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Briefing Report to the Chairman, Subcommittee on Conservation, Credit, and Rural Development, Committee on Agriculture, House of Representatives

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# FARM CREDIT SYSTEM

# Analysis of Financial Condition

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The Honorable Ed Jones
Chairman, Subcommittee on Conservation,
Credit, and Rural Development
Committee on Agriculture
House of Representatives

Dear Mr. Chairman:

Your April 24, 1986, letter requested that we provide an overview of the important issues facing the Farm Credit System (System), an assessment of internal problems that may have contributed to the System's financial problems, a periodic assessment of the financial condition of the System, and a projection of its condition 12 months into the future. This report provides an assessment of the financial condition of the System at December 31, 1985, a projection of its condition as of December 31, 1986, and a discussion of the principal factors that have contributed to the System's financial stress.

This is the third report that we have issued on the System's financial condition. The prior reports were: Preliminary Analysis of the Financial Condition of the Farm Credit System, (GAO/GGD-86-13BR, Oct. 4, 1985); and Farm Credit System, GAO's Analysis of the System's Third Quarter Financial Condition (GAO/GGD-86-35BR, Dec. 23, 1985). In those reports, we portrayed trends in the financial condition of the System from January 1, 1979, to June 30, 1985, and September 30, 1985, respectively, and projected what the condition of the System might be on June 30, 1986, if past trends continued.

Our assessment of the financial condition and future prospects of the System is based on two important premises. First, we analyze System finances as if the 37 Farm Credit banks and their associations were a single financial entity. We make this assumption because a large portion of each bank's liabilities is systemwide in nature, and the resources of the System's institutions can be, by law, reallocated to strengthen those institutions which have financial weaknesses. Moreover, federal assistance, by law, can only be provided after the System has committed its available resources and is in need of financial assistance.

Any assistance provided by the federal government will be to the System, not to individual institutions in the System. The second premise is that in projecting the System's condition at the end of 1986, we have assumed that the severe difficulties encountered in 1985 will continue. While this assumption may be questioned because it lacks a basis in long-term trends, we could find little evidence that conditions in the System or in agriculture have yet stabilized.

The System's financial condition deteriorated significantly during 1985. During that year, the System incurred an operating loss of $2.8 billion. The operating loss was absorbed by surpluses that were built up from prior years' earnings. This loss and certain other accounting adjustments resulted in a reduction of the combined surplus of the System from $6.2 billion at the end of 1984 to $3.2 billion at the end of 1985. If these difficulties continue and the relationships between various accounts that we have assumed hold true, we project that the System could incur an operating loss of $2.9 billion for 1986, which would essentially deplete the System's remaining surplus. However, the System would still have $9.6 billion in total capital.

Because of the judgmental nature of our projection, we cannot be certain that the loss we have estimated will actually occur nor can we be certain precisely when the System's surplus will be exhausted. Legitimate differences of opinion can and do exist over the validity of our projection. However, more important than differences which exist between projections of 1986 losses is the probability that the losses will continue over the foreseeable future unless there is a dramatic reversal in the condition of the agriculture sector or the current trend in interest rates.

During 1985, the amount of nonaccrual loans, i.e., loans on which interest accruals have been suspended because they are not considered fully collectible, increased from $1.8 billion at year end 1984 to $5.1 billion at year end 1985. The System had an additional $5 billion in other high-risk loans at the end of 1985. By June 1986 nonaccruals had grown to $7.6 billion and other high-risk loans amounted to $4.7 billion. The allowance (reserve) for loan losses increased from $1.3 billion at year end 1984 to $3.2 billion at year end 1985.

The System's competitiveness as an agricultural lender appears to be weakening. The combined Federal Land Bank and Production Credit Association market share of farm debt declined from 32.6 percent at the end of 1984 to 29.4 percent at the end of 1985. (Banks for Cooperatives' loan volume is excluded from the farm debt market data.) During 1985 gross loans outstanding declined by 13 percent, or $10.7 billion. During the first half of 1986 gross loans declined from $72.7 billion to $65 billion. Some System officials believe that the more creditworthy borrowers are leaving the System because other agricultural lenders are offering more favorable lending rates.

The System's problems are two-fold: (1) problems with its loan portfolio and (2) the high cost of its debt that has resulted from funding variable rate loans with long-term, fixed-rate bonds. Triggered by weakness in the agricultural economy and falling land values, the System's loan portfolio contains a record-breaking volume of problem loans. Many of the problem loans are not being repaid according to terms, and in some cases these loans must be liquidated. Many loans are not fully collateralized. This condition has resulted in and will continue to result in losses when the loans are liquidated. Loans, not yet liquidated, on which interest is no longer being paid are costly to the System because such loans are funded primarily with interest-bearing debt. Because the System's loan portfolio is essentially related to the depressed agricultural economy, there is little hope of relief for the System's loan portfolio problems during the next few years.

The System has exposed itself to fluctuations in interest rates by funding variable rate loans with long-term, fixed-rate bonds. The System reprices its loans on the basis of its average cost of borrowing. Because of this, when interest rates are rising, rates on its loans are lower than current interest rates and when interest rates are falling, rates on its loans are higher. During the past 8 years long-term market interest rates rose from about 9 percent in 1978 to about 15 percent in 1981 and then returned to 1978 levels in 1986. In the 1980-1982 period, the System adopted a strategy of growth, which it achieved by charging relatively low rates for variable rate loans during periods of rising interest rates. This growth was financed in part by long-term fixed-rate bonds. This exposed the System to losses in the event that interest rates should decline, if its average borrowing costs could not be passed through to borrowers in a lower interest rate environment. While a funding strategy that resulted in pricing at current rates during the 1980-1982 period might have increased repayment problems for existing borrowers, such a practice might also have discouraged many of the Systems' current borrowers from borrowing funds which they cannot now repay. Had the System used alternative debt instruments that allowed it to match the repricing of its liabilities to that of its variable rate assets, it would in all likelihood now be generating additional net interest revenue. Alternatives to long-term, fixed-rate bonds existed and continue to exist for funding variable rate loans without incurring significant interest rate risk. These options include long-term debt with call provisions or with floating, market-based interest rates; interest rate swap transactions; or short-term debt. We have not attempted to assess the feasibility or relative costs of these alternatives, but each of them would have reduced interest rate risk.

We found that in carrying out its regulatory and supervisory responsibilities, the Farm Credit Administration (FCA) has not addressed the System's exposure to this interest rate risk. We could not find evidence in FCA records or in interviews with FCA staff that the FCA seriously considered these options or was mindful of the risks being taken in the past when approving the funding of the System's debt. Finally, while the volume of newly issued long-term, fixed-rate, non-callable debt has declined in 1985 and the first half of 1986, such debt still continues to be issued. The continuation of the practice will perpetuate the System's vulnerability to interest rate fluctuations.

Had the System not issued the long-term, fixed-rate bonds when interest rates were high but instead more closely matched the frequency with which its debt and loans are repriced, we estimate that the System's interest expenses during 1985 through the end of 1986 would have been reduced by $3.4 billion. Assuming no future change in the level of interest rates or loan prices, the high rates on these bonds will continue to depress earnings for several years.

## CONCLUSIONS

The combined effects of problem loans and high borrowing costs and the probability that these conditions will continue raise serious questions about the viability of the System. Barring a dramatic turnaround in the agricultural economy and/or a dramatic increase in market interest rates that would make its cost of funds and loan pricing more competitive, based on our assumptions it would appear that the 1985 losses, and their effect on the System's surplus will continue at least for the near future. We believe this trend may be slowed by effective management actions but not reversed.

Our projection of the System's 1986 performance based on past trends indicates that externally supplied capital could be needed by the end of 1986 or shortly thereafter because its unallocated surplus may be nearly exhausted by year end. New capital could be supplied either privately or by the federal government under the provisions of the Farm Credit Amendments Act of 1985. Because our extrapolations involve a combination of judgments based on past trends regarding, primarily, the condition of the System's loan portfolio as well as appropriate levels of reserves to cover expected future loan losses, we cannot be certain when the surplus will be effectively exhausted. Nevertheless, given the financial problems facing the System and the near term outlook for the financial condition of the agricultural economy and for interest rates, it is possible that the System surplus will be exhausted in the relatively near future.

One of the strengths of the System has been its ability to obtain funds to finance its activities at highly competitive rates by issuing securities on the Nation's bond market. Past management decisions, however, to fund its activities with long-term, fixed-rate bonds during a period of volatile interest rates are now preventing the System from maintaining reasonable debt service expenses.

Given the current condition of the System, we believe management should undertake an aggressive program to reduce further exposure to interest rate risk. Such a program could involve a combination of decreasing the frequency for adjusting interest rates on all new loans, making more fixed-rate loans, issuing new long-term securities with a call provision or with floating interest rates, and issuing more debt with short-term maturities. Also, the System might be able to enter into interest rate swaps in which it could trade at least some of its existing liabilities on which it must pay a fixed rate of interest for liabilities on which it would pay a floating rate of interest and thereby reduce further exposure to interest rate risk. However, arranging such transactions would be costly.

## RECOMMENDATION TO THE CHAIRMAN OF THE FCA BOARD

We recommend that the Chairman of the FCA Board require the banks in the System to develop and collectively implement a plan to reduce the interest rate exposure of the System. The plan should consider all assets and liabilities systemwide, not the financial position of the individual banks.

## AGENCY COMMENTS

Both the System and FCA believe that our projected systemwide operating loss for 1986 of $2.9 billion is too high. Unofficial estimates provided by senior System and FCA officials show a projected operating loss for 1986 of $1.7 and $1.8 billion, respectively. The principal difference between our projection and those of the System and FCA is the level of the allowance for loan losses at December 31, 1986. We project an allowance level of $4.6 billion at the end of 1986 compared to $3.5 billion projected by the System and a $3.3 billion projection by FCA. The allowance for loan losses at the end of 1985 was $3.2 billion and we are projecting about a 46 percent increase in the level of the allowance account at the end of 1986 because of a corresponding increase in the amount of nonaccrual loans. While the System and FCA are projecting about a 46 percent and 35 percent increase respectively during 1986 in the amount of nonaccrual loans, they believe that the potential losses on these loans have already been recognized in establishing the level of the allowance account at the end of 1985 and that a significant increase in the level of the allowance account at the end of 1986 will not be necessary.

The allowance for loan losses should be at a level which, in the judgment of management, is adequate to cover estimated losses inherent in the loan portfolio. The appropriate level of the allowance account is one area in the System's financial statements that lacks a verifiable basis; thus, projections of future levels are unavoidably subjective.

In making our projection on the basis of the ratio of nonaccrual loans to the allowance for loan losses, we are not suggesting that management should only consider the potential losses in the nonaccrual loans in establishing the level of the allowance account. Other categories of loans, including those loans undercollateralized but still accruing interest and other factors affecting loan portfolio performance are also important in estimating future losses. However, we believe that loans in nonaccrual status reflect the workings of many of the internal and external factors that affect a borrower's ability to repay and, therefore, nonaccruals represent a valid proxy for the overall condition of the loan portfolio and the potential for future System losses.

Because of the judgmental nature of decisions regarding an appropriate level for the System's allowance for loan losses, legitimate differences of opinion can exist over estimates of future losses. However, more important than the difference in projected 1986 losses is the probability that the System's losses will continue. On this conclusion there appears to be agreement between GAO, the System, and FCA. Unofficial projections by the System and FCA through 1988 indicate substantial losses for each of those years. While we have not made a financial projection beyond 1986, our analysis of the System's key income and expense components indicates that no significant opportunity for improvement in its financial performance exists. Unless there is a dramatic change in some external factor such as an improved agricultural economy, increased land values, or higher interest rate levels, the System will continue to suffer losses. Thus, there seems to be general agreement that the System's problems are unlikely to reverse themselves and, for this reason, exhaustion of the System surplus in the relatively near future seems inevitable.

The System agrees that excessive interest rate risk contributed to the System's financial difficulties. The System said that it also recognized the dangers of exposure to interest rate risk and recently took steps to manage and control this risk. According to System officials, these steps are in various stages of planning. FCA noted that it introduced a match funded lending program for the banks for cooperatives that was designed to limit interest rate risk. We do not believe that this action by FCA can be fully effective in promptly dealing with the System's interest rate exposure because the program is small and does not address the current mismatch in the repricing of all assets and liabilities.

FCA did not comment directly on our recommendation to require the System to develop and implement a plan to reduce its interest rate exposure nor did it suggest what, if anything, it plans to do to reduce the overall exposure to interest rate risk facing the System. FCA apparently has incorrectly inferred that we advocate a strategy of issuing only short-term debt as the way to manage interest rate risk. In our draft we mentioned several ways in which the System's interest rate exposure could be reduced, one of which was to issue short-term debt. We would anticipate that a sound asset/liability management program might use several different methods of limiting interest rate risk exposure. We have made some revisions in the final draft report to clarify this point.

FCA comments and our response are included in appendix III. The System's comments and our response are included in appendix IV.

Appendix I discusses in more detail our analysis of selected aspects of the System's financial condition and our extrapolation of the financial condition of the System at December 31, 1986. Appendix II presents our objectives, scope, and methodology for the analysis contained in this report.

As arranged with your office, we are providing copies of this report to the Chairman of the FCA Board, the Director of the Office of Management and Budget, various congressional committees and subcommittees, and other interested parties. If you have any questions on this report, please contact Craig A. Simmons on 275-8678.

Sincerely,

W. J. Anderson

William J. Anderson
Assistant Comptroller General

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### Abbreviations

| | |
|---|---|
| BC | Banks for Cooperatives |
| FCA | Farm Credit Administration |
| FICB | Federal Intermediate Credit Bank |
| FLB | Federal Land Banks |
| FLBA | Federal Land Bank Associations |
| PCA | Production Credit Associations |

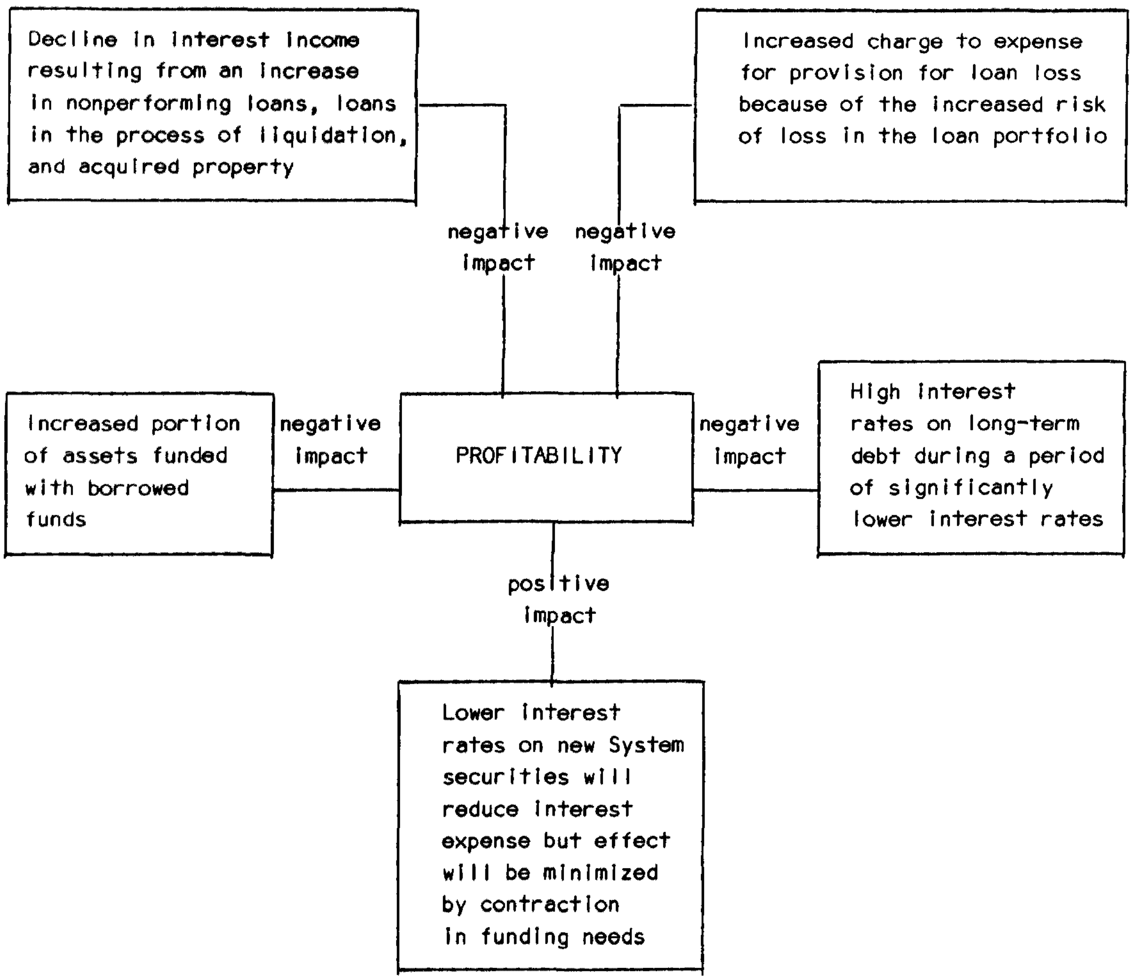
## OVERVIEW OF THE FINANCIAL CONDITION OF THE FARM CREDIT SYSTEM

In 1985, the Farm Credit System incurred an operating loss of $2.8 billion which was absorbed by surplus accumulated from prior years' earnings. This loss reduced the System's combined surplus from $6.2 billion at the end of 1984 to $3.2 billion at the end of 1985.[1] While there were several contributing factors, the loss was mainly due to the fact that (1) revenues failed to offset the combined effects of the provision for loan losses charged to expense and (2) the System was unable to pass the relatively high cost of funded debt through to its borrowers. The provision for loan loss is an amount added to the allowance (reserve) for loan losses against which loan losses are charged. The high cost of System debt is the result of the System issuing fixed-rate, long-term bonds in prior years when interest rates were higher than those prevailing today. Had the System increased its loan interest rates to cover the cost of its provision for loan losses and high cost of debt, it could not have remained a competitive lender to the agricultural sector. In fact, some of the $10.7 billion decline in its gross loan volume appears to be attributable to a decline in the System's competitiveness.

Key factors influencing the System's profitability are shown in figure I.1. Each of those factors is discussed in the following sections.

[1]The decline in surplus is accounted for by the $2.8 billion loss, System institution adjustments to the 1984 ending earned surplus of $115 million, and rounding differences of about $100 million.

Figure I.1:
Key Interrelated Factors Influencing The Profitability Of The Farm Credit System



## INTEREST REVENUE NOT ADEQUATE TO COVER EXPENSES

Interest revenue is derived from interest earned on loans and investments. The System prices most of its loans on a variable rate basis. The interest rate is typically determined on the basis of the average cost of borrowed funds plus a sufficient spread to cover administrative and other costs. During 1985, however, the System could not generate sufficient revenue to cover its costs and as a result incurred an operating loss of $2.8 billion for 1985. While several factors contributed to the loss, the two principal expense factors were the high cost of funded debt and the large increase in the provision for losses due to poorly performing loans.

### Loan pricing and volume

The System's annual net interest revenue (total interest revenue minus total interest expense) as shown in table I.1 rose steadily from $1 billion in 1979 to a peak of $1.7 billion in 1982, then decreased to $1.2 billion by 1985. The decrease began when a decision was made to reduce the differential between interest charged on loans and System interest costs for borrowed money. Beginning in late 1982, most of the Farm Credit banks lowered their loan fees and reduced interest rates more than the corresponding reductions in their cost of borrowed funds. Net interest revenue declined still further in 1985, primarily because of a $10.7 billion drop in gross loan volume.

Also contributing to the 1985 decline in net interest revenue was the fact that the System had less "free" money with which to make loans. The assets of the System are funded either with interest-bearing liabilities (System securities) or with capital. In effect, System capital is an interest-free source of funds. As capital is depleted, more assets must be funded with interest-bearing liabilities, placing a greater burden on revenue from loans to cover the expenses. Table I.1 shows the increase during the last 2 years in the ratio of interest-bearing liabilities to earning assets.

Table I.1: Summary Of Farm Credit System Earning Assets, Interest-Bearing Liabilities, and Interest Revenue and Expense, 1979-1985
($ billions)

| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|
| Total interest revenue | $5.3 | $7.6 | $9.9 | $10.8 | $9.6 | $9.9 | $9.0 |
| Total interest expense | 4.3 | 6.2 | 8.3 | 9.1 | 8.2 | 8.4 | 7.8 |
| Net interest revenue | 1.0 | 1.4 | 1.6 | 1.7 | 1.4 | 1.5 | 1.2 |
| Average earning assets | 54.4 | 66.1 | 76.9 | 82.9 | 83.3 | 82.1 | 76.9 |
| Average interest-bearing liabilities | 47.6 | 58.1 | 67.6 | 72.6 | 73.2 | 72.8 | 70.8 |
| Percent of interest-bearing liabilities to earning assets | 87.5% | 87.9% | 87.9% | 87.6% | 87.9% | 88.7% | 92.1% |
| Interest rate spread (rate) | .76% | .78% | .49% | .51% | .33% | .46% | .72% |

The table indicates that the average interest rate spread (the difference between the rate earned on loans and the rate paid on liabilities) has increased in 1985 to nearly the level shown in 1979 and 1980. This reflects the fact that many associations raised the rates charged for loans in 1985. However, this improvement in rate spread has not been sufficient to compensate for the fact that the proportion of interest-bearing liabilities has increased, thus resulting in the 1985 decrease in net interest revenue.

Table I.2 shows the quarterly movement of various market interest rates for 1978 through 1985. It indicates that:

--The prime rate moves more rapidly and more widely than the other rates, and changes in the other rates lag behind changes in the prime rate.

--As shown in the first box on the table, from 1980 to 1982, when interest levels were unprecedentedly high, Federal Land Banks (FLB) real estate loan rates were as much as 4.72 percentage points lower than life insurance company rates, but before and since that time, the difference was about 1 percent and less than that in 1985.

--The same pattern of rate differences is shown in the second box on nonreal estate loans made by Production Credit Associations (PCA) compared to rural banks, except that the differential generally was not as large.

Table I.2: Interest Rates on New Farm Loans, Selected Lenders, by Quarter[a]
1978-1985

| Year and quarter | Prime rate, large banks[b]/ | Real estate loans: Life insurance companies[c]/ | Real estate loans: Federal land banks[d]/ | Real estate loans: Difference | Nonreal estate loans: Rural banks, farm production loans[e]/ | Nonreal estate loans: Production credit association[f]/ | Nonreal estate loans: Difference |
|---|---|---|---|---|---|---|---|
| 1978: | | | | | | | |
| I | 7.75 | 9.26 | 8.23 | 1.03 | 9.22 | 8.28 | 0.94 |
| II | 8.00 | 9.52 | 8.26 | 1.26 | 9.20 | 8.64 | 0.56 |
| III | 9.00 | 9.68 | 8.35 | 1.33 | 9.38 | 8.88 | 0.50 |
| IV | 9.75 | 9.84 | 8.58 | 1.26 | 9.51 | 9.15 | 0.36 |
| 1979: | | | | | | | |
| I | 11.75 | 10.01 | 8.78 | 1.23 | 10.24 | 9.89 | 0.35 |
| II | 11.75 | 10.29 | 9.11 | 1.18 | 10.39 | 10.57 | (0.18) |
| III | 11.50 | 10.56 | 9.32 | 1.24 | 10.78 | 10.79 | (0.01) |
| IV | 13.50 | 11.21 | 9.42 | 1.79 | 11.80 | 11.00 | 0.80 |
| 1980: | | | | | | | |
| I | 15.25 | 12.47 | 9.87 | 2.60 | 13.63 | 12.07 | 1.56 |
| II | 19.50 | 14.24 | 10.78 | 3.46 | 16.39 | 13.65 | 2.74 |
| III | 12.00 | 12.58 | 10.52 | 2.06 | 15.29 | 13.25 | 2.04 |
| IV | 13.50 | 13.56 | 10.37 | 3.19 | 13.96 | 11.99 | 1.97 |
| 1981: | | | | | | | |
| I | 21.50 | 14.06 | 10.76 | 3.30 | 17.58 | 12.90 | 4.68 |
| II | 17.50 | 14.91 | 10.99 | 3.92 | 17.02 | 14.19 | 2.83 |
| III | 20.00 | 16.23 | 11.51 | 4.72 | 18.04 | 15.04 | 3.00 |
| IV | 19.50 | 16.48 | 11.83 | 4.65 | 18.85 | 15.71 | 3.14 |
| 1982: | | | | | | | |
| I | 15.75 | 16.36 | 12.17 | 4.19 | 17.21 | 15.26 | 1.95 |
| II | 16.50 | 16.21 | 12.28 | 3.93 | 17.40 | 14.84 | 2.56 |
| III | 16.50 | 15.99 | 12.35 | 3.64 | 17.40 | 14.42 | 2.98 |
| IV | 13.50 | 13.46 | 12.29 | 1.17 | 16.30 | 13.80 | 2.50 |
| 1983: | | | | | | | |
| I | 11.50 | 12.93 | 11.90 | 1.03 | 15.00 | 12.83 | 2.17 |
| II | 10.50 | 12.30 | 11.70 | 0.60 | 14.20 | 11.77 | 2.43 |
| III | 10.50 | 12.08 | 11.49 | 0.59 | 13.90 | 11.37 | 2.53 |
| IV | 11.00 | 12.55 | 11.44 | 1.11 | 14.10 | 11.82 | 2.28 |
| 1984: | | | | | | | |
| I | 11.00 | 13.04 | 11.47 | 1.57 | 14.0 | 12.1 | 1.9 |
| II | 11.50 | 13.56 | 11.60 | 1.96 | 14.1 | 12.1 | 2.0 |
| III | 13.00 | 13.71 | 11.80 | 1.91 | 14.6 | 12.6 | 2.0 |
| IV | 12.75 | 13.65 | 12.00 | 1.65 | 14.9 | 13.1 | 1.8 |
| 1985: | | | | | | | |
| I | 10.75 | 12.90 | 12.15 | 0.75 | 14.3 | 12.9 | 1.4 |
| II | 10.50 | 12.90 | 12.10 | 0.80 | 13.9 | 12.5 | 1.4 |
| III | 9.50 | 11.00 | 12.35 | (1.35) | 13.4 | 12.15 | 1.25 |
| IV | 9.50 | N/A | 12.40 | N/A | 13.2 | 12.0 | 1.2 |

[a]Source: Agricultural Finance Statistics, 1960-1983, United States Department of Agriculture. 1984 and 1985 data from same source, supplied by FCA. In some cases FCA data only show rates in tenths of a percent.

[b]Rates are for first day of quarter. Source: Agricultural Finance Databook--Monthly Series, Board of Governors of the Federal Reserve System.

[c]Estimated by National Economics Division, Economic Research Service, United States Department of Agriculture from data obtained in a quarterly life insurance company survey.

[d]Rates as calculated by ERS are averages of quoted first day of month district rates, unadjusted for loan fees and required stock purchases. Source: Farm Credit Administration.

[e]Rates for first day of quarter are most common interest rates charged on short-term farm loans made by rural banks in the Minneapolis Federal Reserve District as reported in the Survey of Current Agricultural Credit Conditions, Ninth Federal Reserve District. Source: Agricultural Finance Databook--Quarterly Series, Board of Governors of the Federal Reserve System.

[f]Rates including service fees are for first day of quarter and are estimated by ERS with data obtained from the Farm Credit Administration. Rates are unadjusted for required stock purchases.

If rates should again rise to the level of the early 1980s, the opportunity might exist for the System's loan prices to be raised to produce a wider spread between lending and borrowing costs with resulting potential benefits to the System. However, in 1985, the relative closeness of System rates to those of the competition coupled with the near-term outlook for interest rates makes it doubtful whether System prices can be significantly increased any time soon. Moreover, while rate increases might provide the System the opportunity to raise its interest spreads while remaining competitive, such an event would also probably increase the credit risk on loans to System borrowers who are already in distress.

A plan is under development that would allow the System banks and associations to offer differential interest rates to their customers, whereby loans to the more creditworthy borrowers would carry a lower interest rate than loans to higher risk borrowers. As of May 1986, each district bank had submitted a differential interest rate plan for FCA approval. If implemented, these plans may stop sound borrowers from leaving the System, but, in the short term, the plan will result in a lower rate of return on loans, thereby adversely affecting revenue.

Amount of nonearning assets is growing rapidly

Nonearning assets are a second major factor adversely affecting System revenue. Such assets as nonaccrual loans and property acquired through foreclosure impose a cost on the System because they are primarily funded with interest-bearing funds, but they earn little or no income. For example, System nonaccrual loans increased from $1.8 billion at the end of 1984 to $5.1 billion at the end of 1985. Also, property acquired through foreclosure or threat of foreclosure increased from $0.5 billion at the end of 1984 to $1.2 billion at the end of 1985. Finally, an indeterminate number of loans were restructured or otherwise changed to accommodate struggling borrowers. As a result, these loans may be producing lower revenues in the future than were originally anticipated.

Revenue from investments

The third area where net interest revenue may be decreasing is in investments. Short-term securities held by the System increased from $3.2 billion at the end of 1984 to $8 billion at the end of 1985. The increase in investment securities resulted from a management decision that the System's liquidity should be increased to maintain investor confidence: unforeseen difficulty in marketing the System's debt could be temporarily dealt with by liquidating high-quality investments on very short notice. This practice can have a negative effect on revenues if the interest cost of carrying the investments is higher than the investment income generated. In September 1985, FCA management indicated that the policy to increase investments did have a net cost. We were unable to obtain management's estimate of the amount of this 1985 cost or whether it is continuing.

## HIGH COST OF DEBT

In the past, the System issued large amounts of long-term debt at relatively high rates. The System's major operating cost is interest expense on its securities. This expense must be recovered through interest earned on System loans if the System is to be self-sustaining. A traditional strength of the System has been its ability to obtain funds at reasonable rates. Even though in the fall of 1985 the System experienced some difficulty in marketing its securities and for a period of months had to pay an interest rate premium compared to Treasury securities having like maturities, short-term System bonds were issued in the 7.5 percent to 8.5 percent range. However, the average cost of the System's average outstanding debt for 1985 was 11 percent.

The large difference between the cost of bonds issued during 1985 and the average cost of the System's outstanding debt resulted from the large amount of long-term, fixed-rate bonds that were issued in the early 1980s when interest rates were high. During this period of high interest rates the System issued bonds with maturities of up to 20 years having interest rates in the 12- to 14-percent range. In 1984, when interest rates had declined from their earlier peak, the System issued securities with maturities longer than 1 year 11 different times during the year. These issues totaled $9.5 billion with maturities ranging from 2 years to 23 years. Interest rates ranged from a low of 10.65 percent on a 3-year issue to a high of 13.75 percent on an 8-year issue. As market interest rates declined, the cost of this and previously issued debt put more stress on the System's ability to pass funding costs on to borrowers. These borrowing practices resulted in enormous risk exposure to the System, which is commonly referred to as interest rate risk.

Interest rate risk arises when interest rates charged on System loans and interest rates paid on System debt securities used to fund the loans do not necessarily move in a similar fashion. Most System loans, including long-term loans, are made using a variable rate that can be adjusted monthly. However, a large portion of the securities funding these loans are fixed-rate bonds that most frequently have long-term maturities whose terms cannot be changed once they are sold.

Repricing opportunities for System liabilities are far less than for its variable rate loans and short-term investments. Table I.3 shows the repricing opportunities for System securities. For example, 40 percent of interest-bearing liabilities will not be repriced for 1 to 5 years and 13 percent will not be repriced for more than 5 years. On the other hand, virtually all assets will be subject to repricing within 6 months.[2] This means that if interest rates increase, a greater portion of assets than liabilities will be repriced at a higher rate, thus increasing net interest income. Conversely, if interest rates decline, a greater portion of assets than liabilities will be repriced at a lower rate and net interest income will decline.

Table I.3: Exposure to Interest Rate Risk

| Interest bearing liabilities | December 31, 1984 | | December 31, 1985 | |
|---|---|---|---|---|
| | $ billions | percent | $ billions | percent |
| Less than 6 months | 20.3 | 28.5 | 25.4 | 37.3 |
| 6-12 months | 9.6 | 13.4 | 6.3 | 9.3 |
| 1-5 years | 31.0 | 43.4 | 27.4 | 40.3 |
| Over 5 years | 10.5 | 14.7 | 8.9 | 13.1 |

Clearly, had interest rates not gone through the cycle they did or had the System not chosen to fund "long" at or near the peak in the cycle, the System would not be in the position it is in today. However, it would still be suffering from the decline in the quality of its loans.

Nevertheless, it is important for the future to recognize that because the System reprices its loans on a very frequent basis, decisions to fund lending with long-term fixed-rate borrowing expose the System to wide fluctuations in earnings that will, by definition, be highly beneficial or highly detrimental. This is particularly noteworthy because there was and continues to be nothing preventing the System from matching fairly closely the repricing of its new borrowings regardless of their maturity with that of its new loan commitments, thereby eliminating most of the fluctuations in net earnings on these loans due to changes in interest rates.

To obtain some indication of the magnitude of effect interest rate risk had on System earnings, we computed System interest expense for 1985 on the basis of rates that would have

[2]Data are not available to determine with precision the repricing opportunities of loans, but FCA officials estimated that between 94 and 97 percent of the loan volume would be subject to repricing monthly. About 97 percent of the System's investments as of December 31, 1985, mature in less than 1 year. Over half these investments were in federal funds which are repriced daily.

been paid if all outstanding liabilities had been repricable every 6 months. This is not to imply that we advocate only short-term debt. We believe that there are many alternatives for reducing interest rate risk and that an effective asset/liability management approach might use many of these methods. We calculated that the System's average cost of interest-bearing liabilities would have been 8.3 percent in 1985 rather than the actual rate of 11 percent and that the System's interest expense would have been $1.9 billion lower. This means that the System's net loss would have been $0.9 billion rather than the $2.8 billion loss actually incurred. Moreover, an interest rate of 8.3 percent would essentially have been comparable to the 8 percent average rate reported for 1985 by all federally insured commercial banks.

To obtain some indication of the effects that interest rate exposure might have on the future profitability of the System, we prepared an estimate of the System's 1986 interest expense on the basis of the assumptions that all outstanding System debt be repriced every 6 months at then prevailing short-term rates and that market interest rates remain at their current level through the end of 1986. Our computation indicates that the System interest expenses would be lowered by $1.5 billion during 1986. Thus, the past practice of funding a large portion of variable rate loans with fixed-rate, long-term, noncallable bonds will cost the System an estimated $1.5 billion more in interest expense in 1986 than it would have if its terms of borrowing had been structured to approximately match the repricing intervals on its loans. The bulk of this effect can be attributed to interest rate fluctuations. The rest of the increased 1986 interest expense can be attributed to the premium that investors frequently attach to long-term debt compared to short-term debt.

The System is still mismatching the repricing of its assets and liabilities although the extent of long-term funding with fixed-rate bonds appears to be at a much lower level than in the past. For example, through July 1, 1986, the System issued $10 billion of fixed-rate securities, of which $2.3 billion had intermediate or long-term maturities that ranged from 13 months to 21 years.

## SYSTEM LOAN EXPERIENCE AND PROSPECTS

Performance of the System's loan portfolio during 1985 reflected the distress experienced in many sections of the agricultural economy. While that distress has been evident for several years, 1985 was the first time that the System itself realized substantial operating losses. Moreover, at year end, the System's loan portfolio contained a record-breaking amount of high-risk loans which are expected to lead to further losses.

On the basis of past results our extrapolations of System loan performance for 1986 show continuing problems. (See app. II, pp. 37-38 for explanation of the basis of our extrapolations.) Because of falling farm values, many loans are no longer fully collateralized. Significant economic recovery could relieve these credit risks, but recovery is not expected to occur during the next few years. In addition to problems with its loans, we found that the System is experiencing large and growing operating losses on assets it acquired as a result of loan defaults.

Factors affecting loan risk

Three factors must be considered when assessing the riskiness of the System's loan portfolio. These factors are: trends in System gross loans; trends in nonperforming loans (that is, loans adversely classified or those in nonaccruing status); and trends in property acquired by the System as a result of defaulted loans. Ultimately, any assessment of risk involves many matters of judgment involving not only the individual loans but also more general developments, such as changes in interest rates and in the level of farm prices. On the System's statement of condition, the sum total of these judgments is finally represented by the reserve allowance for losses, which is intended to cover losses expected in the future.

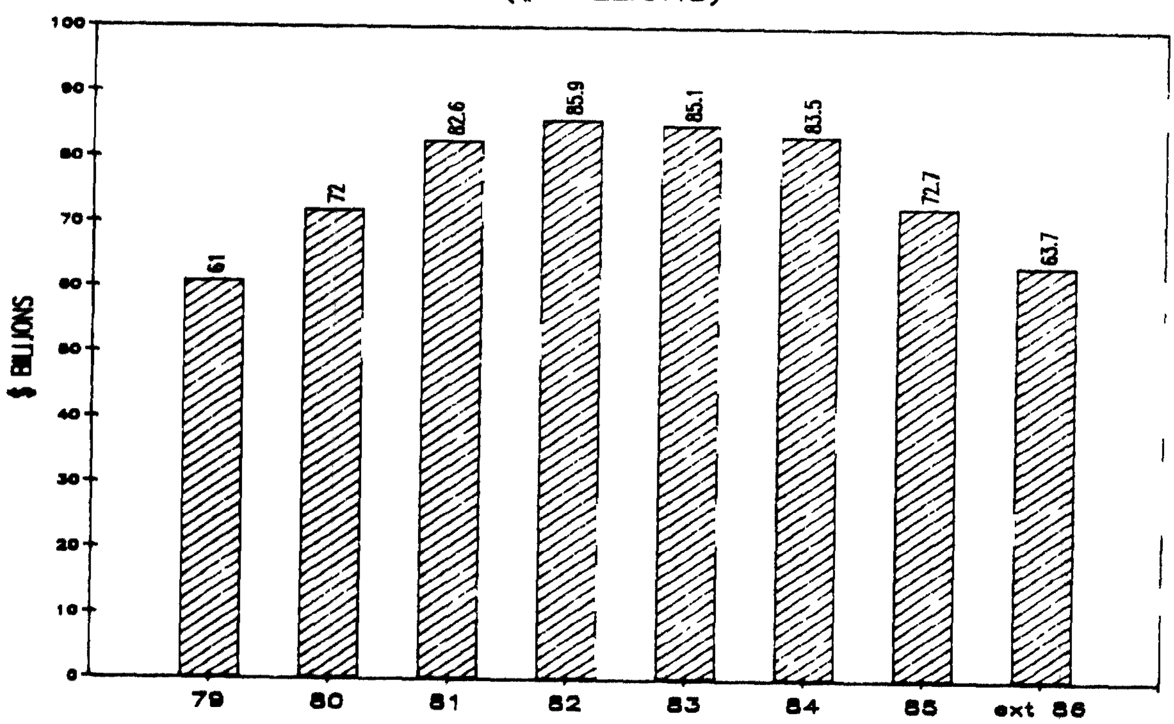
In our prior reports, Preliminary Analysis of the Financial Condition of the Farm Credit System, (GAO/GGD-86-13BR Oct. 4, 1985) and Farm Credit System, GAO's Analysis of the System's Third Quarter Financial Condition (GAO/GGD-86-35BR Dec. 23, 1985) we expressed concern about the adequacy of the allowance for loan losses. In 1985 there was a sharp increase in the allowance for loan losses because the System recognized the potential for greater losses in its loan portfolio. We do not, however, know the extent to which the increased level of the allowance in 1985 reflects a sharp increase in risk in the loan portfolio for 1985 only or recognition at that time of problems that existed in past years.

Declining loans outstanding

The total outstanding loans at book value (gross loans) have been declining since reaching a year end peak of $85.1 billion in 1983. (See figure I.2.) During 1985 alone, gross loans declined by about 13 percent to $72.7 billion, and a further 13-percent decline this year would result in projected gross loans of $63.7 billion at December 31, 1986.

The net repayment of System loans during 1985 was $9.6 billion (not including the $1.1 billion of loans charged off during the period). A very important aspect of the sharp decline in System loans involves the credit quality of the borrowers who have left the System compared to the quality of those who remain. Data are not available to indicate conclusively whether the average quality of existing System customers is different from customers whose loans have recently been repaid. However, there are indications from System staff that in fact many of the stronger borrowers have left. If this is true to any great extent, it could seriously affect the soundness of the System's existing loan portfolio and hence its viability.

Figure I.2: SYSTEM GROSS LOANS AT YEAR END ($ BILLIONS)




A decline in loan volume could impair the System's ability to successfully meet the credit needs of its remaining members. A lower loan volume will result in a smaller base across which the System can distribute its expenses, including the expenses associated with its problem loans. However, it is doubtful whether the interest rates charged to borrowers could be significantly increased in the light of the poor condition of many of them and competition from other lenders. Also, it remains to be seen whether the stronger customers can be retained through lower interest rates on loans. If the above steps cannot be taken, the widespread liquidation of System loans has probably increased System risk.

Declining loan quality

The risk in the System's loan portfolio appears to have increased significantly in 1985. We have used two alternative methods to assess potential loan weaknesses.

The first measure of loan weakness is nonaccrual loans, as reported in the System's accounting records. Nonaccrual loans are those on which interest is no longer being accrued because there is reasonable doubt whether interest or principal will be collected. (It is important to note that the System recognizes other risky loans in addition to those in the nonaccrual group: as of December 31, 1985, it reported $5.1 billion in nonaccruals and $5 billion of "other high risk" loans.)

Our second measure of loan weakness has been adapted from the System's loan review process. Credit examiners and System managers continuously review individual loans and classify them as acceptable, problem, vulnerable, or loss, depending on the degree of riskiness they perceive in such loans.[3] We attached a weight to each of the adverse types of classification and added up the weighted amounts as an indication of overall System loan weakness.[4] We refer to this sum as weighted System adversely classified loans.

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[3]Definitions of the loan classifications are as follows:

Acceptable--loans of highest quality, ranging down to and including those having significant credit weaknesses.

Problem--loans having serious credit weaknesses requiring more than normal supervision but believed to be collectible in full.

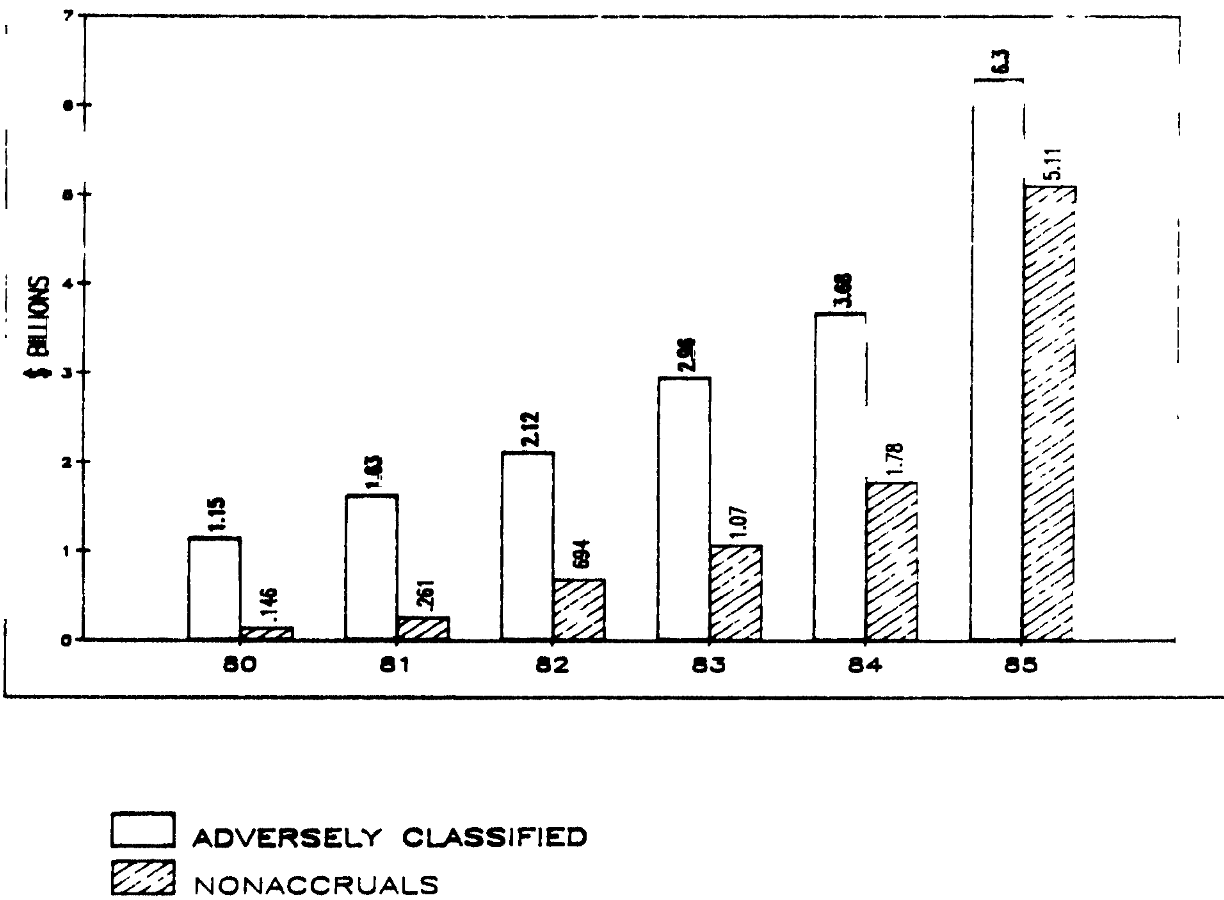
Vulnerable--high risk loans still considered collectible but involving probability of loss in the event that repayment from available sources does not materialize.

Loss--loans deemed uncollectible, either in part or in full.

[4]We weighted the adversely classified loans as follows: 20 percent of problem loans, 50 percent of vulnerable loans, and 100 percent of loss loans.

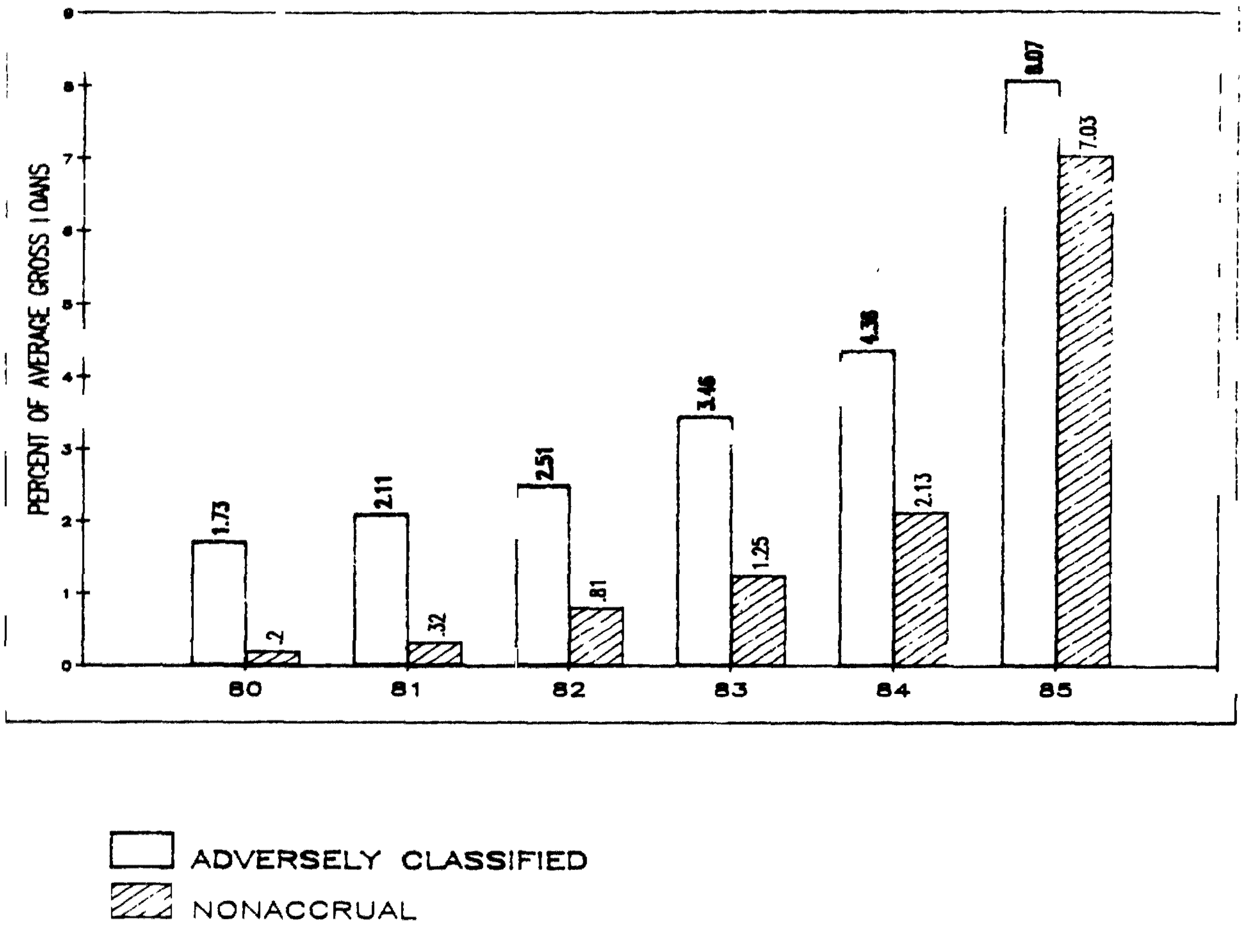
Figure I.3 shows the dollar amounts of both the weighted System adversely classified loans and nonaccrual loans at the year end 1980 through 1985. Both measures indicate continuously growing risk in the System's portfolio, with an especially large increase in 1985.

Figure I.3: WEIGHTED SYSTEM ADVERSELY CLASSIFIED LOANS AND NONACCRUALS AT YEAR END ($ BILLIONS)




The dollar amount of risky loans should be analyzed in the context of changes in the System's gross loans. Figure I.4 shows the ratio of risky loans to average gross loans by both of the measures we have selected. In 1985, System loans declined sharply, so that the proportion of risky loans to gross loans grew even faster than just the rate of growth in risky loans.

Figure I.4: WEIGHTED SYSTEM ADVERSELY CLASSIFIED LOANS AND NONACCRUALS TO AVERAGE GROSS LOANS




Risks in acquired property

At December 31, 1985, the System owned approximately $1.2 billion in property that it had acquired from borrowers whose loans were in default. This property, which is carried on the System's books at the lower of cost or estimated market value, had doubled in amount since December 31, 1984.

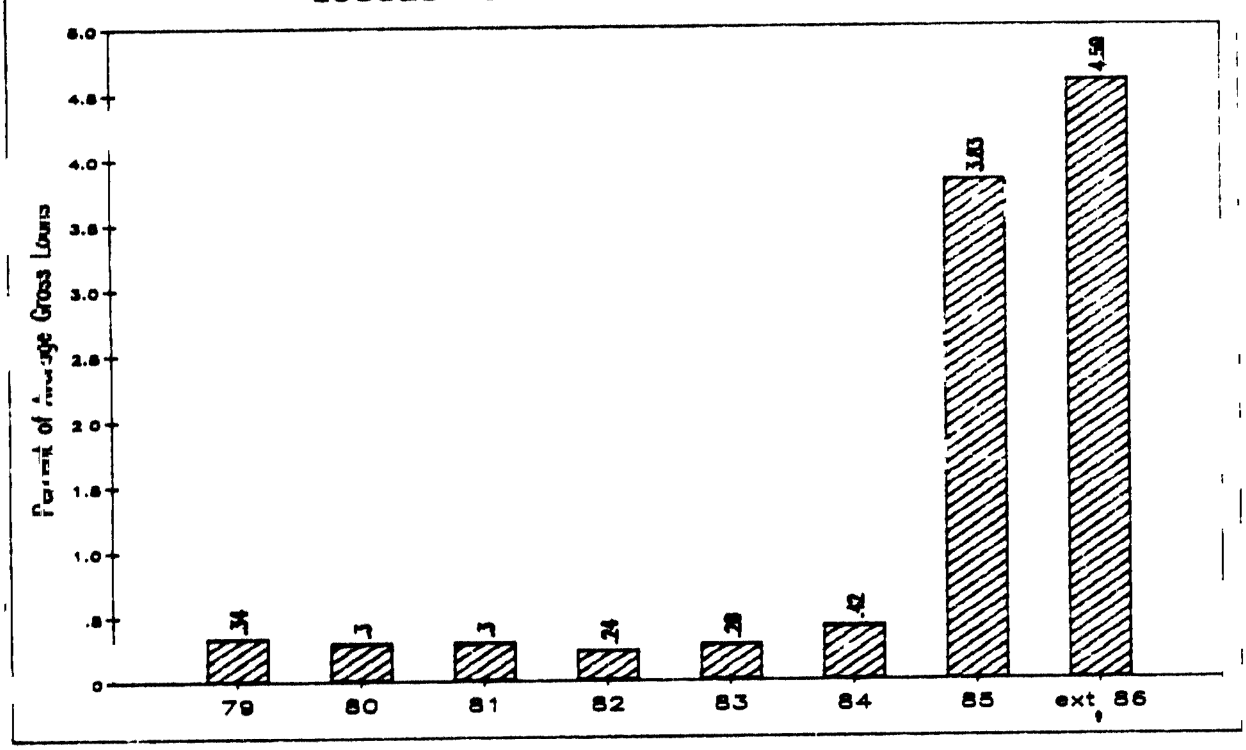
During 1985, the System made a provision of approximately $280 million for expected losses on acquired property, compared to a provision of about $25 million in 1984. These expected losses have thus become a significant adverse factor for the System, and that experience raises a question whether the loan portfolio might contain unidentified risks that could lead to additional losses as other loans go into default.

1985 LOAN PERFORMANCE AND EXPECTATIONS FOR 1986

A record $3.0 billion expense provision was made in 1985 for System loan losses. This amount represents the sum of management's estimates during the year of expected losses that will be incurred in the future. This charge to income increased sharply over the $0.4 billion provided in 1984 and was a major reason why 1984 net System income of $0.4 billion was followed by a net loss of $2.8 billion in 1985.

Figure I.5 shows that the annual provision for losses, expressed as a percent of average gross loans, ranged from 0.24 percent to 0.42 percent between 1979 and 1984, before increasing to 3.83 percent for 1985. We project further increases to 4.59 percent for 1986 (see app. II, pp. 37-38, for an explanation of the basis of our projection).

Figure I.5: SYSTEM PROVISION FOR LOAN LOSSES TO AVERAGE GROSS LOANS



A second reflection of poor results is indicated by a change in the System's reserve allowance for loan losses which increased during 1985 from $1.3 billion to $3.2 billion.[5] This change is significant because it represents management's expectation of future losses. The $1.3 billion reserve at the beginning of the year was increased by the $3.0 billion loss provision mentioned above, and it was reduced by $1.1 billion in loans charged off as being uncollectible during the year. Figure I.6 shows that this reserve, expressed as a percent of gross loans outstanding at year end, was stable at about 1.7 percent in the years 1979 to 1984, but it increased to 4.43 percent in 1985. We project a further increase to 7.21 percent by the end of 1986.

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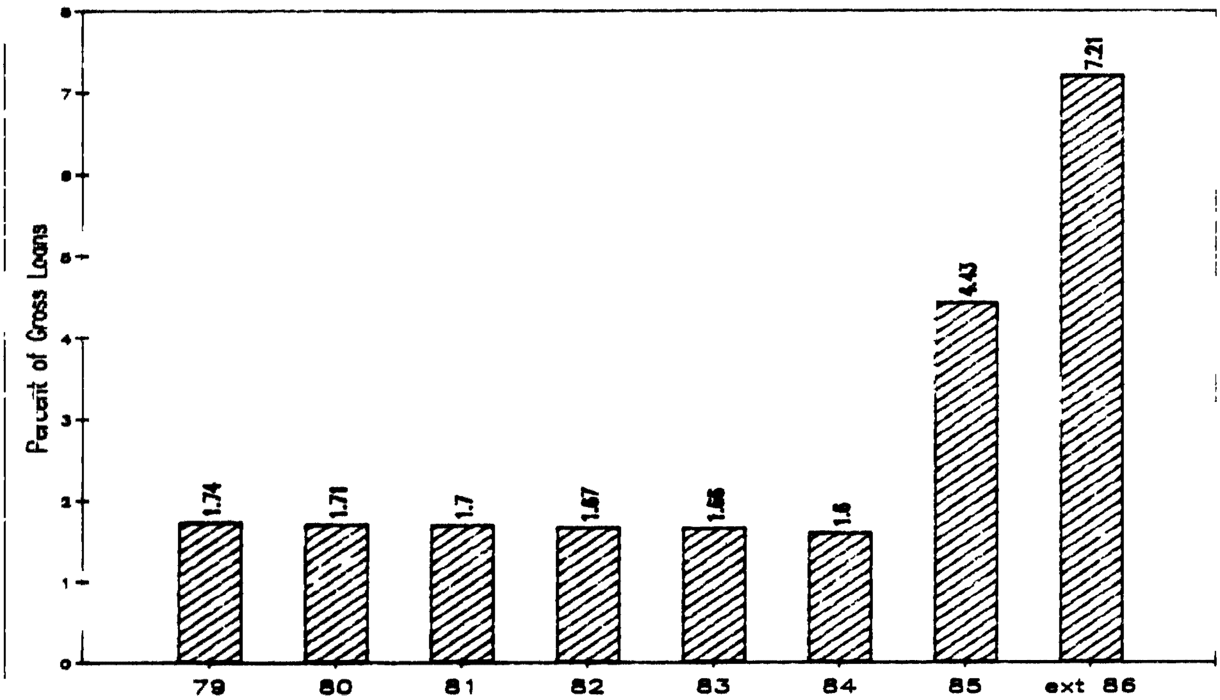
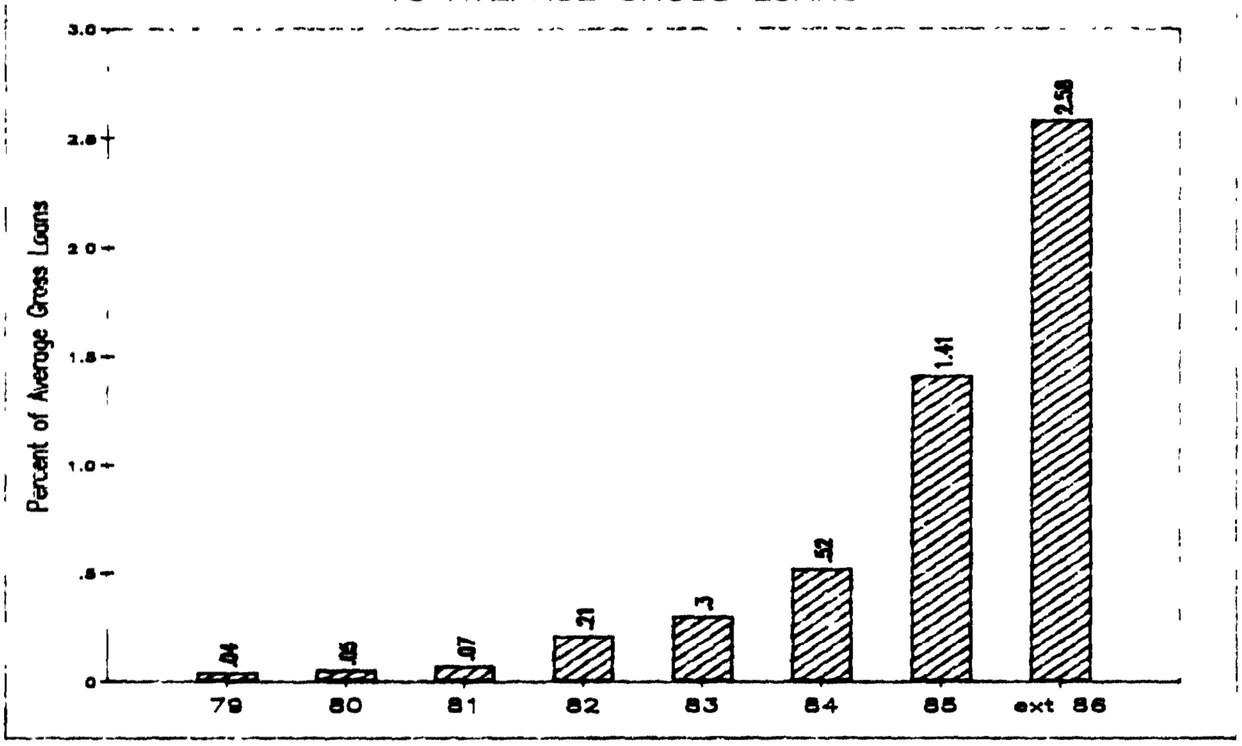
[5]Under generally accepted accounting principles, System banks and associations must evaluate the risk of loss in their loan portfolios and establish on their balance sheets a reserve account, which is called an allowance for losses. This reserve should be maintained at a level sufficient to absorb future losses that are expected in the ordinary course of business. (The balance in the allowance for loan losses, which appears on the statement of condition as a deduction from gross loans outstanding, is increased by the annual provision for loan losses, an expense item on the institution's income statement. The allowance account is decreased during the course of the year by charging off loans which are deemed uncollectible.)

Figure I.6: SYSTEM ALLOWANCE FOR LOAN LOSSES TO GROSS LOANS AT YEAR END




The $1.1 billion in loans charged off in 1985 was also a record high. This reflected continuing deterioration in the Production Credit Association-Federal Intermediate Credit Bank loan portfolios and a sharp increase to $0.5 billion in land bank loans charged off. Figure I.7 shows that annual chargeoffs, expressed as a percent of average loans outstanding in each year, gradually increased from 0.04 percent in 1979 to 0.52 percent in 1984 and then increased sharply to 1.41 percent in 1985. We project an increase in the percentage to 2.58 percent by the end of 1986.

Figure I.7: SYSTEM LOAN CHARGEOFFS TO AVEPAGE GROSS LOANS




## CAPITAL AND LOAN LOSS RESERVE DECLINE

Figure 1.8 shows the trends of total capital from 1979 through projected end of 1986 levels. The adequacy of capital is an important factor in a financial institution's ability to withstand future losses. System capital has several unique aspects. In most institutions, the stockholders' investment in the institution is at risk and available to absorb losses. System stock is sheltered from being used to absorb losses, except that it may be at risk if the institution fails and is liquidated.[6] Therefore, the only System capital that is available to absorb losses is internally generated. This is not

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[6]The Congress and FCA draft regulations excluded borrowers' capital stock from their definition of "available capital and reserves."

the case with commercial banks or other financial institutions because investor-supplied capital is viewed as providing a cushion that may be used to absorb periods of poor operating performance.[7]

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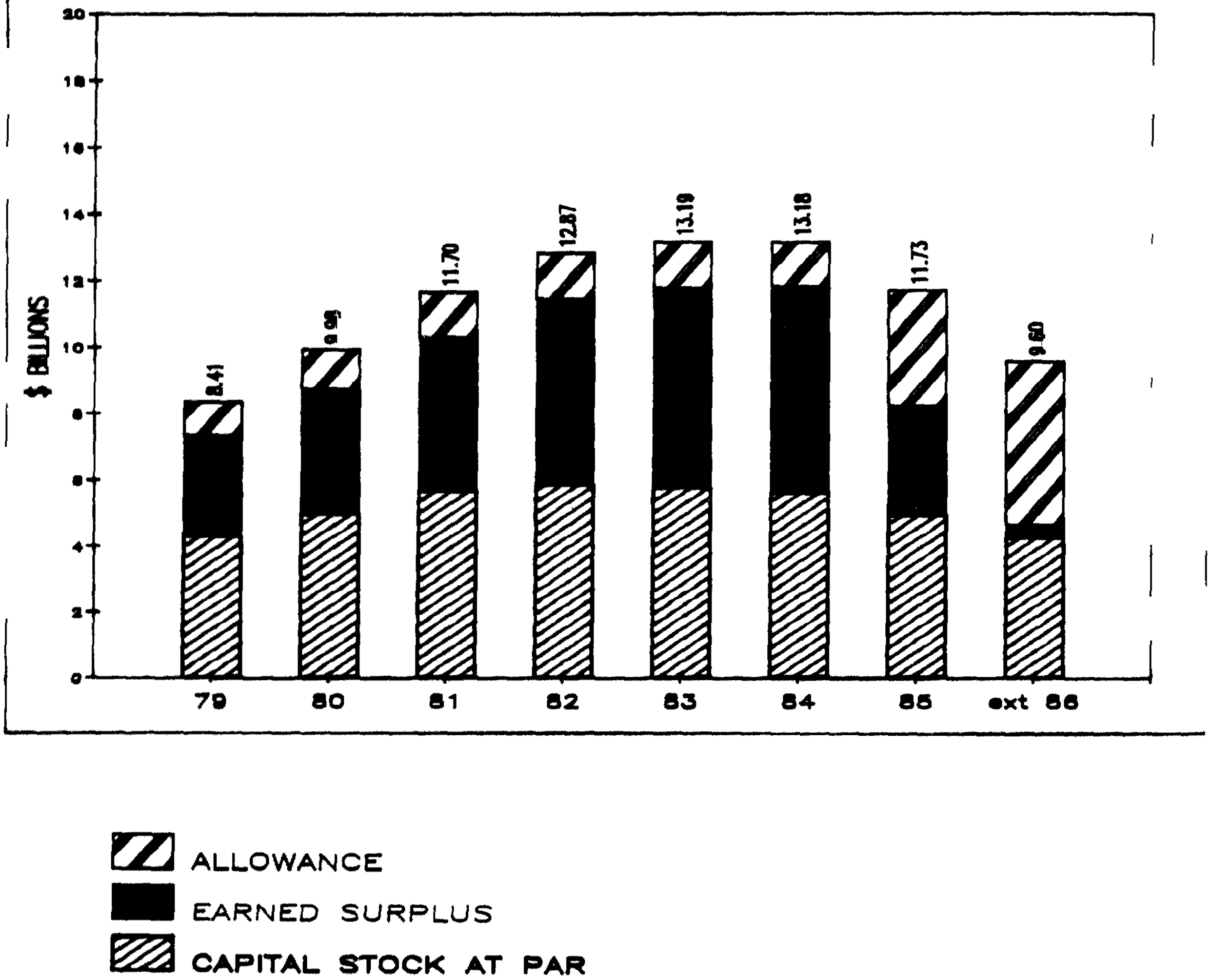
[7]Stock in Farm Credit institutions differs from stock in other financial institutions such as commercial banks. The System, as a cooperative system, is owned by its borrowers as opposed to investors who purchase stock for the prospect of financial gain. System borrowers must purchase stock from their local association in an amount equal to 5 to 10 percent of the amount of their loans. The associations in turn own stock in their respective district banks. Cooperatives must own stock in the district bank for cooperatives from which they borrow. System borrowers are issued stock at par value, which is $5 a share for production credit associations and land bank associations and $100 a share for banks for cooperatives. According to an FCA official, stock generally is not purchased outright with cash but rather, in effect, the purchase price is added to the amount of the loan and interest is charged on it. There is no legal obligation to automatically redeem the stock, but as a general practice stock has been redeemed at par value as borrowers repay their loans.

While the value of stock is at risk if an institution fails and is liquidated, the Congress and the System have established several features that protect the value of borrowers' stock from decreasing below par value in the event there are losses. For example, a key provision of the Farm Credit Amendments Act of 1985 established the Farm Credit System Capital Corporation. The Congress established the corporation as a mechanism to transfer capital from the the financially strong System institutions to troubled institutions. The 1985 Act requires FCA to establish regulations that provide guidelines for carrying out the congressional mandate for intra-system financial assistance. In order to become eligible for federal assistance, "available capital and reserves" of district banks and associations must first have been committed by those institutions in good financial condition to those needing help. FCA draft regulations exclude borrowers' capital stock from their definition of "available capital and reserves." Thus, if the System continues to incur losses, federal assistance could be sought without first applying the losses against the System's capital stock.

Figure I.8: TOTAL SYSTEM CAPITAL AT YEAR END




## Future losses may cause inadequate System capital

For purposes of analyzing the System's ability to absorb future losses, we have included unallocated surplus accounts and allowance for losses, but, as previously explained, we have excluded capital stock. For purposes of this report we refer to the allowance for losses and unallocated surplus as "adjusted capital."

Until 1985, the System consistently generated capital internally through the retention of earnings. During 1985, the System's upward trend in adjusted capital position was reversed, declining from $7.3 billion at year end 1984 to $6.5 billion at December 31, 1985 (see fig. I.9). We project that, during the 12 months ending December 1986, the adjusted capital position will continue its downward trend to $5.1 billion and the unallocated surplus accounts that have been built up from prior years' earnings may be nearly exhausted due to increases in the allowance for loan losses. Also, adjusted capital decreased from 8.4 percent to 7.8 percent of average assets during 1985. We project that this will decline to 6.9 percent at year end 1986. (See fig. I.10).

Figure I.9: SYSTEM ADJUSTED CAPITAL AT YEAR END
($ BILLIONS)

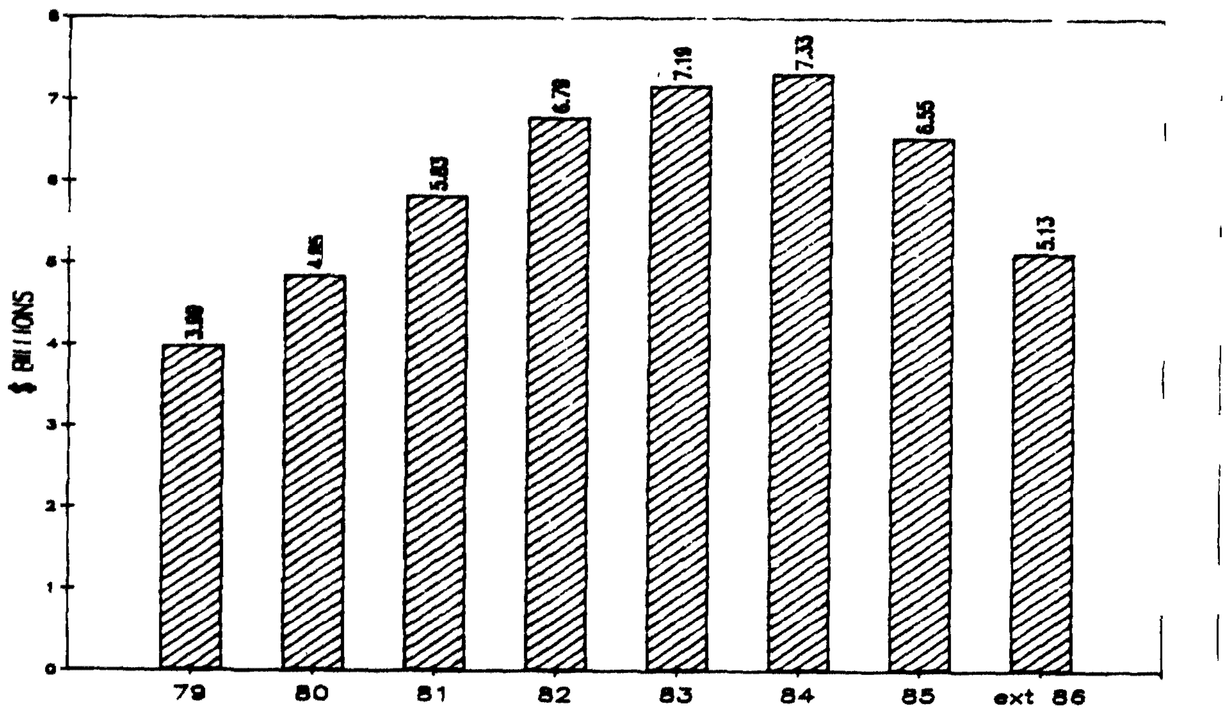
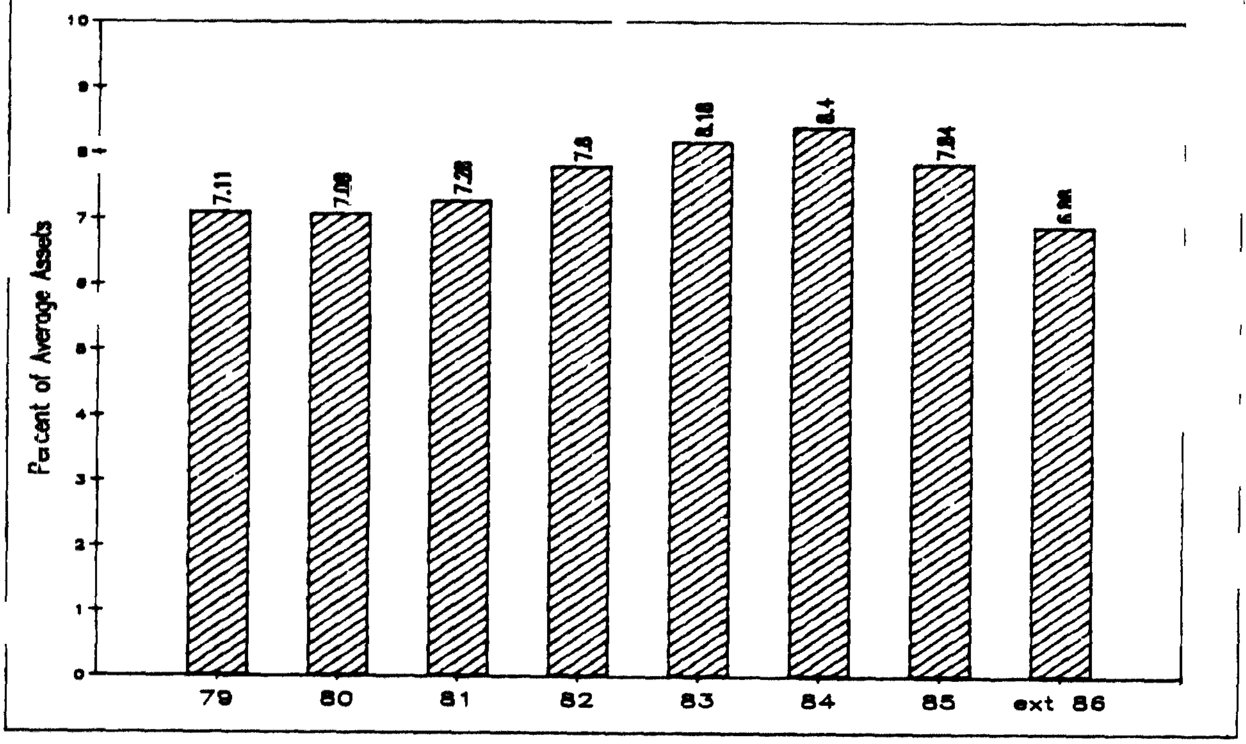


Figure I.10: SYSTEM YEAR END ADJUSTED CAPITAL TO AVERAGE ASSETS




## FINANCIAL OUTLOOK AND FEDERAL AID

To obtain some indication of the future financial outlook for the System, we prepared a projection of the financial condition of the System at December 31, 1986. The projection is based primarily on extrapolations of historical trends and relationships and on the assumptions that, in the near term, the agricultural economy will not improve and interest rates will not drastically rise. In table I.4 we present condensed combined financial statements for 1984, 1985, and our extrapolation for 1986.

A key element in our analysis is the extrapolation of nonaccrual loans at year end 1986 to about $7.5 billion, which is an increase from $5.1 billion at December 31, 1985. Assuming the System maintains the same relationship between the allowance for loan losses and nonaccrual loans that existed in 1985, the allowance will reach $4.6 billion by year end. Our extrapolation also indicates that provision for loan losses and net operating loss will approximately equal the 1985 levels. Of major significance is the projection for the depletion of surplus. The extrapolation indicates that the surplus will decline to $354 million, effectively leaving the System with no resources to absorb expected operating losses that will have to be accounted for beyond 1986.

Despite the unfavorable indications of our extrapolation, we cannot be certain that the System will require outside assistance by the end of 1986 or shortly thereafter. This is because any extrapolation of accounts that are affected by the quality of the System's loan portfolio is highly judgmental. The accounting records for 1985, for the first time, reflect serious problems in the System's loan portfolio. During the year nonaccrual loans increased from $1.8 billion to $5.1 billion and weighted adversely classified loans increased from $3.7 billion to $6.3 billion. During 1985 the System charged off $1.1 billion in loan losses, which was more than the combined chargeoffs for the prior 6 years. The 1985 provision for loan loss was over 700 percent of the 1984 provision for loan loss.

The dramatic changes that took place during 1985 no doubt reflect some recognition during that year of loan problems that existed in prior years. However, our projections indicate continuing growth in nonaccrual and other nonperforming loans in 1986. With regard to nonaccruals, there is little disagreement between GAO, FCA and the System. At issue is whether the relationship between the allowance for loan losses and problems known to exist in the System's portfolio at the end of 1985 should continue to be maintained to recognize the growth in problem loans that has occurred in 1986. This is largely a matter of judgment about which legitimate bases for disagreement can exist. Nevertheless, it is important to observe that the near-term outlook for the financial condition of the agricultural economy and for interest rates provides little evidence that the causes of the System's problems will reverse themselves any time in the near future. The important point is not whether the System will have effectively exhausted its surplus by the end of 1986. What is important is that the causes of the System's problems are unlikely to reverse themselves and for this reason, exhaustion of System surplus in the relatively near future seems inevitable.

Table I.4

Farm Credit System

Statements of Condition at
December 31
($ millions)

| | Actual 1984 | Actual 1985 | Extrapolated 1986 |
|---|---|---|---|
| Earning loan items | $81,676 | 67,634 | $56,199 |
| Nonaccrual loans | 1,782 | 5,111 | 7,465 |
| Gross loan items | 83,458 | 72,745 | 63,664 |
| Less allowance for loan losses | (1,336) | (3,224) | (4,592) |
| Net loan items | 82,122 | 69,521 | 59,072 |
| Cash and investments | 3,516 | 8,348 | 7,286 |
| Net acquired property | 504 | 941 | 1,190 |
| Other assets | 926 | 1,190 | 1,380 |
| Total assets | $87,068 | $80,000 | $68,928 |
| Total notes and bonds | $72,193 | $67,810 | $61,579 |
| Other liabilities | 3,067 | 3,986 | 2,707 |
| Stock | 5,639 | 4,976 | 4,288 |
| Earned surplus | 6,169 | 3,228 | 354 |
| Total liabilities and net worth | $87,068 | $80,000 | $68,928 |

Annual Income and Expense Statements
($ millions)

| | Actual 1984 | Actual 1985 | Extrapolated 1986 |
|---|---|---|---|
| Income from loans | $9,560 | $8,598 | $7,313 |
| Income from investments | 293 | 392 | 539 |
| Income from financial services | 115 | 91 | 150 |
| Total gross income | 9,968 | 9,081 | 8,002 |
| Interest expense | (8,399) | (7,765) | (6,589) |
| Operation expense | ( 809) | ( 838) | ( 786) |
| Net operating income | 760 | 478 | 627 |
| Less: provision for loss on loans | ( 358) | (2,991) | (3,129) |
| Less: provision for loss on acquired property | ( 25) | ( 279) | ( 469) |
| Other income and expenses | ( 4) | ( 47) | 98 |
| Net income (loss) | $ 373 | ($2,839) | ($2,873) |

## OBJECTIVES, SCOPE, AND METHODOLOGY

In his April 24, 1986, letter, the Chairman, Subcommittee on Conservation, Credit, and Rural Development, House Committee on Agriculture, requested that we provide an overview of the important issues facing the Farm Credit System, an assessment of internal problems that may have contributed to the System's financial problems, a periodic assessment of the financial condition of the System, and a projection of what the condition will be like in 12 months. The objective of this report is to provide an assessment of the financial condition of the System at December 31, 1985, and to project its condition as of December 31, 1986.

The financial data and ratios presented in this report are based on unaudited information provided to the Farm Credit Administration by the various System institutions. Since the data we used were unaudited, there are minor differences (which we did not attempt to reconcile) between the information we report and data reported by the System's auditors. Our analysis treats the individual banks and associations as if they are, in effect, a single institution and assumes that funds can be provided and applied where needed. This assumption is based in part on (1) the fact that systemwide notes and bonds are the joint and several obligations of the 37 Farm Credit Banks and (2) in part on the passage of the Farm Credit Amendments Act of 1985, which set up various mechanisms for the financially stronger institutions in the System to help other System institutions which are under financial stress.

We obtained copies of the end-of-year Reports of Operations submitted by the PCA, Federal Intermediate Credit Banks (FICB), Federal Land Bank Associations (FLBA), FLB, and Banks for Cooperatives (BC) from 1978 through 1985. These reports contain balance sheet and income statement data for the year. To the extent possible, without performing a financial audit of all the institutions in the System, we adjusted and combined the balance sheets and income statements that were reported to FCA. We did this to prevent double counting assets, liabilities, earned surplus, income, and expense items. For each year, we combined and adjusted district data reported by PCAs and FICBs and the data reported by FLBAs and FLBs to develop a combined statement for the PCA-FICB and a combined statement for the FLBA-FLB. We then combined and adjusted the PCA-FICB and FLBA-FLB data with the combined BC data reported by FCA to produce a systemwide combined balance sheet and income statement. Then, to the extent such data were available from FCA, we adjusted for inter-system accounts. The results of these adjustments and combinations were used to generate the ratios and other data presented in this report. Thus, our analysis treats the individual banks and associations as if they were one large institution.

EXTRAPOLATION METHODOLOGY

Projecting the System's future condition is complicated by the fact that in 1985 the System incurred extraordinarily large loan losses and also a substantial runoff or liquidation of its loan portfolio, neither of which events had any precedent. This means that projections could not be based on long-term historical trends. Our projection is the result of extrapolations which assume that the unfavorable experience in 1985 will continue in 1986. Unaudited interim financial data for the first and second quarters of 1986, together with indications of continuing distress in the industry, support this assumption, but we cannot be certain that our projections will prove to be accurate.

We made a projection of the financial condition of the System at December 31, 1986, based largely on the changes that occurred over the past 1 to 3 years. We have, however, made some adjustments where linear extrapolations of prior years' data would not recognize effects of changing management policies or other conditions. For example, starting in 1984 and extending into 1986, there has been a considerable consolidation of associations together with budget-cutting at banks. While FCA did not have an estimate of savings that these actions may have on 1986 expenditures, we projected savings in personnel cost on the basis of the percent of reduction in personnel in 1985.

The accuracy of our projections of the financial condition of the System in 1986 primarily depends on the validity of the extrapolations of four accounts. Three accounts are balance sheet items (gross loan volume, nonaccrual loans, and allowance for loan losses); and the fourth account (provision for loss on loans) is an income and expense item.

We extrapolated gross loans on the basis of the assumption that gross loan volume will decline during 1986 at the same percent as it did in 1985. Our extrapolation of nonaccrual loans is based on the assumption that nonaccrual loans will increase during 1986 by the same volume as they did during 1985 except that the projected 1986 increase is reduced by the same percent of decline that we project for the 1986 gross loan volume. We are concerned that our extrapolation may misstate the effect of adverse events in 1986 because System institutions only began classifying loans as nonaccrual in December 1984 and we were concerned that they may have been understated in that year but accurately reflected in the 1985 statements. Thus, our use of 1985 data could result in an overstatement of the 1986 nonaccrual loans. However, the System's unaudited financial data for the first half of 1986 indicate that the dramatic deterioration in loan quality that was reflected in the 1985 financial statements is continuing in 1986 at similar rates.

The 1986 year end allowance for loan losses was developed by applying to the extrapolated 1986 nonaccrual loans figure the ratio of the allowance for loan losses to nonaccrual loans at December 31, 1985. The key income and expense item, the provision for loan losses, was calculated by deducting the beginning allowance for loan losses from the sum of the ending 1986 allowance for loan loss and projected loan chargeoffs. We extrapolated chargeoffs by determining the ratio of chargeoffs in 1985 to average nonaccrual loans in 1985 and applying that ratio to projected average nonaccrual loans in 1986.

Other projected items are based on historical trends and/or the relationships between ending balance sheet items. For example, the 1986 investments account was projected to have the same percentage size compared to year end gross loans as it did at December 31, 1985.

The two most significant remaining items are the projections for income from loans and interest expense. We projected the income from loans by applying the average rate on loans in 1985 to the average gross loans net of nonaccruals for 1986. We did not increase the interest rate on loans in 1986 because market interest rates in early 1986 continued to fall. Moreover, we believe that competitive factors would prevent the System from increasing the rates charged borrowers if the level of market interest rates do not change.

To project the interest expense, we computed the weighted average interest rate for the outstanding System securities that would either mature during the year or continue to be outstanding throughout the year for each of the three banking groups at the beginning of 1986. For those securities that we expect to be issued during the year we assumed that their interest rate will be the same as the average short-term rate on securities issued during the first 4 months of 1986. The weighted interest rates were applied to the projected average interest-bearing liabilities for 1986 for each bank group to obtain their interest expense. We then combined the three bank groups' interest expense to determine the combined System interest expense.

## DATA LIMITATIONS

We used data reported to FCA by the banks and did not perform any audit work or verifications of the accuracy of the data. The banks and associations frequently revise these data after FCA publishes the data. Because of the complexity and difficulty of making such revisions to our data base, we have not revised the data we obtained from FCA to reflect any changes reported to FCA that are not reflected in the data FCA provided us.

Another limitation of our methodology is the way we calculated average asset and liabilities balances for each year. We have assumed that changes in an account occur evenly throughout the year. Therefore, to the extent, if any, that the beginning and ending balances presented in the balance sheets are not representative of the average balances the ratios in this report reflect such imprecision. For example, if the ending balance for gross loans was $10 billion one year and the ending balance was $40 billion the next, our computation of average gross loans for the year would be $25 billion. (Beginning balance of $10 billion plus ending balance of $40 billion divided by two results in an average of $25 billion.) However, if average gross loans were $10 billion for 11 months but increased to average $40 billion in the twelfth month our computation of average gross loans would remain at $25 billion because we only have ending and beginning data, rather than the more precise weighted average of $12.5 billion. Clearly, if the latter were the case, any computation using average gross loans would be understated or overstated. We are not aware of any instances where such a condition existed that would produce skewed results.

GAO comments supplementing those in the report text appear at the end of this appendix.

**Farm Credit Administration**

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FCA
FARM CREDIT ADMINISTRATION

August 27, 1986

Mr. William J. Anderson
Assistant Controller General
United States General Accounting Office
Washington, DC 20548

Dear Mr. Anderson:

The following is the Farm Credit Administration ("FCA") response to the U.S. General Accounting Office ("GAO") draft report: "THE FARM CREDIT SYSTEM: Analysis of Financial Condition at December 31, 1985."

The FCA recognizes the importance of the GAO's role in providing Congress with an alternative view of the operation and the financial condition of the Farm Credit System ("System"). We also appreciate the difficulty in assessing the financial condition of the System lending network of nearly 500 individual institutions. This difficulty is further compounded by the volatile conditions in the System during 1985, the weakened agricultural environment, along with considerable uncertainty surrounding the sector's future condition, as well as the inherently subjective nature of forecasting. The FCA recognizes the professional efforts the GAO has applied to this undertaking and welcomes the opportunity to comment on the draft report.

The FCA is concerned with two aspects of the draft report: (1) the methodology used to project the System's 1986 earnings and financial condition and potential market reaction to these projections; and (2) the funding strategy proposed by the GAO.

While we differ with the views of the GAO concerning the appropriateness of the System's past funding strategy and the FCA's actions relative to that strategy, we believe our enclosed comments are sufficient response. However, the projection methodology used to develop the forecast of the System's 1986 operating loss and the potential market reaction to it troubles us greatly.

The FCA strongly believes GAO should revisit its projection methodology and results before a final report is issued We particularly take issue with the finding that the System could essentially deplete its remaining surplus during 1986.

Sincerely,

Frank W. Naylor, Jr.
Chairman

Enclosure

**Farm Credit Administration**
**Response to General Accounting Office Report**
**on the**
**Financial Condition of the Farm Credit System**

**Detailed Analysis of Concerns**

The following analysis outlines specific concerns of the Farm Credit Administration ("FCA") regarding the U.S. General Accounting Office ("GAO") draft report: "THE FARM CREDIT SYSTEM: Analysis of Financial Condition at December 31, 1985."

The FCA is concerned with two aspects of the draft report: (1) the methodology used to project the Farm Credit System's ("System") 1986 earnings and financial condition and the potential market reaction to these projections; and (2) the funding strategy proposed by the GAO.

**Projection Methodology**

See comment 1.

The FCA is concerned that some of the methodology employed by the GAO to project the financial condition of the System is subject to problems that cause the System's yearend 1986 financial condition to be misrepresented. The FCA believes the GAO's use of simple extrapolations and comparisons is inappropriate considering the volatile developments occurring during 1985. The FCA is particularly concerned that the methodology used to project the System's 1986 earnings substantially overstates the losses and understates the System's capital position at yearend 1986. The FCA recognizes that the System faces severe financial difficulties; however, we believe the GAO analysis does not accurately forecast the level of System capital.

Now on p. 37.

The GAO indicates in its report (Appendix II, page 36) that the accuracy of its projections depends on the validity of the extrapolation of four items: gross loan volume, nonaccrual loans, allowance for loan losses, and the provision for loss on loans. The FCA believes the most important measures, the allowance and provision for loss on loans, may be subject to serious problems that affect the precision of the GAO's projections.

The FCA's concerns are based on the following observations:

See comment 2.

1. In 1985, System institutions converted to generally accepted accounting principles ("GAAP") from accounting standards established by FCA Regulation. This change materially affected the determination of the System's allowance for loan losses and provision for loan losses. The System made a $3.0-billion provision to loan losses in 1985 as a result of this transition and incurred a $2.7-billion operating loss for the year. As a result, 1985 financial results were heavily influenced by atypical and nonrecurring events that make that year an inappropriate basis for meaningful extrapolations.

See comment 3.
Now on p. 35.

2. Through the first 6 months of 1986 the System made a $1.0-billion provision for loan losses and on June 30, 1986, held a $3.5-billion allowance for losses. The GAO projects (Appendix I, page 33) that the System will provide $3.1-billion for loan losses during 1986 and will have a $4.6-billion allowance for losses at 1986 yearend. Under GAO's

projections, the System's provision for loan losses would exceed $2.1-billion during the last 6 months of 1986. In light of the best information available to us, this projection is unreasonable and unrealistic.

The FCA believes the System's practice of recording heavy provisions for losses in the last half of the year has been overcome, in part, through regulatory efforts. The System's external auditors, Price Waterhouse, have also brought additional discipline and scrutiny to the loan portfolio evaluation process. Accordingly, the FCA feels the provision for loan losses of the magnitude suggested by the GAO analysis for the last 6 months of 1986 is excessive and substantially overstates the operating loss the System will incur during 1986.

See comment 4.

3. The methodology used by the GAO to develop its projected provisions for loan losses is not appropriate. The methods outlined below lack the precision necessary to accurately determine the 1986 provision for loan losses and, accordingly, do not provide a reasonable basis to make the categoric statement that the System will essentially deplete its earned net worth during 1986.

   The GAO's estimated 1986 loan loss provision is computed by subtracting the actual 1985 allowance for loan losses and projected 1986 chargeoffs from the projected 1986 ending allowance for loan losses. The accuracy of the 1986 provision, therefore, relies heavily upon determining an accurate ending balance in the allowance. The GAO projects the 1986 yearend allowance by extrapolating the relationship between the yearend 1985 allowance and the 1985 nonaccrual loans. This approach is subject to significant error because the level of nonaccrual loans is the only factor considered.

   Several factors, in addition to nonaccrual loans, must be evaluated to determine an appropriate allowance for loan losses. Among those factors are: estimated future losses in all significant loans; known deterioration in pledged collateral, concentrations of credit or classes of borrowers; historical loss experience based on volume and types of loans; independent review or evaluation of the loan portfolio quality; local and national economic conditions; as well as volume and trends in delinquencies. The relationship of these factors to an institution's allowance for loan losses is complex. Thus, the allowance for loan losses cannot be reliably predicted using linear extrapolation techniques.

We urge the GAO to carefully review and disclose the limitations in the assumptions and methodology employed in its projections. We further urge the GAO to be very sensitive to the potential adverse response of the financial markets to out-of-context statements that might be based on the report. Events of September 1985 make it clear that a substantial adverse move in the cost of funds based on inaccurate or incomplete information represents a risk that the System can ill afford.

3

**Funding Strategy**

See comment 5.

The report focuses on reducing the interest rate risk of the System and recommends that the FCA Board develop and implement a plan to do so. The GAO maintains that the System has been exposed to fluctuations in interest rates by funding variable rate loans with long-term, fixed rate bonds, a practice it considers unsafe and unsound.

The GAO maintains that if the System had matched the repricing of its liabilities to that of its variable rate assets, it would now be generating additional net interest revenue. It suggests that funding the System's variable rate loans with floating-rate or short-term debt could have eliminated interest rate risk.

Legitimate differences of opinion exist concerning the best strategy to minimize the combined exposure to interest rate and credit risks faced by the System. The FCA believes that interest rate risk should not be addressed without adequate consideration of the effect upon credit risk.

Now on p. 12.

Three of the areas isolated in Figure 1.1 of the report (Appendix 1, page 2) have resulted in the decline in the System's financial position: (1) increases in the provision for loan losses; (2) the decline in interest income brought by increases in nonaccrual loans and acquired property; and (3) the cost of high-priced, long-term debt. Adopting a strategy to completely abolish the System's interest rate risk could have eliminated the impact of the latter. By funding with short-term instruments, System banks could have shifted this risk to the System's borrowers. This could have simultaneously increased the overall exposure facing the banks by increasing loan losses and the occurrence of nonaccrual loans more than proportionately.

During a rising interest rate period, funding with short-maturity bonds increases volatility in the interest rate on the variable rate mortgage, which in turn increases credit risk. If the Federal land banks ("FLB") had funded with 6-month bonds, for instance, their interest rates would have exceeded 14 to 16 percent during the period 1980 to 1982, markedly adding to farmer credit problems.

Funding long-term farm sector investments backed by real estate mortgages with short-term bonds clearly would have a destabilizing effect on agriculture during the late 1970s and the mid-1980s. Since FLB interest rates are often used to arrive at the capitalized value of farm land, this lending rate volatility would likely have accelerated the decline in the value of farm land, causing further loan chargeoffs as collateral values deteriorated.

The GAO's report does not address the liquidity implications of funding entirely with short-term bonds. Greatly increased financial market risks could result from the very large volume of rollover financing required by such a strategy. If the strategy were based on 6-month bonds, the monthly rollover would be three to four times the largest issue ever marketed by the System. The market's continued capacity to absorb such volume, even in adverse periods, is necessary for such a strategy to be viable. Liquidity risks are as legitimate a concern as interest rate risks and are not addressed in the alternative funding strategy suggested by GAO.

See comment 6.

The report maintains that the FCA in carrying out its regulatory and supervisory responsibilities has not addressed the System's exposure to interest rate risk. The FCA did not believe the strategy of funding the long-term mortgage loans of the System's FLBs with short-term debt instruments to meet their repricing characteristics was appropriate. Accordingly, the FCA did not promote or endorse shortening the maturity of the liabilities supporting the majority of the System's mortgage lending portfolio. Instead, FCA promoted match funded lending programs, now widely used by System banks for cooperatives, to manage their interest rate risk. As early as 1979, the FCA recommended changes to variable rate loan pricing to more adequately reflect costs of funding new loans. These recommendations included the increased use of loan fees and annual pooling. The FCA also recommended building financial reserves to accommodate competitive advantage shifts over the interest rate cycle.

See comment 7.

Provided for your consideration in developing a final report are: (1) technical comments on the draft letter and appendices; (2) copies of FCA policy actions taken in 1979-80 that addressed the interest rate issue; and (3) interest rates on new 6-month bonds issued from 1979 to 1985.

COMMENTS FROM FCA

The following are GAO's comments on FCA's letter of August 27, 1986.

GAO COMMENTS

1. Under generally accepted accounting principles, the allowance for loan losses should be adequate to cover estimated losses in the loan portfolio. Actual loan chargeoffs are subtracted from the balance of the account and any recoveries on loans previously charged off are credited to it. To increase the allowance account to an appropriate level, an expense account called "provision for possible loan losses" is credited to the allowance account. The provision for possible loan losses is an expense item that is subtracted along with other expenses from income to arrive at net operating income.

We projected the level of the allowance account based on the ratio of nonaccrual loans to the allowance account at the end of 1985. We assumed that, if the amount of nonaccrual loans increased during 1986, then it would be reasonable that the allowance account would increase proportionately. We realize that 1985 may have been an unusual year and that the provision account may have been unusually high in order to bring up the allowance to an appropriate level. However, we have difficulty in accepting FCA's assumption that, even though the financial statements are projected to reflect a significant deterioration in the quality of the loan portfolio (the volume of nonaccrual loans are projected by FCA to increase by about $2 billion during 1986), a significant increase in the allowance account will not be needed.

At the end of 1985, the System's independent auditor agreed with an allowance amount of $3.2 billion. This represented 35 percent of nonaccrual loans. During 1986 the level of nonaccruals is projected to increase to $7.0 billion. FCA's projected System allowance account of $3.3 by year end 1986 represents only a slight increase over end of 1985 levels and declines as a percent of nonaccruals compared with the 1985 ratio. In our October 1985 report on the System's financial condition we expressed concern about the adequacy of the System's reserves for loan losses. As a result of the 1985 financial audit by its independent accountant, the allowance was increased from $1.3 billion at the end of 1984 to $3.2 billion at the end of 1985 to adequately reflect expected future losses. Since that time the level of nonaccrual loans has increased by about $2.3 billion, and we believe it reasonable to expect the same rate of loss on the increase in these nonaccrual loans as that which was believed appropriate at the end of 1985.

2. We do not believe that the System's conversion to generally accepted accounting principles from accounting standards established by FCA regulation materially affected the allowance for loan loss account change between 1984 to 1985. The Farm Credit Bank Report to Investors in 1984 states

> "The Regulations require that each FLB and its FLBA maintain a combined allowance for loan losses in accordance with generally accepted accounting principles. . . ."

Table III.1: 1984 and 1985 Allowance for Loan Losses ($ billions)

| | 1984 | 1985 | Increase |
|---|---|---|---|
| FICB/PCA | .520 | .830 | .310 |
| FLB/FLBA | .694 | 2.263 | 1.569 |
| BC | .121 | .132 | .009 |
| *Total | 1.335 | 3.225 | 1.890 |

*Totals differ from data reported earlier because of rounding.

As the data in table III.1 shows, the FLB/FLBA caused \$1,569 million of \$1,890 million or 83 percent of the change in the allowance. The allowance for loan losses was on a joint basis in accordance with generally accepted accounting principles in both 1984 and 1985. Thus, the drastic change in the allowance for loan losses in FLB/FLBAs was not caused by a change in accounting practices. Whether the drastic change in the allowance for loan loss turns out to be atypical or nonrecurring remains to be seen.

3. As we have discussed, the provision is a highly subjective management estimate of anticipated losses that exist in the loan portfolio; the estimate should be based on an analysis of each loan in the System's portfolio. System representatives have informed us that the System is not yet in a position to make a loan-by-loan analysis and has relied on other analyses to establish its allowance level. We do not know whether an additional \$2.1 billion provision will be needed in the last half of 1986. However, it seems reasonable that the allowance account should increase by more than the \$100 million projecetd by FCA over the 1985 level. The System's nonaccrual loans and other high-risk loans increased to over \$12 billion at June 30, 1986, or 32 percent, in the first 6 months of 1986. This casts doubt on the adequacy of FCA's 4 percent projected increase in the allowance by year end.

4. The key area of FCA's concern lies in in the projected level of the System's ending allowance for loan losses. (Once the ending allowance was established, the amount of the provision for loan losses was simply arrived at by deduction, given the beginning and ending balance and the projection of loans charged off.) Our projection is based upon a linear relationship between the level of the allowance and nonaccrual loans. This relationship is not as simple as it might at first appear; external factors, such as deterioration in collateral and the volume of loan delinquencies are at least partly

subsumed in the judgments which lead to the nonaccrual classification itself. Nonaccrual loans are by definition delinquent and involve deficiencies in collateral. Other factors, such as concentration of credit or economic conditions may also be reflected by the fact that certain loans have come to a nonaccrual status. Finally, such factors as valid historical trends or loss experience may not be demonstrable in a situation which has no precedent. In any case, we agree that this methodology has limitations which were unavoidable because of incomplete data. Our projection could prove to be overly pessimistic, but we believe that it has an objective theoretical basis, albeit a necessarily simplified one.

We also believe that our report adequately discloses the limitations, assumptions, and methodology associated with our financial projection. We point out on several occasions in the report, the judgmental nature of establishing an appropriate allowance for loan losses (which drives the 1986 loss estimate) and point out that we cannot be sure that the rate of deterioration in surplus that we project will actually occur. This is because a certain amount of discretion exists on the part of the System to decide what the allowance will be. The issue then becomes what an appropriate level should be.

We are sensitive to the potential adverse response of financial markets to the information contained in the report. We are also very concerned about the even greater adverse reaction that might occur after an unexpectedly large increase in System losses as a result of 1986 actual financial results. If our projections are accurate there would be little time after the 1986 actual results are reported to weigh options for replenishing System surplus either through a privately or federally supplied infusion of capital.

5. FCA comments on our report's discussion of interest rate risk are based largely on a misinterpretation of our report. We are recommending that FCA, as federal regulator, require the System, not the FCA Board, to develop and implement a plan to reduce its exposure to interest rate risk.

Most of FCA's remaining comments on interest rate risk are based primarily on the assumption that GAO advocates a strategy of funding the System's debt entirely with short-term bonds. In our draft report we suggested several ways that the System could reduce its interest rate risk, one of which was issuing more short-term debt. We would anticipate that an effective asset/liability management program which would include management of interest rate risk, liquidity, and credit risk, would make use of a combination of ways to reduce the interest rate risk. We have made some revisions in our final report to more clearly explain our position.

As FCA points out, had the System reasonably matched the repricing of its assets and liabilities when interest rates increased in the early 1980s, the increase would have immediately been passed on to the borrowers through increased loan rates and would have adversely affected borrowers' ability to repay loans.

These rates would have been applicable to new borrowers as well as existing ones. Higher rates might have discouraged some borrowers from committing to debt which they subsequently could not service. With respect to borrowers already committed to long-term loans, the increased rates probably would have created a credit problem for some borrowers during the 1980 to 1982 period. However, the long-term funding practices followed by the System have contributed to credit problems in subsequent years because interest rates charged to customers have decreased more slowly than current money market rates. As a result, funding variable rate loans with intermediate and long-term, fixed rate bonds has masked the interest rate risk and has unwittingly committed the borrower to a high cost of funds (by today's standards) for the past several years and for some time to come.

Whether the problems being experienced today as a result of the funding strategy during the early 1980s are more serious than problems that might have been experienced under an alternative policy primarily based on current market rates is somewhat conjectural. We do observe, however, that because of the funding strategy of the early 1980s and its effect on loan pricing, an indeterminate number of borrowers obtained loans which they are currently having problems repaying. Under a policy of pricing loans on the basis of prevailing current rates, it is reasonable to infer that some or many of these borrowers would have chosen not to borrow and therefore would not be in the position they find themselves today.

6. We do not believe that the steps mentioned by FCA adequately address the System exposure to interest rate risk. This is most notably true in FCA's match funding of fixed rate debt with loans of similar maturity. While the loans made under this program may or may not impose interest rate risk on the System, it does little to offset the current overall mismatch in repricing of its assets and liabilities. The System should not attempt to match the maturity of each of its assets with specific funding maturity. Rather, it should aggregate all of its earning assets and funding sources to determine its overall interest rate risk position. Because the overall System balance sheet is asset sensitive, i.e., its assets are repriced much more frequently than its liabilities, any new debt incurred by the System should have terms that are designed to reduce this overall imbalance.

With regard to FCA's comment about pricing new loans at their cost to the System rather than at the average cost of all System debt, such a practice may have somewhat reduced the interest rate risk but would not have eliminated it.

Moreover, as shown on page 15 of appendix I, the System rates in the early 1980s did reflect the then current market interest rates.

7. Due to their length, copies of the policy actions and interest rate schedules have not been included in the report. This material is available for inspection at GAO headquarters.

Farm Credit Corporation
of America

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Note: GAO comments supplementing those in the report text appear at the end of this appendix.

August 18, 1986

Mr. William J. Anderson
Director
United States General Accounting Office
General Government Division
Room 3858 C
441 G Street NW
Washington, D.C. 20548

Dear Mr. Anderson:

Enclosed is the Farm Credit System's response to the General Accounting Office's The Farm Credit System - Analysis of Financial Condition at December 31, 1985.

We appreciate this opportunity to respond and look forward to any questions or comments that you may have.

Sincerely,

H. Brent Beesley
President and Chief Executive Officer

HBB:rt

cc: All Farm Credit System Bank and Service Entity CEOs/Presidents

encl.

The Farm Credit System

FARM CREDIT SYSTEM RESPONSE TO
GAO REPORT
THE FARM CREDIT SYSTEM - ANALYSIS OF FINANCIAL CONDITION AT
DECEMBER 31, 1985

The Farm Credit System appreciates the opportunity to respond to the General Accounting Office's The Farm Credit System - Analysis of Financial Condition at December 31, 1985. The System recognizes that such studies and analyses by GAO and others are an important means of increasing public understanding of the System.

See comment 1.

While it is useful in some circumstances to analyze System finances "as if the 37 Farm Credit Banks and the related associations were a single financial entity", it must be noted that the System is comprised of about 488 separate and distinct corporate entities. Using aggregates and averages can be misleading and will mask important aspects of the System's condition. For example, the 12 Banks for Cooperatives and the Central Bank for Cooperatives have carefully managed their interest-rate risk for many years as have most of the Federal Intermediate Credit Banks and Production Credit Associations. Most of the problems regarding interest-rate risk identified by the GAO Report apply primarily to the Federal Land Banks. Even among the Federal Land Banks the severity of the problems differs greatly from one district to the next.

See comment 2.

GAO has correctly identified excessive interest-rate risk as a contributing factor to the System's current financial difficulties. The System has recognized the dangers of exposure to interest-rate risk and has recently taken steps to manage and control interest-rate risk in all reasonably foreseeable economic environments. In fairness, however, it should be noted that by historical standards the interest-rate risks incurred by Federal Land Banks were not unreasonable in the pre-October 1979 environment and were incurred at the urging of the Farm Credit Administration in many instances. Only the recent gyrations in interest-rate levels coupled with an agricultural recession have revealed the weaknesses of funding methods that had worked well for decades.

See comment 3.

Much of the "interest-rate risk" described by GAO is the result of loan pricing strategies. If the System had followed market rates more closely in the early 1980's: 1) it would have had higher earnings and, 2) higher loan prices would have slowed the increase in loan volume and 3) the System would have sold less high cost debt. However, charging competitive rates during that period would have met with resistance from borrower/directors under the circumstances then existing. In addition, the law and the regulations at the time stipulated that Federal Land Bank loan pricing be based solely on cost. Regardless of the pricing or funding strategies utilized during the last several years, the System would still be experiencing severe financial difficulty today primarily because of the high level of nonaccruing assets and loan losses combined with the decline of accruing loan volume due to the present contraction of the total agricultural debt market.

See comment 4.

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Farm Credit System Response to GAO
August 18, 1986

It should also be noted that the current problems facing the System are all inter-related. Each one drives the other. For example, the high interest rates currently charged to borrowers result in decreased loan volume, increased per unit operating costs, a sustained high cost of funds, and increased defaults by distressed borrowers. Declining loan volume also makes it more difficult to reduce the present exposure to interest-rate risk.

Likewise, all these factors result in increased non-performing loans and acquired property, increased demands for forbearance in loan collections and increased operating losses which all combine to reduce the capital base. Loan payoffs due to high interest rates also reduce the capital base. These events lead to further deterioration in net income which increases the pressure to keep rates above competitive levels, and the cycle repeats itself.

A major driving force in the cycle is the agricultural economy. The profitability of agriculture and the ability of borrowers to repay debt are extremely important to the viability of the Farm Credit System. Government policy is a very significant factor in the health of the agricultural economy.

With regard to the 1986 financial projections for the System, GAO has assumed that the order of magnitude of difficulties to be encountered during 1986 will be about the same as in 1985. This assumption has been translated into a 1986 projection which mirrors the 1985 actual in terms of provisions for losses, loss of accruing loan volume, and increases in nonaccruing loans and acquired property. The result is a GAO projected 1986 loss for the System of $2.9 billion, approximately the same as was experienced in 1985.

See comment 5.

We believe the System has adequately identified and provided for loan losses as of the end of 1985 and as of the end of each quarter so far during 1986. The System's loss for the first half of 1986 was $968 million. Senior System managers now estimate unofficially that the total 1986 operating loss will be less than the $2.9 billion loss projected by GAO. However, several uncontrollable factors, such as interest rate levels, land values and commodity prices, significantly impact System earnings and the provisions for loan losses. These factors can change daily. Therefore, all forecasts of future earnings are necessarily subject to change no matter how carefully they are prepared.

The Farm Credit System has recognized each of the issues raised in the GAO Report as well as several other factors which impact System viability. In early 1986, the Farm Credit System developed a comprehensive Business Plan to reverse the cycle and resolve its problems. Five long-term goals and five short-term goals were identified. Fifteen Bank and Association strategies and 22 Systemwide strategies have been developed to achieve the objectives.

Page 3
Farm Credit System Response to GAO
August 18, 1986

Each strategy identifies the entities responsible to carry out the strategy and the target date for completion.

There is significant concern in the Farm Credit System today that the System shares risk and liability among its various entities without significant controls over the risks incurred. As of June 30, 1986, over $1 billion has been transferred or committed from the stronger entities of the System to the more distressed entities. These transfers have substantially weakened the viability and competitiveness of the contributing entities.

One of the strategies in the Business Plan requires the System to develop structural alternatives in order to manage the shared risks, improve profitability and competitiveness, increase economies of scale, pool capital and serve the unique needs of each market segment while retaining local operational authorities to the extent practical and in keeping with sound business principles. This study has been completed and the System is now reviewing the alternatives.

COMMENTS FROM THE SYSTEM

The following are GAO's comments on the System's letter of August 18, 1986.

GAO COMMENTS

1. The Farm Credit Amendments Act of 1985 provides for marshalling the resources of all institutions in the System to help those that are troubled. Further, the Act provides the mechanism for the System to seek federal aid after it has exhausted its earned net worth. This aid would be provided to the System, not to specific institutions in the System. We recognize that analyses could be made of each institution in the System, of the three banking systems that make up the Farm Credit System or it could be made systemwide. FCA, as the regulator of the System would be concerned about the performance of each institution within the System. Since the primary objective of our review was to examine the resources of the System and the possible need for federal aid, we believe that it is appropriate--indeed necessary--to analyze the System as one entity. Furthermore, while we acknowledge that different approaches to managing interest rate risk may exist among and within the three banking entities that comprise the System, the overall effect on System earnings and financial viability of poor management of interest rate risk remains the same. Identifying the source of the problem may be an important consideration when seeking remedial solutions.

2. In the pre-1979 environment, the System was taking interest rate risks, but this was not a major potential problem because of relatively stable rates.

The size of these potential risks only became apparent in 1980, as interest rates rose to unprecedented levels. At that time it was clear that huge losses in the savings and loan industry which engaged in fixed-rate, long-term lending resulted from an inability to reprice assets except on new mortgage originations. It should have been clear then that the System was becoming increasingly vulnerable to sharply reduced loan revenue and/or noncompetitive loan rates if market interest rates fell due to the mismatch of repricing of its loan portfolio and its securities. Nevertheless, the System pursued a strategy of rapid growth. (System gross loans increased by $24.6 billion, or 40 percent, in the 1980 to 1983 period.) This growth was funded to a large extent by long-term, high-interest, fixed-rate debt. It is that debt which proved especially damaging to 1985 and 1986 earnings.

3. We do not accept that the interest rate risk incurred by the System was an unavoidable consequence of the System's loan pricing policies. We do agree that if loans had been priced at current market rates, the System would have had higher earnings, higher loan rates, and less high cost debt. However, even given the loan pricing policy which was in effect, there was no legal requirement that any part of the System's financing be in the form of long-term, fixed-rate debt which created interest rate risk. Subsequent industry distress due to the general decline in the agricultural economy resulted in severe credit problems. However, these problems were exacerbated by the delay in lowering the interest rates charged for System loans.

4. We agree.

5. We agree that uncontrollable external factors can have a significant impact on the future performance of the System and these factors cannot always be predicted. A senior System official provided us an unofficial projection of the financial condition of the System for 1986, 1987, and 1988. The projection is a composite of projections prepared by each of the 12 groups of district banks and the central

bank for the cooperatives. The principal difference between this projection and our projection for 1986 is the amount of the allowance for loan losses. The System is projecting an allowance for loan losses of $3.5 billion compared to our projection of $4.6 billion. Primarily because of the lower level of the allowance for loan loss, the System is projecting an operating loss for 1986 of $1.7 billion compared to our projection of $2.9 billion.

The System is projecting a deterioration in the quality of the loan portfolio but not a corresponding increase in the level of the allowance for loan losses. Nonaccrual loans are projected by the System to increase by about $2.5 billion during 1986 to over $7.7 billion at year end. The allowance account, however, is only projected to be $3.5 billion at year end, an increase of less than 10 percent from year end 1985. While any projection of the allowance for loan losses is very subjective, we believe that our projected increase in the allowance account, which is based on the 1985 ratio of the allowance account to nonaccrual loans, is reasonable.

## Glossary

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| Acquired Property | Property obtained through foreclosure or deed in lieu of foreclosure from delinquent borrowers. |
| Adjusted Capital | Total unallocated surplus plus allowance for losses. |
| Adjusted Capital to Average Assets | Adjusted capital divided by average assets. |
| Adversely Classified Loans | Loans considered not to be fully acceptable; such credit risks are categorized as problem loans, vulnerable loans, or loss loans. |
| Allowance for Loan Loss | Reserve of capital established to absorb losses from bad loans. |
| Average Assets | Current year total assets plus prior year total assets divided by two. |
| Average Earning Assets | Current year total earning assets plus prior year total earning assets divided by two. |
| Chargeoff | Amount of a loan deemed uncollectible and charged against the allowance for loan losses account. |
| Collateral | Property or other assets pledged by a borrower to secure repayment of a loan. |
| Earning Assets | Investments in securities plus gross loan volume less nonaccrual loans. |
| Interest-bearing Liabilities | Notes and bonds issued by the Farm Credit System and other items on which the System pays interest. |
| Interest-free Funds | Capital resulting from the sale or distribution of Farm Credit System stock and earned surplus. |

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| Interest Rate Spread | The difference between the average rate earned on earning assets and the average rate paid for interest bearing funds. |
| Net Interest Revenue | The difference between interest earned on loans and investments and the interest paid on all debt. |
| Nonaccrual Loans | Loans on which interest accruals are no longer being recorded because they are not considered fully collectible. |
| Nonearning Assets | Items such as nonaccrual loans, buildings, acquired property, supplies, prepaid accounts, etc. |
| Noninterest-bearing Liabilities | This includes interest payable, the provision for taxes, other payables, and other liabilities. |
| Provision for Loan Losses | The amount a bank or association adds to the allowance for loan losses against which loan losses are charged. The amount of the provision is determined by management on the basis of its assessment of the adequacy of the allowance account in relation to the risks inherent in the loan portfolio. |
| Rate of Return | The ratio of earnings to assets. |
| Surplus | A representation of earnings accumulated from prior years. |
| Unallocated Surplus | Earned surpluses less amounts allocated to patrons. |

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