaked at 0.46% in 1991. In contrast, assets in failed FICBs per dollar of assets in all FICBs were substantially higher, averaging 0.21% over the same period, and peaking at 1.30% in 1991.

Fewer assets in failed FICUs per total assets need not imply that credit unions were better managed. FICUs may simply take on less total risk than banks. Credit unions tend to serve different customers and to hold different kinds of loans than banks do. For instance, most credit unions hold far smaller proportions of their assets in business loans, which historically have had higher loan loss rates than the current mainstays of credit union lending, (collateralized) mortgage and auto loans.

#### Causes of credit union insurance losses and failures

Both macroeconomic and microeconomic factors are likely to contribute to insurance losses and failures. High NCUSIF loss rates from 1980–1994 coincide mostly with either high real interest rates or high unemployment rates, and the highest loss rates, which occurred in the early 1980s, coincide with both. Our preliminary analysis indicates that just two macroeconomic factors—the then-current unemployment rate and the prior year's real interest rate—may account for over half of the variation of annual NCUSIF loss rates from 1971–2004.

Microeconomic factors, such as differences across individual depositories, also help account for which ones are most likely to fail (Kharadia and Collins 1981, Gordon et al. 1987, Hanc 1998). Our preliminary analysis suggests that FICUs were more likely to fail if they were smaller, younger, less well capitalized, more loaned up, less profitable, and less efficient.

Other studies of credit unions additionally attribute the failures of many small FICUs to "mundane" causes, such as a lack of trained managers, weak lending and collection operations, poor record keeping, and closures of sponsoring companies (Gordon et al. 1987, U.S. GAO 1991, Shafroth 1997).

The macroeconomic shocks of the 1970s and 1980s also revealed credit unions' exposure to risks associated with financial regulation. Like other depositories, credit unions were then importantly limited in the types of deposits, loans, and products and services that they could provide, and their interest rates on loans and deposits were constrained by regulatory ceilings. In addition, each credit union's field of membership was typically so narrowly defined that credit unions were precluded from achieving much diversification across either their borrowers or their savers. Such restrictions likely contributed to the high failure and loss rates of credit unions in the

1970s and 1980s. Deregulation has since enhanced credit unions' ability to manage their interest rate, credit, and (lack of) diversification risks, much as it has for banks.

#### Conclusion

Our newly constructed data show that failure rates have typically been lower for larger than for smaller credit unions and lower for credit unions than for commercial banks of similar size. Credit unions also tended to impose lower loss rates on their insurance fund than commercial banks did.

Our data also show that credit unions' failure and loss rates, like those of banks, fluctuated with the macroeconomic environment. The relatively stable macroeconomic performance of recent years contributed to both failure and loss rates that were lower than their historical averages.

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