AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

CORNELL

S.A. no. 89-7

GIANNINI FOUNDATION OF
AGRICULTURAL ECONOMICS
LIBRARY
WITHDRAWN
APR 18 1989

CORNELL
AGRICULTURAL ECONOMICS
STAFF PAPER

Recent Changes in Credit Institutions Serving Agriculture

Eddy L. LaDue

Staff Paper No. 89-7

March 1989

Department of Agricultural Economics
Cornell University, Agricultural Experiment Station
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York, 14853

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

RECENT CHANGES IN CREDIT INSTITUTIONS SERVING AGRICULTURE

*Eddy L. LaDue**

The agricultural recession of the mid-1980's put the credit institutions serving agriculture through a mill the likes of which they have not seen since the 1930's. As lenders have tried to cope with the financial problems of farmers and their own institutions, numerous changes have been made in both structure and method of operation. Many of these changes are a result of the Agricultural Credit Act of 1987. Others are a more direct result of the financial problems faced by farm operators.

What I would like to do in the next few minutes is discuss some of the changes that are taking place in the credit institutions serving agriculture, review their financial condition and explore some ideas about what the future may hold.

Cooperative Farm Credit System

Structure

The Farm Credit Act of 1987, with modest help from the Acts of 1985 and 1986, dictated a number of changes in the structure of the Farm Credit System and forced consideration of a number of others. The results of those changes are indicated in the organizational chart presented in Figure 1.

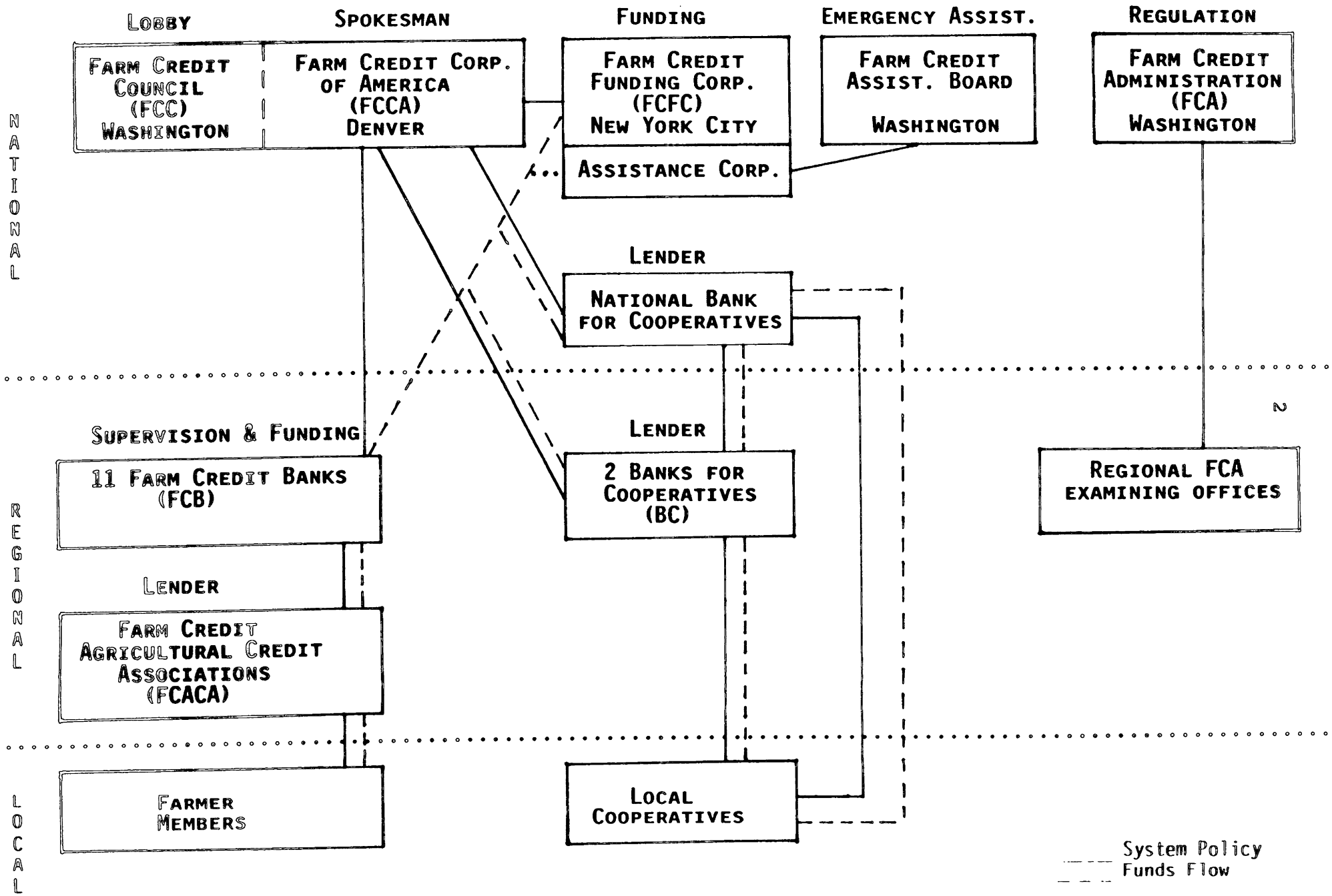
Prior to 1985, the Farm Credit Administration (FCA) served as an all encompassing head office of the Farm Credit System. It served as spokesman, lobbyist and regulator for the system. Congress decided that there was a conflict of interest in having the regulator also serve as spokesman and lobbyist for the System. So, in the 1985 law, they made the sole function of FCA that of regulator. FCA's current job is to ensure that Farm Credit entities obey the law and that their managers run safe and sound financial institutions. The FCA was given more enforcement powers, including the right to issue cease and desist orders, levy penalties and remove officers. They were given regulatory authority over, and examining responsibility for, all associations and banks. Since the district banks had historically conducted the examination of associations, the FCA greatly expanded its examining branch. That expansion included the development of regional FCA examining offices. The regional FCA office for this area is in Albany.

With the changes in FCA, The Farm Credit System was left without a spokesman or lobbyist. To fulfill these needs, they created; (1) The Farm Credit Corporation of America (FCCA), located in Denver, to serve as spokesman and carry-out the systemwide coordination and policy formulation function, and (2) the Farm Credit Council (FCC), located in Washington to serve as the System's lobbyist. These two organizations have functioned since 1985.

---

* The author is Professor of Agricultural Finance in the Department of Agricultural Economics at Cornell University, Ithaca, New York. This paper is a written version of comments presented at the Western New York Agriservice Group meeting and a preceding meeting of area farmers in Batavia, New York on February 9, 1989. I wish to thank John Brake for his helpful comments on an earlier draft.

FIGURE 1.


LOBBY
SPOKESMAN
FUNDING
EMERGENCY ASSIST.
REGULATION
FARM CREDIT COUNCIL (FCC) WASHINGTON
FARM CREDIT CORP. OF AMERICA (FCCA) DENVER
FARM CREDIT FUNDING CORP. (FCFC) NEW YORK CITY
FARM CREDIT ASSIST. BOARD WASHINGTON
FARM CREDIT ADMINISTRATION (FCA) WASHINGTON
ASSISTANCE CORP.
NATIONAL
LENDER
NATIONAL BANK FOR COOPERATIVES
SUPERVISION & FUNDING
LENDER
11 FARM CREDIT BANKS (FCB)
2 BANKS FOR COOPERATIVES (BC)
REGIONAL FCA EXAMINING OFFICES
REGIONAL
LENDER
FARM CREDIT AGRICULTURAL CREDIT ASSOCIATIONS (FCACA)
LOCAL
FARMER MEMBERS
LOCAL COOPERATIVES
System Policy
Funds Flow

The Farm Credit Funding Corporation (FCFC) has been in operation in New York City since 1929 (formerly as the Farm Credit Banks Fiscal Agent). Its function is to obtain the funds from the financial market for practically all of the lending done by Farm Credit. It does this through the sale of bonds and discount notes. The 1987 Act created the Farm Credit Assistance Corporation to sell the government guaranteed bonds required to bail-out the Farm Credit System. The Assistance Corporation has the same board of directors and officers as the Funding Corporation so for all intents and purposes, the Funding Corporation sells the assistance bonds. It just wears its Assistance Corporation hat during those sales.

There has recently been some discussion within Farm Credit of combining the Farm Credit Council and Farm Credit Corporation of America, and even the Funding Corporation, into a unified head office for the Farm Credit System. In my view, it makes sense to combine FCC and FCCA. They could be located in Washington where the most effective lobbying could be done. It does not really matter where the FCCA functions are located. These functions could even be distributed between the FCC and FCFC. However, I would leave the Funding Corporation in New York City where it is close to the financial markets it must interact with to be effective.

The Farm Credit Assistance Board was established in the 1987 Act to protect the existing borrower stock and to assist in restoring the financial health of system institutions. That is, they decide who gets the assistance money (from the sale of assistance bonds), how much they get and what they have to do to get it. The Assistance Board tells the Assistance Corporation who to give money to, when and how much. Their main objective is to work themselves out of a job.

Mergers

The National Bank for Cooperatives, which has recently decided to refer to itself as CoBank, is also a result of the 1987 Act. Remember that the Farm Credit System had divided the United States up into 12 regions, called districts. Within each of those districts, they had: (1) a Federal Land Bank (FLB) which made long term loans to farmers through local Federal Land Bank Associations, (2) a Federal Intermediate Credit Bank (FICB) that loaned money to local Production Credit Associations (PCA's) for lending to farmers, and (3) a Bank for Cooperatives (BC) that made loans to agricultural cooperatives throughout their district. There was also a Central Bank for Cooperatives in Denver. As you know, the Springfield district banks serve this area. The 1987 Act forced members of the 12 BC's to vote on whether they wanted to join together to form a National Bank for Cooperatives. They were not forced to merge. They were forced to vote on merger. After some analysis and some information was provided to members, the vote was taken. In the original vote, eight districts voted to join. After that vote, two other districts, Jackson and Spokane, decided that maybe they had made a mistake and revoted. On the revote, they decided to join. Thus, 10 of the original 12 districts have merged to form CoBank. The two districts that decided to remain independent are St. Paul and Springfield. So, this district still has a local district BC.

One interesting aspect of the BC situation is that each of the three BC's (CoBank, St. Paul and Springfield) can make loans anywhere in the U.S. Initially it is likely that they will stay within their original boundaries. However, in the longer run, CoBank might try to pick off some of the larger cooperatives in the St. Paul and Springfield areas. If they are successful, they could affect the efficiency and profitability of the St. Paul and Springfield BC's. Whether they are successful or not will depend upon the level of services the various BC's can provide. Presumably the coops in this area voted to stay independent because they believed Springfield could and would provide better service. The analysis of the merger provided by Hopkin Associates before the merger vote, estimated about one-quarter percent (per dollar of loan volume) gain from administrative efficiencies of merging all BC's into one organization. This may be an overestimate because little effort was made to look for any diseconomies of size. It does, however, give you an idea of the magnitude of competitive advantage CoBank may have gained. The Hopkin report also estimated funding cost savings of another one-quarter percent. However, this was calculated by comparing the Central Bank for Cooperatives costs to that of other cooperatives and results solely from the fact that the Central Bank maintained a shorter term portfolio than the district banks and a shorter term portfolio had a lower cost during the declining interest rate environment of the early 1980's. The opposite would have been true had the analysis been done for the rising rate environment of the 1970's. The FCFC obtains the funds to be lent by all three BC's, so the cost can not be much different. Thus, you see why the BC's relative competitive position will depend on their ability to provide the financial services cooperatives need.

One merger that was mandated by Congress in the 1987 Act was that of the FLB and FICB in each district into a district Farm Credit Bank. There was no vote, no options. These mergers took place on July 6, 1988. So, there are no longer any FLB's or FICB's, except the FICB of Jackson which has no FLB to merge with. However, that FICB will be merged into the Texas Farm Credit Bank, making FLB's and FICB's extinct. That merger is also how we get to the 11 Farm Credit Banks listed on Figure 1.

The 1987 Act also mandated that all PCA's and FLBA's with similar territory vote on whether to merge into a single entity. In this district, all PCA and FLBA boards are identical so all had to vote. However, as you know, in this district the PCA's and FLBA's have been operating with the same officers and staff since the 1940's. About all that was at issue was a name change and some minor problems with tax status. Thus, the PCA's and FLBA's in all associations in the Springfield district voted to merge and have done so as of January 2, 1989.

In other districts, PCA's and FLBA's often do not have similar territory and frequently not only do not have similar management but view each other as fierce competitors. In those areas, we may see some negative merger votes. Although PCA's and FLBA's will become extinct in this area, some may continue to exist in other parts of the country.

Interestingly, there was a modest problem with the name changes of the associations. The associations wanted to call themselves Farm Credit Associations, which would, of course, have been abbreviated FCA. However,

another important group, the Farm Credit Administration, was already using that abbreviation and did not want competition! And, since they were the regulator, they decreed that the associations could not be Farm Credit Associations (FCA's) and that the regulator was going to refer to them as Agricultural Credit Associations (ACA's). As a compromise, FCA did allow the associations to call themselves _____ Farm Credit, ACA (i.e., Sesquehanna Valley Farm Credit ACA or Farm Credit of _____, ACA (i.e., Farm Credit of Western New York ACA). We probably will not see much focus on the ACA part of the names in this district.

Another change that has been going on in Farm Credit in this state is the merger of associations. Where we had 12 associations only a couple of years ago, we now have five (Figure 2). In this process, some quite large associations have been developed, the largest of which covers this part of the state. With the merger, this association should be large enough that size should not limit performance. It will be a challenge for this association to be more efficient than the individual associations that were combined and, particularly, to meet the goals they have set for themselves.

Another level of merger that was encouraged by the 1987 Act was merger of districts. The bill language that started out saying there would be no more than six districts, ended up saying there would be "no less than six financially viable Farm Credit Banks". The System has a committee that has been working on alternatives and recommendations. It is clear at this point that the Jackson district, which covers Mississippi, Louisiana and Arkansas, will be merged into the Texas district. The Assistance Board and FCA closed down the Jackson FLB and put it in receivership. Texas bought most of that loan portfolio. The Jackson FICB is talking very seriously with Texas about merger. It appears quite certain that it will happen. The Jackson BC has already joined CoBank.

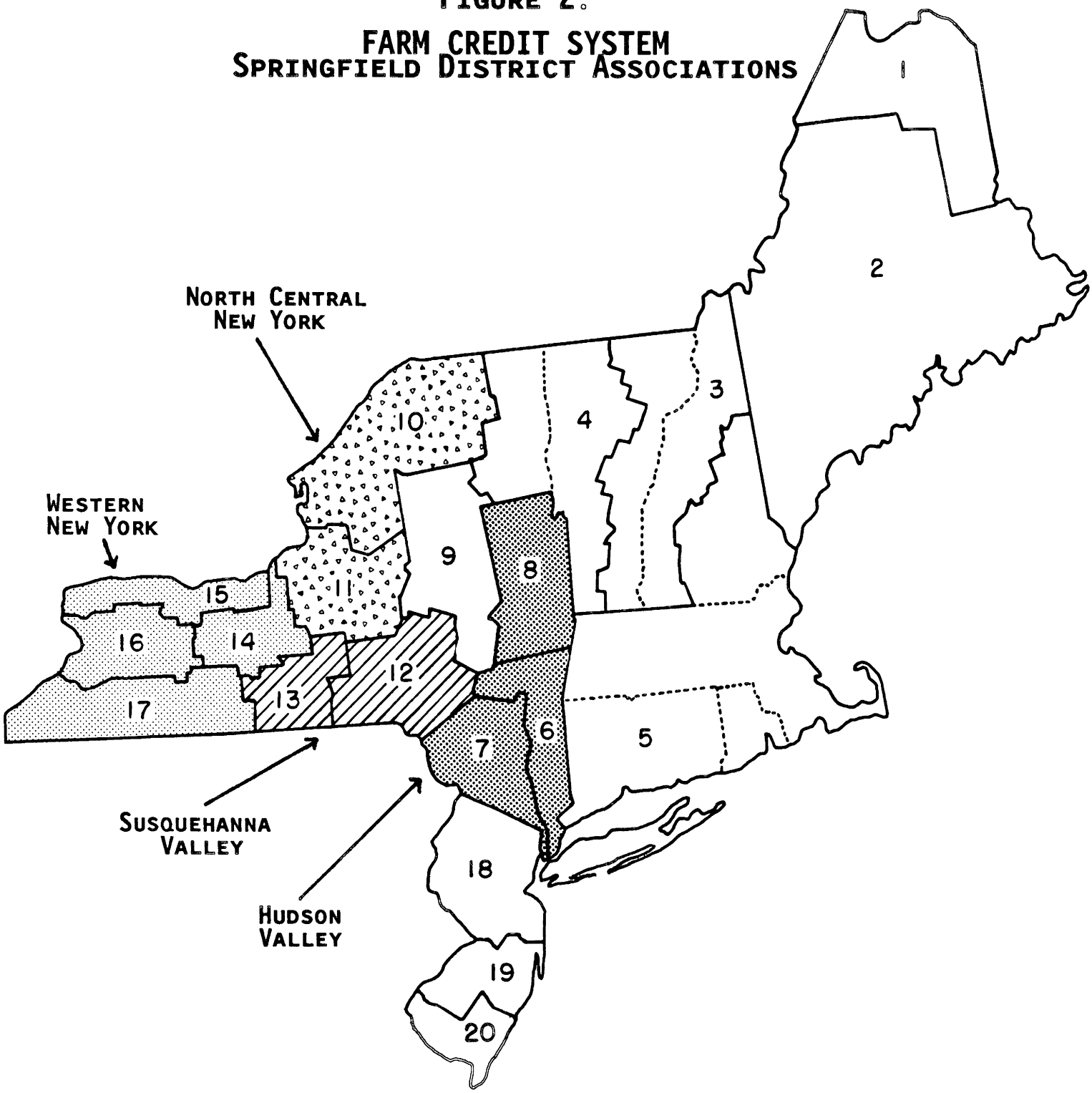
Other district mergers are much less certain. Louisville and St. Louis are seriously considering the possibility. Apparently Louisville is pushing quite hard on this issue. Such a merger is possible. However, I would not bet much on the other merger possibilities, at least in the short run. Springfield and Baltimore have been talking. They are both healthy. But, at this point, I judge the probability of merger quite low. There are some good reasons for this: (1) the two banks have significant differences in management styles, (2) Springfield has a BC, Baltimore does not, (3) based on the BC merger study, the savings with merger are modest, (4) both banks are healthy, and (5) some of the board and management people talking to each other stand a good chance of losing their job with merger. The law says "no less than six". Eleven is no less than six. The law does allow mergers to take place in the future, when circumstances are appropriate. We may see some mergers in the future.

The Assistance Board

As I said earlier, the Farm Credit Assistance Board is charged with restoring the financial health of the system institutions, primarily by distributing the assistance bond funds. What has the assistance board done? Their biggest step so far has been to put the Jackson FLB in receivership. The Jackson FLB applied for assistance. However, in looking

FIGURE 2.

FARM CREDIT SYSTEM
SPRINGFIELD DISTRICT ASSOCIATIONS



SHADED AREAS ARE RECENT MERGERS

at their situation and plan for the future, the Assistance Board was not convinced that they could pull it out. They brought in a receiver to take over the loans and the Columbia and Texas district banks agreed to provide FLB service to farmers in the three state area (Louisiana, Arkansas, Mississippi). The loans have since been sold to the Texas Farm Credit Bank.

The Assistance Board has authorized two assistance bond sales. These have been sold by the Funding Corporation, while wearing their Assistance Corporation hat. In July, they sold $450 million of 15 year assistance bonds at 9.34 percent interest. The rate was quite good; only 33 basis points over 10 year treasuries. In November, they sold $240 million at 9.45 percent, which was 39 basis points over 10 year treasuries. The bonds sold in the latter sale had a 10 year call provision, which the Assistance Corporation estimated cost them only 10 to 12 basis points. With total sales to date of only $690 million, and the improvements that are taking place in the System, it is not likely that the System will use anywhere near the $4 billion that is authorized unless the System receives another severe shock from something like a continued widespread drought or general downturn in the agricultural economy.

The System is expected to repay the assistance bonds. In general, the principal will be repaid by the borrowing banks. The interest will be shared. The federal government will pay the interest for the first five years and half the interest for the second five years. The System will pay half the interest the second five years and all the interest for the final five years.

To date funds have been used to support the banks as shown below:

Jackson	$45+ M
Louisville	$90 M
Omaha	$110 M
St. Paul	$133 M
Spokane	Redeem Stock
Refund Assessments on Healthy Banks	$160 M

Use of the funds varies between banks. One of the stipulations of the 1987 Act was that existing stock (or stock purchased before October 6, 1988) was guaranteed. Some funds have been used to complete repayment on stock where the association could not do so. A major use has been to buy down high cost debt. Some banks held a major interest in some long term high interest rate bonds that raised their cost of capital such that they could not be competitive on rates. Buying down the rates has allowed them to be competitive. This has been particularly important for Omaha and Louisville.

One of the tenets of Congress in the 1985, 1986 and 1987 laws was that the System should help itself to the degree possible. Thus, the healthy banks were assessed to help the less healthy ones. Springfield Banks and Associations were among those assessed. The healthy banks have argued that this could imperil their health, particularly when a large amount of funds were assessed as a lump sum. It was agreed that much of

the assessments paid in prior years would be refunded and healthy institutions would contribute over time as funds were needed and assistance bonds sold. That is why $160 million of assistance bond sales were used to refund a large part of the original assessments. This delays the impact on the healthy institutions and may even reduce the amount they contribute if the total funds required are less than expected.

Financial Condition

Lets first look at the financial condition of the complete Farm Credit System. One frequently used measure of the quality of a loan portfolio is the level of nonaccrual loans. Nonaccrual loans are those on which the lender is not now receiving interest and expects that (s)he may never receive interest. The level of nonaccrual Federal Land Bank (FLB) (long term real estate) loans in the Springfield and Baltimore districts is low and has been throughout the 1984-88 period (Table 1). However, some of the other districts had, and still have, very high nonaccrual levels. It is easy to see that the Jackson district had the most problems. The Texas district, which has been the third healthy bank throughout the period of serious System problems, has suffered some increase in nonaccruals recently. A major part of this is likely due to problems in the gas and oil industry. Overall, for the entire System, nonaccruals have been declining modestly during 1987 and 1988.

Table 1. Nonaccrual Loans
Federal Land Banks, December 31

District	1984	1985	1986	1987	6/30/88
	----------Percent of Loans[a]----------				
Springfield	1.3	.6	2.9	1.5	1.1
Baltimore	.8	1.4	2.3	1.7	1.3
Columbia	1.1	4.3	10.6	7.8	8.1
Louisville	1.6	11.0	14.9	12.7	10.0
Jackson	3.3	5.8	18.6	22.5	20.8
St. Louis	2.4	9.2	16.2	16.2	14.6
St. Paul	2.7	11.7	18.5	17.1	16.1
Omaha	1.7	12.3	17.8	13.4	8.8
Wichita	3.2	11.0	16.7	11.7	10.6
Texas	.0	.1	3.6	2.9	4.5
Sacramento	1.9	4.9	8.4	10.5	12.7
Spokane	2.6	9.0	20.7	16.2	15.5
All	2.0	8.1	14.0	12.1	11.2

a/ Percent of gross loan items.

Source: Annual Reports, Farm Credit Administration for Annual Data. Summary Report of Condition and Performance of the Farm Credit System, quarter ended June 30, 1988, Farm Credit Corporation of America for 6/30/88 data.

The Production Credit Associations (PCA's) have not had as severe a nonaccrual problem as the FLB's (Table 2). Again Springfield and Baltimore have had the best record during the 1980's. Omaha and Spokane are the trouble spots. Nationally, some improvement has occurred during both 1987 and 1988.Other measures of loan portfolio quality show similar results to those indicated by nonaccrual loans (see Appendix Table A).

Table 2. Nonaccrual Loans
Production Credit Associations[a], December 31

District	1984	1985	1986	1987	6/30/88
	----------Percent of Loans[b]----------				
Springfield	.7	1.2	1.7	.6	.5
Baltimore	1.2	1.4	1.6	1.3	.9
Columbia	3.7	5.5	12.0	10.5	9.0
Louisville	7.3	8.0	9.9	8.5	5.5
Jackson	2.5	1.9	4.3	8.1	7.2
St. Louis	2.7	5.3	8.6	8.1	5.8
St. Paul	2.6	5.8	9.6	7.5	6.5
Omaha	4.8	21.9	16.7	13.1	13.2
Wichita	3.1	5.4	12.1	9.7	8.3
Texas	1.2	1.8	6.2	4.9	9.0
Sacramento	2.4	4.7	8.0	9.1	9.4
Spokane	5.1	9.6	18.0	18.8	16.6
All	3.3	6.3	9.0	7.9	7.4

a/ PCA's only. Excludes FICB.

b/ Percent of gross loan items.

Source: Annual Reports, Farm Credit Administration for Annual Data. Summary Report of Condition and Performance of the Farm Credit System, quarter ended June 30, 1988, Farm Credit Corporation of America for 6/30/88 data.

The financial status of the entire Farm Credit System may best be analyzed by looking at a summarized income statement (Table 3). The income is primarily interest income on loans to farmers and cooperatives. The major expense is interest on bonds used to obtain the funds Farm Credit lends. Operation expense includes salaries and buildings expense. The expense item I would like you to focus on is the provision for loan losses. This has been the basic cause of the net income achieved by Farm Credit. This is the amount set aside by Farm Credit to cover expected losses on loans in the portfolio. In 1985, the provision was $3.0 billion, net income was a loss of $2.7 billion. In 1986, the provision was $1.8 billion, the System lost $1.9 billion. However, in 1987 and the first three quarters of 1988, the provision was negative, indicating that losses were not quite as bad as they had expected back in 1985 and 1986.

Table 3. Net Income
Cooperative Farm Credit System

District	1984	1985	1986	1987	Jan-Sept 1988
	----------Billion Dollars----------				
Income					
Interest	9.8	9.0	7.2	5.8	4.3
Other	.2	.2	.1	.1	.1
Total	10.0	9.2	7.3	5.9	4.4
Expenses					
Interest	8.4	7.7	6.4	5.3	3.7
Operation b/	.9	.9	.8	.8	.6
Losses on Property	.0	.3	.2	.0	.2 a/
Loss loan Provision	.3	3.0	1.8	(.2)	(.5)
Total	9.6	11.9	9.2	5.9	4.0
Net Income	.4	(2.7)	(1.9)	(.0)	.4

a/ Includes $167,469 loss on debt restructuring.

b/ Includes salaries, employee benefits, occupancy and equipment expense and miscellaneous.

Source: Annual Reports, Farm Credit Administration for Annual Data. Summary Report of Condition and Performance of the Farm Credit System, quarter ended June 30, 1988, Farm Credit Corporation of America for 6/30/88 data.

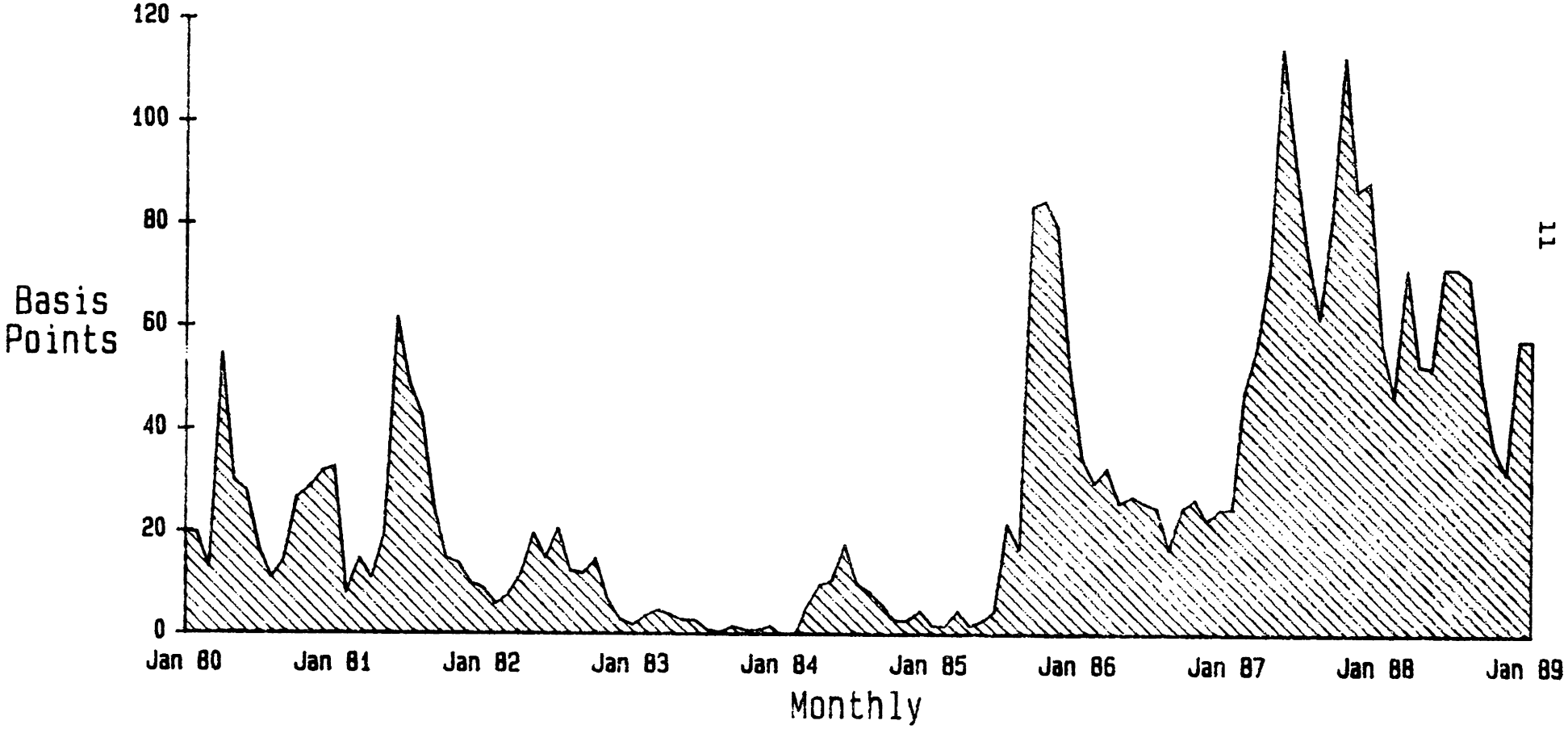
The main point in Table 3 is that income of the System is improving; the System has made considerable progress since the 1985-86 period. 1987 and the first three quarters of 1988 have been basically break-even periods. Recent press releases indicate that the performance for all of 1988 was similar to the first nine months with a net income of $0.7 billion. The modest positive income in 1988 was the result of reversal of the provision for loan losses.

Another factor reflecting and influencing the financial health of the System is loan volume. During the 1983-87 period, loan volume declined from $82 billion to $52 billion (Table 4). However, it appears that the decline has been halted. September 30, 1988 loan volume was even a little above end of 1987 levels.

The price that the System has to pay for the money it borrows in the bond market is a major determinant of System costs as well as being a barometer of investor confidence in the System. In 1983-85, before the financial problems of the System became known, the System was paying only 10 to 15 basis points (about one-tenth of one percent) over treasury

Figure 3.

Spread Between New Six-Month Farm Credit Bonds
and Treasury Bills
Farm Credit Bank Bonds Priced Between 1980-88



securities of the same term for six month bonds (Figure 3). When the seriousness of the problem became clear, the spread between treasury and Farm Credit issues rose to the 100 basis points (1.0 percent) range. Since the signing of the 1987 Act, the spread has dropped to one-third to one-half percent. The 1987 Act and occurrences since then have restored investor confidence. I expect the spread will not go below the 25-40 basis point range in the near future. The memories of agricultural and Farm Credit problems are likely to keep rates from falling into that 10-15 basis point range anytime soon. However, Farm Credit is currently getting its funds at a very favorable rate.

Table 4. Farm Credit System
Loan Volume, December 31

Year	United States	Springfield District[a]
	----Loans to Farmers and Cooperatives (Bil $)----	
1980	69	1.57
1981	78	1.77
1982	80	1.89
1983	82	1.88
1984	80	1.84
1985	70	1.77
1986	58	1.53
1987	52	1.48
1988 (Sept. 30)	53	1.58

Year	United States		Springfield District	
	Bil $	Market Share (%)	Mil $	Market Share (%)
	----------Loans to Farmers Only----------			
1984	67.9	31	912	30
1985	59.2	29	844	29
1986	48.8	26	715	27
1987	41.7	25	691	28

[a] Excludes loans participated to Central Bank for Cooperatives and other banks.

Source: Annual Reports, Farm Credit Administration; Annual Reports, Farm Credit Banks of Springfield; ERS/USDA.

What is happening to Farm Credit in the New York State area? The nonaccrual data showed the Springfield district, which includes this area, to be in very good shape (Tables 1 and 2). Table 5 presents net income data for Springfield similar to that shown in Table 3 for the U.S. The net income in quotations marks is net income from operations in the Springfield district before considering the assistance provided by Springfield to other

banks in the System that were having problems. Net income has been positive throughout the 1984-88 period. There has been some decline in income in recent years but it is still positive. Financial assistance provided a considerable draw on net income in 1985 and 1986. However, some of that was returned in 1988. Remember our earlier discussion of the use of assistance funds where we said about $160 million of these funds had been used to refund assistance from healthy banks? Well, in 1988, Springfield received about $26 million of those funds. However, they had to return about $10 million of that in the form of assistance corporation stock purchases and debt obligations. The $10 million is their share of the assistance funds generated to the end of the third quarter. Springfield loan volume has also increased slightly in 1988 (Table 4).

Table 5. Net Income
Farm Credit Banks of Springfield

District	1984	1985	1986	1987	Jan-Sept 1988
	----------Million Dollars----------				
Income					
Interest	231	220	185	159	126
Other	8	9	7	8	8
Total	239	229	192	167	134
Expenses					
Interest	186	169	141	124	97
Operation[b]	35	37	39	38	30
Losses on Property	0 [a]	0 [a]	0 [a]	0 [a]	0 [d]
Loss loan Provision	0 [a]	2	(1)	0 [a]	0 [a]
Total	221	208	179	162	127
"Net Income"	18	21	13	5	7
Financial Assistance	0	7	46	0	(16) [c]
Net Income	18	14	(33)	5	23

a/ Less than .5 percent.
b/ Includes income taxes.
c/ Includes financial assistance corporation stock purchases and debt obligations.
d/ Included in operation expenses.

Source: Annual Reports, Farm Credit Administration for Annual Data. Summary Report of Condition and Performance of the Farm Credit System, quarter ended June 30, 1988, Farm Credit Corporation of America for 6/30/88 data.

The overall perception one gets from looking at the data on accruals, net income and loan volume is that the Farm Credit System has turned itself around. Loan quality is improving, the large losses have been stemmed and loan volume has stopped its precipitous decline. However, a number of the districts still have a large number of problem loans in their portfolios, and thus, considerable work yet to do. They are beginning to see a little light through the trees, but have a long way to go before they are out of the woods. Fortunately for farmers in this area, Springfield has been one of the two healthiest banks in the System.

Farmers Home Administration

The other agency that received a lot of print in the Agricultural Credit Act of 1987 was the Farmers Home Administration (FmHA). The quality of FmHA's portfolio for the four major farm programs has deteriorated significantly over the past few years (Table 6). The data include all borrowers who are delinquent, which is a somewhat broader category of problem loans than the nonaccrual loan category that we looked at for Farm Credit. Since 1980, delinquencies have increased from the 10 to 20 percent range to the 20 to 50 percent range. Delinquencies are particularly high for the two emergency loan programs.

Table 6. Borrowers Delinquent[a/]
Farmers Home Administration
United States, September 30

Year	Farm Ownership	Operating Loans	Disaster Emergency	Economic Emergency
	----------Percent of Borrowers----------			
1980	8	21	19	9
1981	10	23	18	18
1982	14	26	31	33
1983	18	28	40	40
1984	20	31	38	43
1985	21	29	39	43
1986	22	31	39	45
1987	23	34	39	45

a/ Payments more than 15 days past due.

Source: A Brief History of the Farmers Home Administration, USDA. February 1988.

New York FmHA experience has been similar to that which occurred at the national level (Table 7, top). Again, the emergency loans have the highest delinquency rates. When you look at the percent of loan volume, rather than the number of borrowers (Table 7, bottom), it becomes clear

that larger emergency loans have the most problems. Over half of the emergency loan volume is delinquent.

Table 7. Borrowers Delinquent
Farmers Home Administration
New York State, September 30

Year	Farm Ownership	Operating Loans	Disaster Emergency	Economic Emergency
		----------Percent of Borrowers----------		
1985	21	23	30	33
1986	22	26	33	36
1987	23	29	33	39
1988	25	33	36	44
		----------Percent of Loan Volume----------		
1985	24	18	47	45
1986	25	21	51	47
1987	28	24	51	52
1988	29	27	53	55

Source: Farmers Home Administration, Report Code 616.

One thing that you must remember in looking at these numbers is that FmHA has been legally constrained from foreclosing since the initiation of the Coleman vs. Block (later Coleman vs. Lyng) case in 1983. This has been a considerable handicap. Borrowers who could not pay everyone chose not to pay FmHA because they knew FmHA could do nothing about it. It also led some people to intentionally not pay their FmHA loans. Those of you from other institutions, just think about what your portfolio might look like if you had not been able to foreclose or even threaten foreclosure for the last six years. It may have deteriorated also!

Loan Servicing Program

The loan servicing program that was specified in the 1987 Act and which FmHA started late last year is an attempt to clean up the portfolio. The agency is bending over backward to help any of their borrowers that can be helped and give them every possible opportunity to succeed. However, if those efforts do not succeed, it also gives FmHA the right to follow through the normal legal procedures to get the bad loans off their backs. It is a very complex program. They have a number of tools that were not available before, such as write down of loans, sell back of homestead and lease back of house. Each borrower who requests consideration under this program must be considered for a large number of options, including:

(1) consolidation, restructuring and reamortization of loans, (2) low interest rates, (3) loan deferral, (4) write-down, possibly to net recovery value of the loan to FmHA, (5) sell-back or lease-back of homestead, and (6) sell-back or lease-back of entire farm. The cash flows that would be generated under the various options and the net recovery value of the collateral must be calculated for each loan.

One good aspect of this program is that it appears that it may not be stopped legally - at least it passed the first legal hurdle. Judge VanSickle of North Dakota, who has been blocking foreclosure since 1983 in response to Coleman vs. Block and Coleman vs. Lyng lawsuits, has dismissed the case (with some encouragement from the appeals court) and indicated that he "fail(s) to find that the notices are defective." The FLAG (Farmers Legal Action Group) that brought the suit has conceded that the case is as good as finished.

In the U.S., FmHA sent out 79,000 loan servicing letters. About 8,000 were undeliverable and 35,000 responded. A large proportion of the nonrespondents are likely out of business, in bankruptcy or at a point where they know that loan servicing will not do them any good. Because FmHA could not foreclose, they have not been able to clean-up these cases for a number of years. In New York State, 1,450 letters were sent out; to date they have received about 400 usable responses. They define a usable response as one where they have an actual business and some numbers that they can evaluate to determine what they can do for the farmer.

FmHA is currently receiving some flack about their handling of the servicing program. In the law, Congress stated that farmers were to be given 45 days to respond to the servicing letters and then FmHA was given 60 days to respond to the farmer. FmHA realized that in order for them to respond in 60 days, they would need the data on the farm business at the time of the farmers response, and thus, this was a required part of the response. In recent hearings before, and discussions by, the Senate Agricultural Credit subcommittee, considerable concern about the 45 day response period was expressed. Farmers complained that the 45 days was too short for such a complex request, it occurred over the holidays, and FmHA was being too stringent in enforcing the 45 day rule. Some congressmen said they only expected the farmer to have to say yes, (s)he is interested, or no within the 45 days. Of course you can imagine the problem that FmHA would have had in getting the data to do the analysis within 60 days if all the farmer had to say in his/her response was yes or no. At a minimum, it appears that FmHA will be lenient in enforcing the 45 day response deadline. There is also the possibility that FmHA will be forced to send another letter to nonrespondents to give them a second chance to respond. There are also numerous opportunities for a borrower to appeal most any decision made by FmHA.

There have also been a few complaints about the DALR$ computer program that FmHA developed to evaluate the alternatives for borrowers. I do not know much about the program, but a real problem that they are sure to have will be the quality of the data input. The results could be very sensitive to the estimates farmers presented.

GAO Report

Many of you have probably heard about the General Accounting Office (GAO) audit of FmHA. Many of the papers have carried the headlines that FmHA had losses of $22 billion to $36 billion. GAO was quoted as saying that the problem would require a bailout somewhere between Farm Credit's $4 billion and the savings and loans $100 billion.

Unfortunately, GAO's opinion is based on complete misinterpretation of a small amount of information. They have a bad habit of trying to draw major conclusions from very little data. To begin with, the total agricultural portfolio is only $26 billion. They tried to do an audit like that which would be done for a corporation. Of course FmHA is not a corporation and FmHA and the Congress do not act like a corporation. So their calculation of the need for a $15 billion provision for loan losses to cover loan losses that they think are going to happen is inappropriate. The government does not pay losses until they occur. Also, much of the loss is planned. When Congress establishes low interest rate loans to farmers and subsidized (down to one percent interest) rural housing loans, a loss is planned. Someone has to pay the difference between the rates charged and the cost of funds to the government. Each year Congress appropriates funds to cover administrative expenses and losses, planned and unplanned. The 1988 amount was $8.7 billion. Somewhat higher levels will likely be needed in the future, maybe $9 - $11 billion. However, that is not a major change from what has been happening in the past and what everyone was expecting for the future. In summary, the GAO report should be ignored.

The Future

One of the major problems that FmHA has is political proximity; the political process is too close to the loan decision. Any loan decision still requires considerable judgement. We have not been able to develop mechanical methods of evaluating loans. Thus, it is impossible to completely document a loan decision statistically.

If the political process can exert enough pressure to overturn loan decisions, the loan analysis process breaks down. Many FmHA loans were put on in the late 1970's with a lot of political pressure on FmHA. Good County Supervisors had "no" decisions overturned and they, and others, rapidly learned the correct decision to make. That is a major reason for our current FmHA problems. Loan decisions can not be political decisions. FmHA might be able to be responsive and still provide the necessary insulation from politics that supervisors need if state directors were government employees rather than political appointees. But, until something is done, attempts to be responsive to the people still have the potential to interfere with good loan decisions.

FmHA is likely to continue to push guaranteed rather than direct loans, at least with the current administration. In general, I think that is good. With a guaranteed loan, a commercial lender must think the loan is sound enough to be willing to take 10 percent of it and the loan process helps the borrower develop a working relationship with a commercial lender, which can ease the graduation process. It is particularly good for the

emergency loan programs. If these programs are kept, it might be good to make them guaranteed only. I personally believe that to maintain a healthy structure of agriculture some direct lending for Farm Ownership (FO) and Operating Loan (OL) programs would be appropriate. However, supervisors have to be allowed to make sound lending decisions and the current political proximity may make that impossible and, thus, force guaranteed loans for all programs.

FmHA has a large number of programs. I believe that some of them are worthy of keeping. For example, over the past 50 years or so, the FO and OL programs have been quite successful and made a contribution to agriculture. FmHA should not be treated as if they have only one program for agriculture. Doing away with FmHA could easily represent throwing the baby out with the bath water.

One final point along these lines: FmHA is not a small program. FmHA has $26 billion lent to farmers in the U.S. and $500 million in New York. Market shares are 15 and 20 percent, respectively (Table 8). Doing away with FmHA, as Reagan has suggested, would cause problems for a number of real people. It would take time and would be a major adjustment process.

Table 8. Farmers Home Administration
Farm Loan Volume, December 31

	United States		New York State	
Year	Bil $	Market Share (%)	Mil $	Market Share (%)
1984	25.7	12	521	17
1985	27.5	14	535	18
1986	26.8	14	519	20
1987	26.1	15	501	20

Commercial Banks

Nonaccrual loans at commercial banks rose considerably during 1985-86 but did not get to quite as high levels as was experienced by Farm Credit (Table 9). Since the data in Table 9 are for nonreal estate loans, the appropriate comparison is with PCA nonaccruals (Table 2). The turn-around occurred in 1987 with considerable improvement experienced by 1988.

One rule that seems to be followed by this country is that large institutions are not allowed to fail. We bail-out large institutions such as Chrysler, Continental Bank and the Farm Credit System. However, small institutions are allowed to fail. Many of the banks serving agriculture in the midwest and south are small - so they are allowed to fail. The failure of agricultural banks reached a high of nearly 70 banks per year during the 1985-87 period. However, this too turned around in 1988 with only about half as many failures (Table 10). An agricultural bank is defined as

having more than the U.S. average proportion of its loans in agriculture; in September 1988 this was 16 percent.

Table 9. Nonaccrual Farm Nonreal Estate Loans
United States Commercial Banks, September 30

Year	Percent of Farm Loan Volume
1983	2.3
1984	3.8
1985	5.6
1986	6.2
1987	4.8
1988	3.4

Source: Agricultural Finance Databook.

Table 10. Failures of Agricultural Banks
United States

Year	Number
1981	1
1982	11
1983	7
1984	32
1985	68
1986	65
1987	69
1988	36 a/

a/ Preliminary.

Source: Agricultural Finance Databook.

Charge-off's of agricultural loans by commercial banks were well over $1 billion per year in 1985 and 1986 but have since declined to nearly acceptable levels (Table 11). Note that the rate of loss got as high as 3.4 percent. That means that 3.4 percentage points of the nine to 12 percentage points charged for interest had to be used to pay loan losses. Losses are now in the 0.5 percentage point range.

Table 11. Net Loan Charge-Off's
United States

Year	Farm Credit System[a]	Commercial Banks[b]
	-------Million Dollars-------	
1984	427	900
1985	1,105	1,300
1986	1,273	1,200
1987	461	502
1988 (1st half)	85	67
	-------Percent of Loan Volume-------	
1984	.5	2.3
1985	1.5	3.3
1986	2.0	3.4
1987	.8	1.6
1988 (1st half) Annual Rate	.3	.5

a/ Percent of loan volume based on average of beginning and end of year loan volume. Annual Reports, Farm Credit Administration for Annual Data. Summary Report of Condition and Performance of the Farm Credit System, quarter ended June 30, 1988, Farm Credit Corporation of America for 6/30/88 data.

b/ Nonreal estate loans only. Agricultural Finance Databook,January 1989.

One point that I would like to make is that the banks have been through the same wringer as the Farm Credit Service. Their losses were higher both in terms of absolute dollars and as a percent of their agricultural loan volume than was experienced by the Farm Credit System (Table 11). How were they able to handle it without a bailout? They have a more diverse portfolio. They have loans to consumers and other industries that were able to help pay the losses, just like agriculture helped pay for losses in other parts of the portfolio during the late 1970's and very early 1980's. Clearly being a single industry lender contributed to the severity of the problems experienced by Farm Credit during the mid 1980's.

Commercial bank agricultural loan volume declined during the 1984-87 period, but not nearly as rapidly as occurred for the Farm Credit System (Table 12). In fact, volume declined less rapidly than total farm debt so that commercial bank market share actually increased modestly in both the U.S. and in New York State.

Table 12. Commercial Banks
Farm Loan Volume, December 31

Year	United States		New York State	
	Bil $	Market Share (%)	Mil $	Market Share (%)
1984	49.9	24	787	26
1985	46.9	22	725	26
1986	43.9	24	782	28
1987	43.5	26	723	29

New York banks, like Springfield Farm Credit Service, did not experience the severity of problems in agriculture that was experienced in the midwest. Lenders at both institutions had a number of farmers with problems and dealt with considerable farm stress. However, most of these problems were not so severe that they ended up with large losses to the lender. Most of the losses have been borne by the farmers and FmHA. There are a number of reasons for this. First, many commercial lenders cleaned up their portfolio during the late 1970's and early 1980's when FmHA was lending heavily. Thus, many of the most risky situations were in the FmHA portfolio. Second, the problems hit New York later than the midwest so lenders were forewarned. Third, and most importantly, the prices of the major New York commodities (milk, fruit, vegetables) did not fall as far nor as fast as those on which the midwest depends (corn, soybeans, wheat) and land prices continued to rise modestly rather than falling sharply.

Farmer Mac

One of the interesting developments from the Agricultural Credit Act of 1987 was the authorization of a secondary market for agricultural real estate mortgages, commonly referred to as Farmer Mac. This was pushed by the commercial banks and insurance companies and was in a sense (politically) part of the price Farm Credit had to pay to get the things they wanted in the Act.

The objective of this program is to provide long term funding, including fixed rate loans, to farmers by allowing such loans to be pooled and sold to investors. This makes a lot of sense for commercial banks. Much of their funding is from short term deposits. They do not like to lend long for liquidity reasons and long term fixed rates would expose them to considerable interest rate risk. Farmer Mac makes it possible for them to provide a complete package of funding to a farmer, including short, intermediate and long term credit, without taking the interest rate risk. They make the shorter term loans from their own funds and sell the longer term loans to Farmer Mac. In this process they pass the interest rate risk on the long term loan on to the financial market and can hedge or match fund the shorter term loans. They can make fee income on them all.

The Farm Credit System may also find Farmer Mac more useful than they originally thought. They have generally had a relatively modest amount of really long term bonds. It may be much easier for them to use Farmer Mac for long term loans, particularly long term fixed rate loans, then to try to match fund or otherwise handle the interest rate risk directly.

Organization

Loans qualifying for Farmer Mac include farm real estate loans and loans on rural houses with a purchase price (as adjusted for inflation) of $100,000 or less. The organizational structure of Farmer Mac is illustrated in Figure 4. Loan originators are the institutions who normally make loans to farmers (i.e., banks, insurance companies, Farm Credit offices, etc.). The originators make the loans, sell all or part of the loans to a certified facility and then service the loans.

The poolers, which are referred to as certified facilities because they have to be certified by Farmer Mac before they are allowed to pool, buy loans from the originators and form them into pools. They then get the pools guaranteed by the Farmer Mac Corporation (Federal Agricultural Mortgage Corporation) and sell securities backed by the pools (interests in the pools) to investors. The pooler receives loan payments and makes payments to the investors. They must also establish, possibly with help from the originators, a reserve fund equal to 10 percent of the loan volume.

The Federal Agricultural Mortgage Corporation is run by the Farmer Mac Board made up of five representatives of the Farm Credit System, five representatives from banks and insurance companies, and five public members appointed by the President. The five public members have been appointed although the democrats do not like one of the democrats Reagan chose, Professor Bensten of Emory University. They may force his replacement if Bush goes through with his apparent plans to replace the current chairman of the board with former senator Karnes from Nebraska. The other 10 board members are to be chosen at the March 2nd stockholders meeting.

The board; (1) sets loan standards and rules for the entire Farmer Mac procedure, (2) approves certified facilities, and (3) guarantees (ensures payment) of loan pools. For their guarantee, they can charge up to .5 percent of the loan volume to cover expenses and losses on pools. If these funds are insufficient to handle Farmer Mac losses, they have a $1.5 billion standing line of credit at the U.S. Treasury.

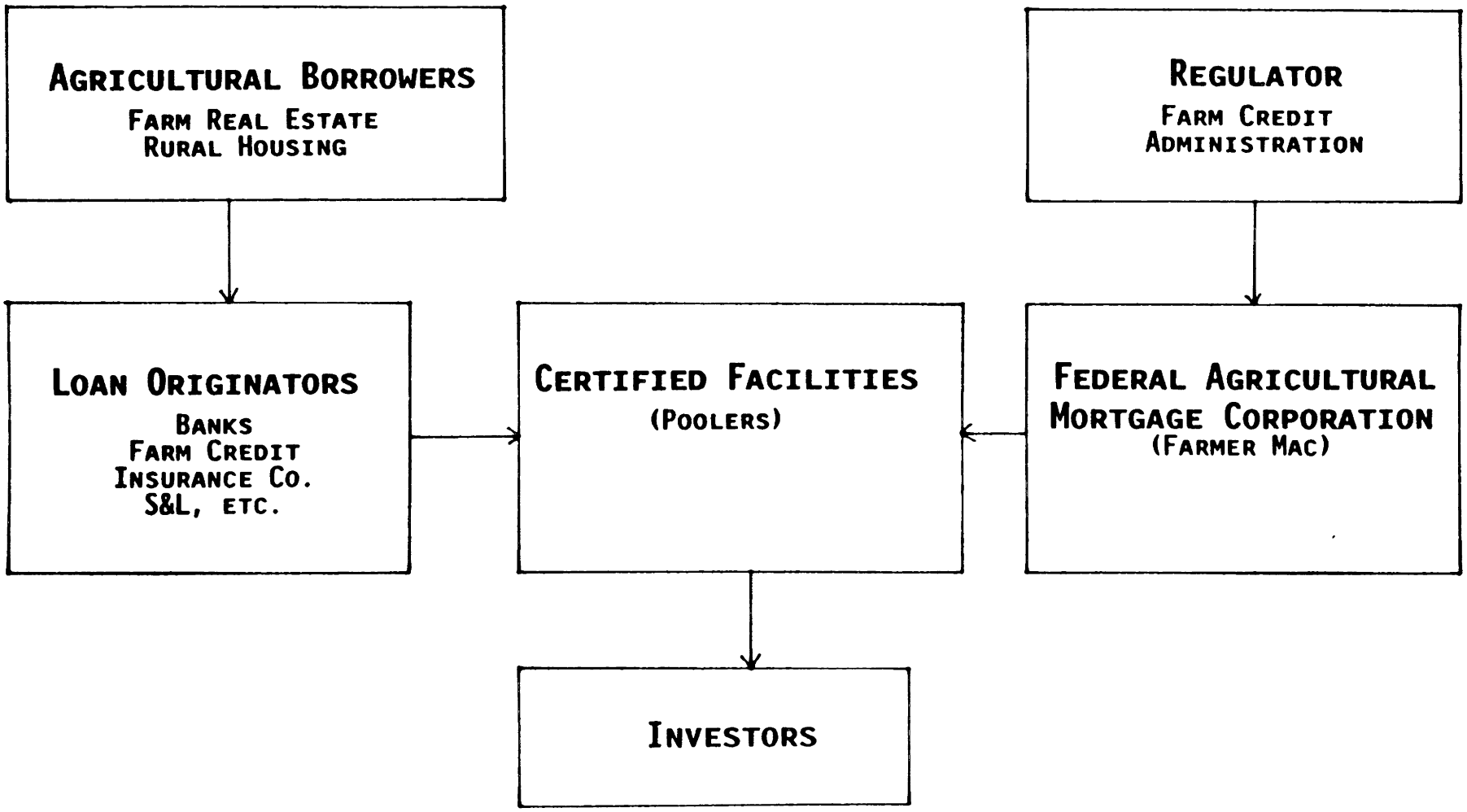
The investors are the same kinds of people who buy Farm Credit bonds. However, they will be people or institutions primarily interested in long term investments.

The regulator for Farmer Mac is the Farm Credit Administration. FCA is responsible for insuring safe and sound operation of the program. They have not done much yet because the System is not yet off the ground.

The first step in the formation of Farmer Mac was the sale of stock in the Farmer Mac Corporation. 500,000 shares of class A stock were

Figure 4.

FARMER MAC
Secondary Market for Agricultural Loans



offered to banks, insurance companies and other non-Farm Credit System institutions. 500,000 shares of class B stock were offered to Farm Credit institutions. The stock sale was held in November and all stock was sold with some over-subscription of class A stock. Ownership of stock is required for an institution to be an originator or a pooler. Thus, the people who will be participating in the program originally are those who purchased stock last November.

The Future

Much has to be done before Farmer Mac starts operations. The permanent board will be selected at the March 2nd stockholders meeting. The board must then establish the underwriting (loan) standards for Farmer Mac loans and their rules and regulations for originators and poolers. The interim board has started this process but it is a very difficult task. After that the poolers and originators must establish their procedures. They are, of course, working on them now, but they can not make final decisions until they know what standards the board is going to set. Given the size of the task, we will be lucky if any loans are sold to investors in 1989.

There are still a number of issues or possible stumbling blocks for Farmer Mac. A number of people are not convinced it will fly. The first issue is the character of the underwriting standards. The standards need to be high, but not so high that no loans qualify. Given the highly publicized problems of the Farm Credit System and agriculture, investors need to be convinced that the loans are good. However, investors are protected at a number of levels. First, all loans are backed by first mortgage security in farm real estate with a maximum loan to value ratio of (up to) 80 percent. Second, if the real estate value does not cover the loan, the reserves equal to 10 percent of the entire pool that the pooler must maintain would be used. Third, if the pooler reserves are insufficient, the Farmer Mac Corporation will use the proceeds from the sale of Farmer Mac stock and the guarantee fees collected. Fourth, if all else fails, Farmer Mac can draw upon a $1.5 billion line of credit at the treasury. Certainly investment in these pools is a safe investment! It is hard to imagine the set of circumstances that would lead to nonpayment of investors.

A related issue is whether Farmer Mac rates will be competitive. Many people have been assuming that the rates paid to investors would be similar to the rates paid on Federal Farm Credit Bonds. Some wonder if a new market penalty will be assessed by investors. The 10 percent reserves and 0.5 percent guarantee fee add to costs. We have a number of people involved (originator, pooler and investor), all of whom expect to make money. At this point, I expect the rates charged farmers will be similar to Farm Credit rates but will not represent a new lower cost source of capital.

Other Lenders

Insurance Companies have not been active lenders in the Northeast and I do not expect that to change. John Hancock of Boston will be a pooler but I am not convinced they will do more loan originating in the northeast than they have in the past. They may buy more loans for pools, but the loans will likely be originated by other existing lenders.

Dealer Financing may become more important, particularly if Farm Credit and banks get real conservative with their lending standards. Companies like John Deere, Purina, Farmland, and what was Massey Ferguson's Ag Acceptance Corporation with possible help from Rabobank are ready to step in with full season point-of-sale lending if it looks like they can make some money. They have used point-of-sale credit as a sales tool for years. They are looking at it more and more as a profit center.

Interest in **leasing** for many assets has declined with recent changes in the tax laws. In the analyses that we have done over the past 15 years there have been relatively few cases where a straight profitability analysis for an average farm situation has shown an advantage for leasing. The relative cost of leasing is a question of rate and risk. Any leasing company could offer a lease at a competitive rate or use it as just another way to lend money. However, until they decide to do that, leasing will be a niche business used primarily on farms with particular tax or asset ownership characteristics and with farmers who place personal limits on credit arrangements.

Table A1. Volume of Net Loan Charge-Off's
Federal Land Banks and
Federal Land Bank Associations

District	1985	1986	1987
	----------Million Dollars----------		
Springfield	.0	.4	.5
Baltimore	4.9	.7	.2
Columbia	24.8	44.0	-10.9
Louisville	58.1	96.4	19.3
Jackson	47.1	103.4	37.7
St. Louis	40.6	56.2	36.5
St. Paul	107.7	202.1	52.8
Omaha	134.7	223.1	81.9
Wichita	63.6	143.3	74.8
Texas	.1	2.8	-.7
Sacramento	15.5	42.7	43.4
Spokane	13.3	41.9	65.2

Source: Annual Reports, Farm Credit Administration for Annual Data. Summary Report of Condition and Performance of the Farm Credit System, quarter ended June 30, 1988, Farm Credit Corporation of America for 6/30/88 data.

Table A2. Volume of Net Loan Charge-Off's
Federal Intermediate Credit Banks and
Production Credit Associations

District	1985	1986	1987
	----------Million Dollars----------		
Springfield	2.8	1.6	-1.1
Baltimore	4.2	1.8	.2
Columbia	43.7	30.6	-16.4
Louisville	48.8	25.8	4.8
Jackson	17.8	7.2	2.3
St. Louis	12.9	8.5	2.8
St. Paul	101.9	82.4	3.8
Omaha	164.2	65.2	3.9
Wichita	23.1	25.1	8.6
Texas	4.4	14.9	14.7
Sacramento	68.2	61.4	27.7
Spokane	29.9	14.5	4.2

Source: Annual Reports, Farm Credit Administration for Annual Data. Summary Report of Condition and Performance of the Farm Credit System, quarter ended June 30, 1988, Farm Credit Corporation of America for 6/30/88 data.

Table A3. Rate of Net Loan Charge-Off's
Federal Land Banks and
Federal Land Bank Associations

District	1985	1986	1987	1st half 1988
	-----Percent of Loans[a]-----			Annual Rate
Springfield	.0	.0[b]	.1	.0[b]
Baltimore	.2	.0[b]	.0[b]	.1
Columbia	.5	1.0	-.3	.2
Louisville	1.4	2.8	.7	.2
Jackson	1.7	5.0	2.2	3.4
St. Louis	.8	1.4	1.1	.7
St. Paul	1.5	2.2	1.0	1.3
Omaha	2.4	4.8	2.1	-.5
Wichita	1.3	3.5	2.2	2.6
Texas	.0[b]	.1	.0[b]	1.4
Sacramento	.3	1.0	1.1	.6
Spokane	.4	1.3	2.3	-1.8

[a] Percent of end of year FLB gross loans.

[b] Less than .05.

Source: Annual Reports, Farm Credit Administration for Annual Data. Summary Report of Condition and Performance of the Farm Credit System, quarter ended June 30, 1988, Farm Credit Corporation of America for 6/30/88 data.

Table A4. Rate of Net Loan Charge-Off's
Federal Intermediate Credit Banks and
Production Credit Associations

District	1985	1986	1987	1st half 1988
	-----Percent of Loans[a]-----			Annual Rate
Springfield	.4	.3	-.2	.0
Baltimore	.6	.2	.0	.1
Columbia	3.1	3.0	-2.0	-.4
Louisville	3.6	2.6	.6	.0
Jackson	2.8	1.3	.5	-.3
St. Louis	1.3	1.2	.5	.8
St. Paul	3.7	3.8	.2	.5
Omaha	12.6	9.8	.8	-6.2
Wichita	2.3	3.7	1.6	.5
Texas	.3	1.4	1.5	1.8
Sacramento	2.3	2.6	1.4	.2
Spokane	3.6	2.7	1.0	-15.6

[a] Percent of PCA gross loan items plus FICB gross loan items minus FICCB loans to PCA's.

Source: Annual Reports, Farm Credit Administration for Annual Data. Summary Report of Condition and Performance of the Farm Credit System, quarter ended June 30, 1988, Farm Credit Corporation of America for 6/30/88 data.

Other Agricultural Economics Staff Papers

No. 88-19	Developing a Spatially Referenced Soil Quality Database for Land Use Research	M. Kelleher N. Bills
No. 88-20	Robert Smock and the Diffusion of Controlled Atmosphere Technology in the U.S. Apple Industry, 1940-1960	J. Love
No. 88-21	A Bioeconomic Model of Pollution and Resource Management	J. Conrad
No. 88-22	Economics and the Risk from Low Level Radioactive Waste	J. Conrad
No. 88-23	Italian Wine in the U.S. Market, A Case Study of Cantine Riunite	A. Segre G. White
No. 88-24	Utilizing a Geographic Information System to Develop an Agricultural Land Use Database	M. Kelleher N. Bills
No. 89-1	Using Strategic Planning to Formulate Future Business Opportunities	G. White
No. 89-2	Some Thoughts for the Farm Financial Standards Task Force	E. LaDue
No. 89-3	An Overview of the 1988 Rural Household and Farm Energy Use Survey	N. Bills M. Kelleher
No. 89-4	An Overview of Dairy Policy Options	A. Novakovic
No. 89-5	Changes in Farm Size and Structure in American Agriculture in the Twentieth Century	B. Stanton
No. 89-6	Testimony Concerning the Proposed Northeast Interstate Dairy Compact	B. Anderson B. Henehan A. Novakovic W. Wasserman