

The financial stress in agriculture

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The financial problems that now grip U.S. agriculture have received a great deal of publicity in recent months. Typically, the publicity has attempted to capture the human emotions and sufferings of those most caught up in the financial stress. Movie and media accounts of the tragedy and of the emotional scars of farm bankruptcies and foreclosure sales have portrayed one of the very real aspects of the unusually tough times facing farmers and all of agriculture. But such accounts rarely dwell on the causes and the extent of the problems. The following article focuses on these issues, giving particular emphasis to the extent of the problem among U.S. farmers and farm lenders.

How the problems arose

The problems in agriculture today, judging with the clarity of hindsight, have deep roots in the excesses of farmers and their lenders that were created by the inflationary environment of the 1970s. In that unusually prosperous era for U.S. agriculture, farmers' production and investment decisions were often made, and willingly financed by creditors, on the assumption that inflation would continue and that foreign markets for U.S. grains and soybeans would continue to grow at the phenomenal 10 percent annual rate of that decade. Resource use patterns changed dramatically. Substantial acreage previously used for pasture or held out of production—under government programs to sop up the excess production capacity of U.S. agriculture—came into grain and row crop production in an effort to capitalize on the booming export markets. New land was cleared for crop production and use of production-enhancing chemicals expanded more rapidly, as did double-cropping and irrigation where feasible. Livestock production in the Midwest shifted more quickly toward capital intensive confinement facilities (such as hog farrowing and finishing facilities and cattle feedlots) or to other geographic regions where land values were less influenced by the potential for crop production.

With the swelling optimism created by inflation in that decade, bidding on farmland became very aggressive and was virtually unaffected by the rapidly rising interest rates in the late 1970s. In the 12 years leading up to the 1981 peak, farmland values rose at a compound annual rate of 12 percent. Since real estate accounted for roughly three-fourths of all farm sector assets, the surge in land values generated huge equity gains for farmers and other land owners.

Fortified by growth both in earnings and equity that outstripped inflation, farmers invested more freely in machinery and equipment, buildings and structures, and in land improvements such as irrigation, land clearing, tiling, and terracing in the 1970s. Lulled by the same security, lenders were willing to finance a growing proportion of the increased farm operating expenses, farmland purchases, and capital investments. As a result, farm debt also grew very rapidly in the 1970s, virtually matching the three-fold increase in farm asset values.

Unfortunately for many in agriculture, the realities of the 1980s have not matched the expectations of the 1970s. Export markets for U.S. agricultural commodities, instead of growing at a sustained rate, have shrunk. This, coupled with widespread drought problems in 1980 and again in 1983, has had significant repercussions for the earnings of most crop farmers. Several factors contributed to the downturn in exports, including the sharply rising value of the dollar, slow economic growth abroad, expanded agricultural production in other areas of the world, and the realignment of trade patterns that has followed from the heavy foreign debt burdens of several countries.

Livestock producers have also experienced adversities in the 1980s. Growth in domestic per capita meat consumption has slowed sharply in recent years. In part, the slowing reflects an aging population and the tendency

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of older people to consume less meat. It also reflects consumers' response to dietetic concerns that have arisen in recent years. Red meat producers have been especially hard hit by the slower growth in meat consumption.

The unexpected realities of the 1980s encompass far more than just internal changes in agricultural markets. In particular, an unbalanced mix of a tight monetary policy and a stimulative fiscal policy since 1979 contributed significantly to the changing realities for agriculture in the 1980s. So too did the stepped-up moves toward financial market deregulation. These factors dramatically altered trade patterns in world markets by contributing to the turnaround from the downtrending value of the dollar in the 1970s to the uptrending dollar so far this decade. These factors also contributed significantly to a surge in inflation-adjusted interest rates and an altering of terms on farm loans. Maturities on farm loans became shorter. The use of fixed-rate loans diminished as lenders moved toward variable-rate farm loans and/or more frequent rate renegotiations. The changing terms of farm loans, in the face of very high interest rates so far this decade, added considerably to the cash outflows of many farmers. Indeed, to an unknown extent, the financial stress among many farmers today reflects their being saddled with annual debt service requirements that could have been considered at best only a remote possibility when the debt contracts were negotiated in the 1970s.

The changes of the 1980s, while encompassing far more than just agricultural markets, are nevertheless vividly reflected in measures of farm sector earnings and farm asset values (Table 1). Indicative of the boom conditions of the previous decade, net cash farm income, adjusted for inflation, in the 1970s averaged 27 percent higher than in the 1960s. But so far this decade, real net cash farm income has averaged 22 percent lower than in the 1970s and the lowest since the early 1960s. Total net farm income has fallen even more sharply so far this decade while averaging the lowest since the Great Depression. Because of the decline in earnings, a growing contingent of farmers face the problem of having insufficient cash inflows to meet family living requirements and simultaneously meet annual debt service requirements. Cash flow shortages are most acute among highly leveraged farmers who rely

Table 1
Real farm sector earnings surged in the 1970s, but are down sharply in the 1980s

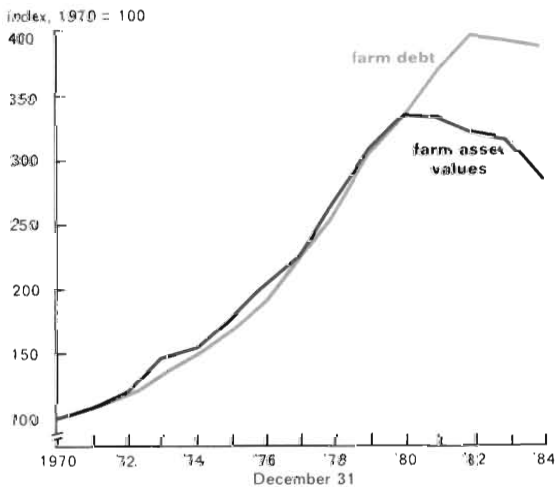
| Annual averages | Net cash income | Total net income |
|-----------------|--------------------------|------------------|
| | <i>(billion dollars)</i> | |
| 1960-64 | \$18.0 | \$15.7 |
| 1965-69 | 19.3 | 16.0 |
| 1970-74 | 24.8 | 21.3 |
| 1975-79 | 22.4 | 17.7 |
| 1980-84 | 18.3 | 12.0 |

mostly on farm earnings for their livelihood. They are less severe among the many, and typically smaller, farmers whose livelihood is also supported by off-farm earnings.

Traditional measures of farm sector earnings encompass income returns to labor, management, and capital. Over time, the share of sector earnings attributable to labor and management has declined with the decrease in the number of farmers and the coincident substitution of capital for labor and management. While the share of farm sector earnings attributable to capital has increased, the decline in total sector earnings has nevertheless resulted in a considerable decline in the income return to farm capital. The lower income return to capital, and the growing pessimism regarding any near-term recovery, have triggered a sharp drop in farm asset values (Figure 1). Forthcoming revisions in U.S. Department of Agriculture estimates are likely to show that the value of farm sector assets has retreated by about a sixth since peaking in the early 1980s. The most pronounced decline has been in land values, which nationwide are off 19 percent since 1981. The extent of the decline varies widely among states, with the sharpest declines occurring in the western Corn Belt and the southern Plains states. Among the five states of the Seventh Federal Reserve District, land value declines since the 1981 peak range from nearly 20 percent in Michigan to more than 45 percent in Iowa.

The decline in farm asset values adds significantly to the financial stress in agriculture. All farmland owners have suffered a substantial decline in net worth in the past few years. At the beginning of 1985, equity in farm sector assets, adjusted for inflation, was off 33 percent

Figure 1
After strong gains in 1970s, farm debt remains high, but asset values are down

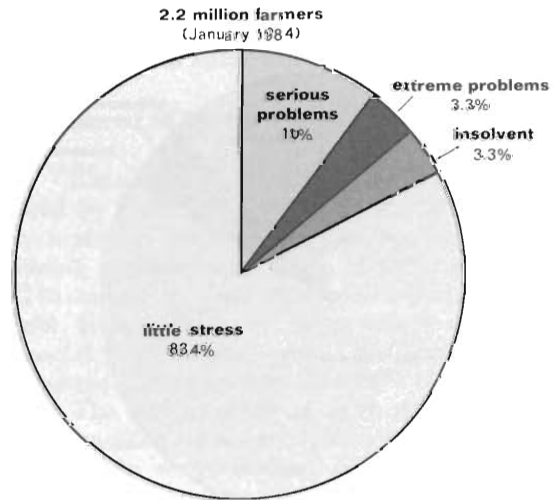


from the 1980 peak and the lowest since 1973. At a minimum, this erosion in farm sector equity has undermined the credit-worthiness of agriculture. Moreover, for highly leveraged farmers who are simultaneously faced with cash-flow shortages, the erosion in equity has undermined the value of the collateral that secures their debts and has accelerated the small, but growing, number of farmers headed toward technical insolvency. Because these farmers owe a proportionately large share of the outstanding farm debt, the stress in agriculture extends deeply into farm lenders.

The extent of the problem among farmers

A recent study by the USDA¹ is the most thorough analysis to date of the extent of the financial stress among farmers. The USDA study focused on various degrees of debt leveraging by farmers, as well as cash flow patterns for various sizes and types of farms. The study concluded that as of early 1984 the majority (83 percent) of the nation's 2.2 million farm operators were relatively free of financial stress. However, the remaining 17 percent of the farmers were identified as falling within three classes of financial vulnerability. Slightly over 3 percent were estimated to be technically insolvent, with debts exceeding assets. Another 3.3 percent having cash short-falls and debt/asset ratios of .7 to 1.0 were regarded as

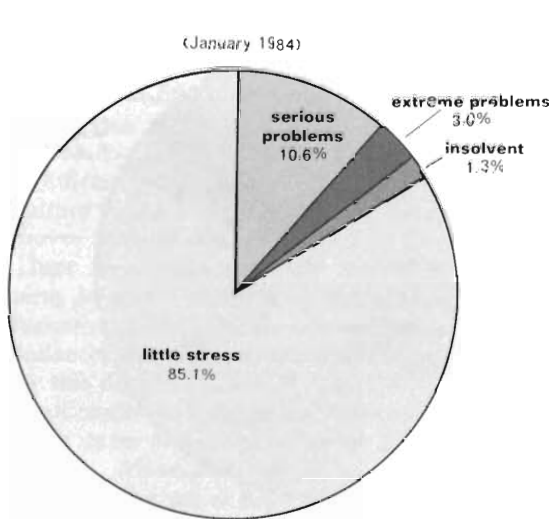
Figure 2
Distribution of farmers by degree of financial stress



having "extreme financial problems" and likely to become technically insolvent if recent conditions were to last another two years. A third category, comprising 10 percent of all operators, was regarded as having leverage and cash shortfall burdens sufficient to warrant a "serious financial problems" label. These farmers were considered to be in danger of reaching insolvency in about four years if recent conditions were to prevail (Figure 2).

In addition to considering the financial vulnerability of all farm operators, the USDA study also focused on a subgroup that might be more representative of family-size commercial farms—those with annual sales of \$50,000 to \$500,000. In concentrating on this group of some 680,000 operators (37 percent of all farmers), the study was able to abstract from the large number of small operators that typically rely on non-farm earnings to overcome financial shortfalls in farm operations. Also abstracted from the family-size commercial operator analysis were the few very large farms that, although often highly leveraged, usually are able to generate positive cash flows because of superior management skills, scale economies, or the specialty nature of the farm operations. The analysis suggested that in early 1984, more than a fourth of all family-size commercial farms fell within the three classes of financial vulnerability. About 4.5 percent were considered technically insolvent, 5 percent were re-

Figure 3
Distribution of farm operator assets by farmers with varying degrees of financial stress

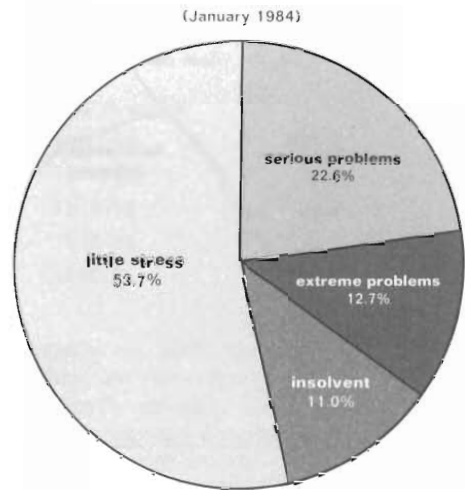


garded as having “extreme financial problems,” and nearly 17 percent were considered to face “serious financial problems.”

To understand the extent of the problem among farmers, it is also helpful to consider the amount of assets owned, and the amount of debt owed, by financially vulnerable farmers. The available evidence suggests that financially vulnerable farmers own a proportionate share of farm assets owned by all farm operators but they owe a larger share of the farm operator debt. Roughly 15 percent of the operator-owned farm assets as of early 1984 was owned by farmers who were in the three classes of financial vulnerability (Figure 3). By comparison, such farm operators apparently owed more than 45 percent of the outstanding farm operator debt (Figure 4). Translating these findings into dollars is difficult, in part because of varying estimates of the distribution of total farm sector assets and debt between farm operators and landlords. By some accounts, however, the findings imply that financially vulnerable farm operators owned about 10 percent of the \$1 trillion in farm sector assets as of early 1984 and that they owed more than 40 percent of the \$215 billion in outstanding farm sector debt at that time.

The 10 percent share of all farm sector assets owned by financially vulnerable farm operators might not initially seem alarming. However, in the context of the adjustments that

Figure 4
Distribution of farm operator debt by farmers with varying degrees of financial stress



financially vulnerable farmers need to make to ease their financial stress, the 10 percent share is considerable. When faced with cash inflows insufficient to service debt requirements, financially stressed farmers and their lenders must consider options for liquidating farmers’ assets in order to pay debts down to levels that are compatible with the farmers’ reduced earnings. Unfortunately, the markets for farm assets, even in the best of times, are not sufficient to handle the amount of asset liquidation needed to quickly overcome the financial stress. For instance, only about 3 percent of farm real estate assets change ownership annually. This suggests that even with strong markets, it would take more than 3 years to complete the transfer of the roughly 10 percent or more of the farm sector assets that need to be transferred from financially vulnerable farmers to financially strong owners. It would take even longer when markets for farm assets are weak, as has been the case in recent years. Forcing the equivalent of more than 3 years’ worth of asset transfers from financially weak farmers—along with normal transfers that would be expected to continue because of retiring farmers, estate settlements, and so forth—into a short period of time could potentially be very destabilizing to markets for farm real estate and other farm assets. Because of this, many observers point out that agriculture needs an extended period of time to make the adjustments

of financially stressed farmers in a manner as orderly as possible.

The USDA study summarized above pertains to conditions as of early 1984. Since then, farm asset values have declined considerably and farm earnings have continued at depressed levels. If the analysis were to be updated, presumably it would show that the proportion of farm operators considered to be financially vulnerable has risen and that the debts of those farmers would constitute an increased share of total farm sector debt. A number of observers, using various degrees of analytical rigor and focusing on various geographic regions, have attempted to gauge the current magnitude of the problem. Rough generalizations from these attempts suggest that a fourth to a third of the farm operators may now be regarded as financially vulnerable and that these operators owe more than 60 percent of farm operator debt, or about 55 percent of total farm sector debt.

Despite these efforts, definitive estimates of the extent of the financial stress among farmers and the amount of farm debt they owe are hard to pin down. Reflecting this, a new study released in late July by the USDA² found that as of the first of this year, some 19 percent of all farm operators, accounting for 62 percent of farm operator debt, had debt/asset ratios (40 percent or more) that are typically considered to result in financial stress under current conditions in agriculture. This proportion of farm operators was notably less than has been suggested in other studies. Moreover, the new USDA study found that a considerable portion of the highly leveraged farmers, even among those that were technically insolvent, had cash flows more than sufficient to meet operating expenses, current principal and interest payments, and family living requirements. In excluding those highly leveraged farmers that had positive cash flows, the new USDA study concluded that 13 percent of all farm operators, accounting for 45 percent of farm operator debt, were encountering significant financial stress as of early 1985.

The above findings, relative to other studies, provide a tempering interpretation of the extent of the current financial problems of farmers. Yet the new USDA study still depicts a somber view. In focusing just on farmers' cash flows, regardless of their individual debt/asset ratios, the new study found that half of all farm

operators, accounting for 64 percent of farm operator debt, were facing negative cash flows. Even among the more typical commercial family farm operators, some 43 percent had negative cash flows. If cash flows do not improve, financial stress will likely increase.

The extent of the problem among lenders

Estimates of the amount of debt that is owed by financially vulnerable farmers are far from precise, yet it is clear that such debt represents a considerable share of the more than \$210 billion in total outstanding farm sector debt. It is therefore not surprising that the financial stress among farmers has become very apparent among lenders that serve farmers.

The credit needs of farmers have long been supplied by a variety of sources, ranging from banks to institutions in the cooperative Farm Credit System, to agencies of the federal government, and life insurance companies. In addition there is a catch-all category identified as "individuals and others."

The cooperative Farm Credit System (FCS) for several years has been the single largest institution serving the borrowing needs of farmers. The FCS is a borrower-owned cooperative that lends almost exclusively to farmers and farmer cooperatives. The system comprises 12 Federal Land Banks that provide farm real estate loans to farmers; 12 Federal Intermediate Credit Banks, which work primarily with local Production Credit Associations (PCAs) in providing short- and intermediate-term loans to farmers; and 12 Banks for Cooperatives and a Central Bank for Cooperatives that finance farmer cooperatives. The FCS's lending operations are funded primarily through the sale of securities. The components of the FCS that lend to farmers—the Federal Land Banks and the FICBs/PCAs—accounted for nearly a third of the outstanding farm debt at the end of 1984 (Table 2). FLBs were by far the dominant farm mortgage lender while FICBs/PCAs ranked a distant second to banks in non-real estate farm debt.

Banks accounted for 23 percent of outstanding farm debt at the end of 1984. Banks provide both real estate and non-real estate loans to farmers, but their most significant role is in non-real estate lending to farmers, where

(Continued on page 12)

Table 3
Delinquencies in farm loan portfolio held by FmHA

| | Amount delinquent | | % delinquent 3 years or more |
|------|-------------------|-------------------------|---------------------------------|
| | Million dollars | As % of outstandings | |
| 1977 | \$213 | 3% | 22% |
| 1978 | 288 | 3 | 24 |
| 1979 | 417 | 3 | 24 |
| 1980 | 823 | 4 | 20 |
| 1981 | 1,588 | 7 | 21 |
| 1982 | 2,928 | 12 | 31 |
| 1983 | 4,125 | 16 | 35 |
| 1984 | 5,390 | 21 | 53 |
| 1985 | 6,388 | 22 | N.A. |

farmers not secured by real estate—by banks nationwide totaled between \$850 and \$900 million in 1984 (Table 4). Among the banks completing the reports, net charge-offs of *farm loans* in 1984 represented 2.2 percent of the year-end portfolio of all such loans at those banks. The ratio of net charge-offs to outstandings varied widely by state, with banks in California reporting by far the highest proportionate charge-offs (6.1 percent). In states covered by the Seventh Federal Reserve District, net charge-offs of farm loans as a percent of outstandings ranged from a low of 0.9 percent among banks in Michigan and Wisconsin to a high of 2.9 percent among reporting banks in Iowa. Iowa ranked third to Missouri and

Table 4
Net charge-offs of farm loans at banks in 1984

| | Million dollars | As % of farm loans |
|-----------------------|-----------------|--------------------|
| United States | \$850 | 2.2% |
| 7th District states | 200 | 2.1 |
| Illinois | 5.1 | 1.9 |
| Indiana | 16 | 1.2 |
| Iowa | 115 | 2.9 |
| Michigan | 5 | .9 |
| Wisconsin | 12 | .9 |
| Other selected states | | |
| California | 238 | 6.1 |
| Kansas | 48 | 2.1 |
| Minnesota | 53 | 2.3 |
| Missouri | 45 | 3.0 |
| Nebraska | 75 | 2.5 |

California in relative charge-offs of farm loans in 1984.

An insight into the deterioration over time that has hit banks because of the financial stress in agriculture can be gained from a comparison of overall performance measures between agricultural banks and other small banks (Figure 5).⁴ Among agricultural banks nationwide, net charge-offs of all loans have risen dramatically in the 1980s. In 1984, net charge-offs of all loans at agricultural banks were equivalent to 1.22 percent of total loans outstanding at those banks at year end. That was about 6 times the relative level of charge-offs recorded annually by agricultural banks in the 1970s and it was double the charge-off rate reported by other small banks. A similar pattern is evident in the sharp rise in the annual provision for loan losses at agricultural banks so far this decade (Figure 6).

With the surge in the annual provision for loan losses, earnings at agricultural banks have declined sharply. In 1984, net income after taxes at agricultural banks nationwide fell to 9 percent of equity capital. That contrasts sharply with the 1970s and early 1980s when net return to equity at agricultural banks annually ranged between 13 and 16 percent. It also contrasted with the 12 percent net income return to equity achieved by small, non-agricultural banks in 1984 and it marked the second consecutive year out of the past 12 in

Figure 5
Annual net charge-offs of all loans at banks as a percent of total loans

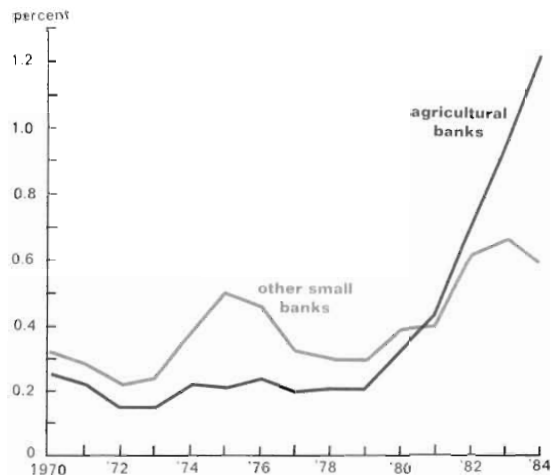
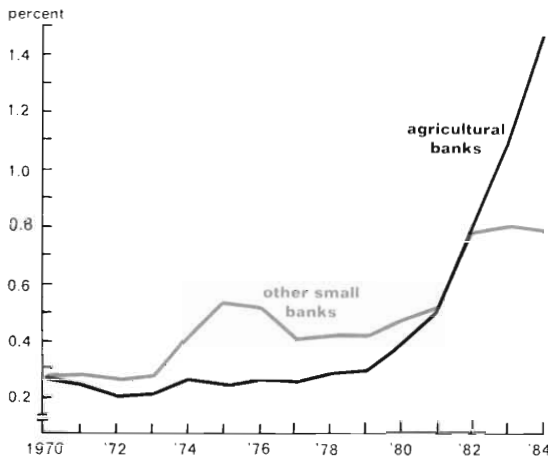


Figure 6
Annual provision for loan losses at banks as a percent of total loans

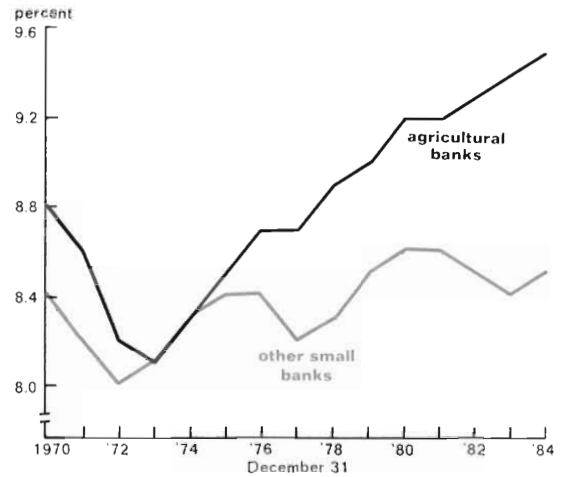


which relative earnings at small, non-agricultural banks surpassed those of agricultural banks.

In conjunction with the decline in earnings, the proportion of agricultural banks with negative earnings has risen sharply. Last year, 12 percent of the agricultural banks nationwide reported negative earnings, up from the more typical 1 to 2 percent of the banks that reported losses in the 1970s and early 1980s (Table 5).

Despite the recent downturn in earnings, agricultural banks have continued to add to their very favorable capital positions. At the end of 1984, capital accounts at agricultural banks nationwide were equivalent to 9.5 percent of total assets of those banks (Figure 7). This new high was up from a capital ratio of 9.0 percent for agricultural banks at the end of

Figure 7
Capital as a percent of assets at banks



1979 and it was a full percentage point above the capital ratio for small, non-agricultural banks at the end of 1984. The strong capital position of agricultural banks, along with the tendency of most deposits at agricultural banks to be covered by FDIC insurance, gives substantial assurance that agricultural banks can weather the financial problems in agriculture.

Performance of FCS also wanes

Of the private lenders serving farmers, the FCS may be the most vulnerable to the financial problems among farmers. That could be the case because the bulk of its assets (90 percent) are in loans to farmers or farm-related businesses and the bulk of its funding is obtained from the sale of its securities to investors in national and international markets. While performance measures for the FCS have deteriorated considerably in recent years, the system, overall, achieved positive earnings in 1984 and it remains well capitalized by industry standards.

Net loan charge-offs among the 37 banks in the FCS reached \$122 million in 1984, sharply above the levels of prior years (Table 6). FLBs accounted for more than \$90 million of the total charge-offs, with FICBs accounting for an additional \$22 million. In addition, charge-offs at PCAs reached \$285 million in 1984, equivalent to 1.6 percent of outstanding

Table 5
Percentage distribution of agricultural banks by rate of return to equity

| | Negative | 0 to 4% | 5 to 14% | 15% plus |
|------|----------|---------|----------|----------|
| 1970 | 1 | 5 | 66 | 28 |
| 1975 | 2 | 5 | 55 | 40 |
| 1980 | 1 | 2 | 42 | 55 |
| 1984 | 12 | 9 | 60 | 19 |

Table 6
Loan charge-offs and provision for loan losses among banks of the Farm Credit System and PCAs

| | 1981 | 1982 | 1983 | 1984 |
|----------------------------------|------|------|------|------|
| Net loan charge-offs | | | | |
| Million dollars | | | | |
| 37 banks* | 13 | 13 | 8 | 122 |
| PCAs | N.A. | 159 | 237 | 285 |
| As % of outstandings | | | | |
| 37 banks* | .02 | .02 | .01 | .16 |
| PCAs | N.A. | .74 | 1.21 | 1.59 |
| Provision for loan losses | | | | |
| Million dollars | | | | |
| 37 banks | 104 | 75 | 39 | 155† |
| PCAs | 101 | 110 | 189 | 214 |
| As % of outstandings | | | | |
| 37 banks* | .13 | .09 | .05 | .20† |
| PCAs | .45 | .51 | .86 | 1.19 |

*Comprised of 12 FLBs, 12 FICBs, 12 BCs, and 1 central BC.
 †Includes \$33 million in allowances for loan losses transferred from local associations to a Federal Land Bank.

farm loans held by PCAs at year-end. Interestingly, the charge-off rate for PCAs in 1984 was about midway between the charge-off rate on farm loans by all banks (2.2 percent) and the charge-off rate on all loans by agricultural banks (1.22 percent).

Similarly, annual provisions for loan losses have increased steadily in recent years within the FCS. The 37 banks of the FCS set

aside \$121 million in provision for loan losses last year, with \$71 million of the total coming from FLBs and another \$41 million coming from FICBs. In addition, the allowance for loan losses of one Federal Land Bank was increased by a \$33 million transfer from local FLB associations within that bank's district. Among PCAs in 1984, the provision for loan losses rose to \$214 million, extending the consistent uptrend that has been evident the past four years.

With the uptrend in provision for loan losses, earnings among the institutions in the FCS have steadily declined. Net earnings of the combined 37 banks fell to less than \$450 million in 1984, down from nearly \$1 billion two years earlier (Figure 8). PCAs in 1984 experienced a net loss of \$11 million, in sharp contrast to the net earnings of \$250 to \$300 million recorded in 1981 and 1982 (Figure 9).

While earnings in the FCS have eroded in recent years, the system remains well capitalized. As of the end of 1984, the 37 banks in the FCS had more than \$9.2 billion in capital, up from \$6.2 billion at the end of 1980 (Table 7). The increase pushed capital to the equivalent of nearly 12 percent of outstanding loans (versus 9.3 percent at the end of 1980) and nearly 11 percent of total assets.

By industry norms, the capital of the FCS would be considered most adequate. Nevertheless, the FCS faces a major challenge in that

Figure 8
Net earnings of the 37 banks in the Farm Credit System

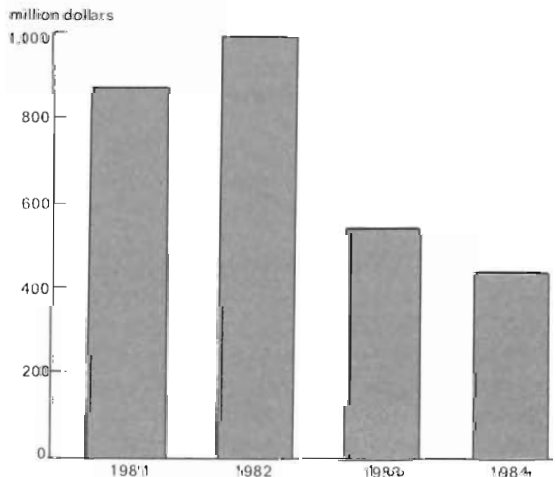


Figure 9
Net earnings of Production Credit Associations

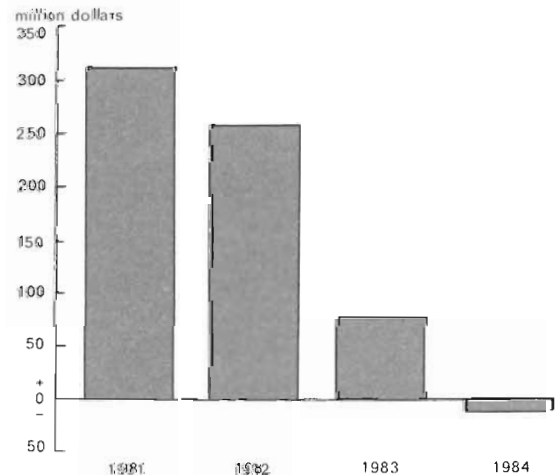


Table 7
Capital accounts of the 37 banks
in the Farm Credit System

| | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> | <u>1984</u> |
|----------------------|-------------|-------------|-------------|-------------|-------------|
| In. billion dollars | | | | | |
| Stock & certificates | N.A. | 4.56 | 4.98 | 5.06 | 5.14 |
| Surplus | N.A. | 2.90 | 3.60 | 3.91 | 4.10 |
| Total | 6.19 | 7.47 | 8.58 | 8.97 | 9.24 |
| As % of loans | 9.3 | 9.8 | 10.9 | 11.3 | 11.9 |

its capital and its problem loans are unevenly distributed among the 37 banks within the system. The future viability of the FCS may largely hinge on its ability to mobilize its capital and its problem loans to achieve proportionate distributions within the system. Recent actions that transferred the bad loans of one FICB to a newly formed FCS entity that was capitalized by all 37 banks within the FCS offer hope that the system will successfully meet the challenges that lie ahead.

1985 another rough year for lenders

1985 is clearly shaping up as another year of declining performance for agricultural lenders. Preliminary figures for the first quarter show that net charge-offs of farm loans by banks nationwide were up more than 65 percent from the same period in 1984. A first quarter report for the 37 banks in the FCS shows that relative to the same period a year ago, net loan charge-offs were up by a multiple of 2.5 and that net earnings were down nearly a fifth. Moreover, the volume of problems loans is still rising rather than diminishing with the increased charge-offs. As of March 31, nonperforming loans at agricultural banks nationwide constituted 4.5 percent of the total loans at those banks, up from 3.5 percent a year earlier.⁵ Similarly, the FCS reported having

nearly \$1.6 billion in nonaccrual loans as of the end of March, up from \$1.4 billion at the end of 1984. In light of the first quarter results and the increased volume of problem loans, it seems clear that the performance measures for banks and the FCS in 1985 will show considerable deterioration from last year's measures.

¹ U.S. Department of Agriculture, "The Current Financial Condition of Farmers and Farm Lenders," Agriculture Information Bulletin No. 490, March, 1985.

² U.S. Department of Agriculture, "Financial Characteristics of U.S. Farms, January 1985," Agriculture Information Bulletin No. 495, July 1985.

³ Several ad hoc reports, however, have alluded to the increased aging of accounts receivable among firms that sell inputs to farmers and to the increased frequency with which farm real estate has reverted back to previous owners because of the inability of recent buyers to meet their land contract payments.

⁴ The following discussion draws heavily from the work of Emil Melichar of the Board of Governors of the Federal Reserve System. Melichar defines agricultural banks as banks with a farm loan-to-total loan ratio in excess of the unweighted average of these ratios at all banks. "Other small banks" is defined as banks with less than \$500 million in assets and having a below-average ratio of farm loans to total loans. The average of the ratios of farm loans to total loans among all banks is about 17 percent.

Under this definition, there are roughly 5,000 agricultural banks nationwide. These banks are quite small, with total assets averaging just over \$30 million. The involvement of agricultural banks in lending to farmers is extensive. Farm loans account for 37 percent of the total loans at these banks.

⁵ The bulk of the nonperforming loans represents loans with interest delinquent 90 days or more and still accruing and questionable loans that are no longer accruing interest.