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**FmHA LENDING IN A PERIOD OF FINANCIAL STRESS:
AN EXAMINATION OF FARMER PROGRAM LENDING
DURING THE 1980s**

David Trechter & Deborah Meiselman

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FmHA LENDING IN A PERIOD OF FINANCIAL STRESS:
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DURING THE 1980s

David Trechter and Deborah Meiselman

For nearly fifty years the Farmers Home Administration (FmHA) and its predecessor agencies have been the lender of last resort in agriculture. As lender of last resort, FmHA farmer loan programs have facilitated the entry of new farmers into the sector, helped farmers adversely affected by economic or natural disasters, and "graduated" viable farming operations to private lenders.

The recent economic downturn in the farm economy has focused attention on agricultural finance issues. Farmers and their lenders are both experiencing the financial consequences of this downturn. The performance of FmHA during times such as these is particularly important in light of the functions they are mandated to perform. This paper will examine trends in several aspects of FmHA activities during the 1980s, including: annual lending levels, total debt outstanding, lending to initial applicants at FmHA, delinquencies, write-offs and the Administration's recent Farm Credit Initiative. To provide a context for FmHA lending activities, similar measures of the Farm Credit System (FCS) will, where appropriate, be examined. The purposes of the paper are to bring together data measuring recent FmHA activities, to examine the agency's response to the financial stress now affecting agriculture, and to contrast FmHA's performance with that of the FCS.

The paper is organized into four parts followed by a summary. In the opening section, trends in the level of FmHA activities will be examined at national, regional and program levels. A comparison of FmHA and FCS activities at the national and program levels will be made. In the second part, national, regional and program level trends in four measures of FmHA performance (loans to initial borrowers, delinquencies, property acquisitions and write-offs) will be examined. Again, FmHA's experience at national and program levels will be compared to similar figures for FCS. The third portion of the paper summarizes the performance of the Farm Credit Initiative (FCI) enacted last fall and the fourth examines FmHA performance in Iowa.

Recent Trends in the Agricultural Sector

The financial difficulties facing agriculture are familiar to most observers of the sector. Average U.S. land prices fell by roughly 20 percent between April, 1981 and April, 1985, and declines

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in the Northern Plains, Lake States and the Corn Belt were much greater. In some states, Iowa for example, prices have declined nearly 50 percent from their 1981 levels.\1 Melichar reports net disinvestments in machinery and motor vehicles in each of the past five years, with a total decrease of \$23.5 billion during this period.\2 Low prices prevailing in most commodity markets have reduced the value of inventories of crops and livestock held by farmers. In addition, even though total farm debt has declined from 1983 levels, it is forecast to be nearly \$20 billion greater in 1985 than in 1981. Therefore, relative to 1981, asset values have fallen, sector debt has increased, and, by definition, the net worth of the sector has fallen.

Net farm income for the sector has been volatile during the 1980s, ranging from a low of \$16.1 billion in 1983 to \$33-36 billion in 1984. Projections are for net farm income to be in the \$20-25 billion range in 1985. This performance is more troublesome when we consider that Federal Government expenditures to support incomes in agriculture have exceeded \$10 billion in each of the past four years.\3

Agricultural lenders have felt the declining fortunes of their farm borrowers. Melichar reports agricultural banks were 16 percent of all failed banks in 1983, 41 percent in 1984 and 63 percent during the first seven months of 1985.\4 Banks have responded by reducing the amount they are lending to agriculture (Melichar reports a \$211 million decline in loans outstanding during the first quarter of 1985 relative to 1984). This trend toward lower lending levels has been reinforced by borrowers who have sought to reduce their debt load.

The Farm Credit System (FCS), also hurt by the poor performance of the agricultural sector, recently announced a loss of more than half a billion dollars for the first nine months of 1985.\5 The FCS has also requested a \$6 billion line of credit from the Federal Government to deal with its financial crisis. Like commercial banks, the FCS has reduced its lending. In its most recent annual report, the FCS reports declines in annual lending of 2.5, 2.4, and

1. Agricultural Land Values, Outlook and Situation Summary, U.S.D.A., June 7, 1985.

2. Melichar, Emanuel, "Agricultural Finance Databook, Division of Research and Statistics, Board of Governors of the Federal Reserve, Washington, D.C., July, 1985, p. 15.

3. Included in this \$10 billion are expenditures by the Commodity Credit Corporation, Federal Crop Insurance and Farmers Home Administration. Data were drawn from the "United States Budget in Brief", various years.

4. Melichar, Emanuel, "Agricultural Banking Experience, 1984", Presented to the Committee on Agriculture, Nutrition and Forestry, U.S. Senate, March 20, 1985, pp. 67-69.

5. News Release, Federal Farm Credit Banks, Funding Corporation, New York, N.Y., October 23, 1985.

5.8 percent in real terms during 1982, 1983, and 1984 respectively.

Other major agricultural lenders, such as insurance companies and individuals and others, have reportedly reduced their lending to agriculture. The only major exception to the trend of reduced levels of lending is the Farmers Home Administration.

Level of Lending Activities

The volume of FmHA activities will be measured in terms of the number of people served by the agency, annual loan volume, and total volume of loans outstanding. Changes over time, program, and geographic regions will be considered. Discussion of FmHA programs will be limited to the four major farmer programs: Farm Ownership loans (FO), Farm Operating loans (OL), Emergency Disaster loans (ED), and Economic Emergency loans (EE). Unless otherwise noted, data will refer to fiscal years (October 1 to September 30).

To provide some context for the FmHA data, trends in FCS's total debt outstanding and annual lending levels will be discussed. This data will be disaggregated to show trends in Production Credit Association and Federal Land Bank activities. Data for the FCS are for calendar years.

Number of Borrowers at FmHA

Given the degree of financial stress reported by farmers and their lenders, the number of people borrowing from FmHA could be expected to have increased in recent years. However, as can be seen in Table 1, there has been no appreciable increase in the number of FmHA's borrowers during the past four years. However, the data in Table 1 do suggest that loan applications and the proportion of applications which were rejected or withdrawn have increased in recent years.

Annual Loan Volume - FmHA and FCS

The decade of the 1980s began with annual FmHA lending at relatively high levels. Nearly \$8 billion was lent by FmHA in 1981. As shown in Table 2, annual loan volume fell substantially in 1982 and 1983 but has rebounded somewhat in the past two years. In contrast, annual FCS lending declined constantly between 1981 and 1984, falling by a total of \$14.6 billion over the period.

Program Summary - Annual Loan Volumes - FmHA and FCS

Within the overall trend for FmHA lending, there are some interesting developments occurring at the program level. As Table 2 illustrates, the largest programs in FmHA in the early 1980s were the ED and the EE programs. Together these programs accounted for 70 percent of FmHA's direct lending in 1980 and 79 percent in 1981. In 1984 and 1985, OL lending has been the largest program within FmHA, accounting for 76 percent of total lending in 1985. The volume of lending in the OL program more than quadrupled between 1980 and 1985.

Table 1: Total Number of FmHA Borrowers, Applicants, and Proportion of Applications Rejected or Withdrawn

Date	Year			
	1982	1983	1984	1985
	Total Borrowers			
March 30,		267,107	265,322	263,381
June 30,	269,122	271,005	270,806	271,943
September 30,	270,209	271,099	273,197	278,892
December 31,	268,341	268,126	267,001	
	Total Applicants (Fiscal Year)			
March 30,		99,422	146,055	122,447
June 30,	125,319	122,748	183,184	156,987
September 30,	143,393	138,597	202,673	174,450
December 31,	33,344	50,753	40,882	
	Percent Rejected or Withdrawn			
September 30,	33	38	40	38

Source: Farm and Housing Activities Report, Farmers Home Administration, Washington, D.C., various years.

The number of OL loans also increased over the period, from 31,000 in 1980 to 76,509 in 1985.

Table 2 shows that annual lending by FLBs fell by 58 percent between 1980 and 1984. Functionally, FmHA's FO program is most closely related to FLB lending. FO lending also declined over the period, but by a smaller proportion, about 29 percent. Since 1980, loan volume at PCAs fell by \$4.4 billion. In contrast, the OL program, the closest FmHA substitute for PCA capital, increased by \$1.1 billion over this period. Thus, in the real estate market, FmHA and FCS lending patterns were reinforcing but in the non-real estate market FmHA's expansion partially offset FCS's contraction.

Lower demand and smaller average loan size help to explain the decline in real estate lending. Demand for real estate loans is weak because fewer farmers are willing to accept an increase in their debt burden. In addition, some hypothesize that potential buyers are waiting for the land market to bottom out prior to entering the market. Evidence that average loan size is declining comes from the

Table 2: Summary of Total Annual Farmer Program Insured Obligations by Program and Region (\$1,000,000)

	Year					
	1980	1981	1982	1983	1984	1985
FmHA \1	6,296	7,986	3,312	3,000	4,286	4,743
FCS \2	43,000	47,200	40,600	35,100	32,600	
Program						
Farm Ownership	926	795	658	730	659	652
Farm Operating	850	823	1,204	1,685	1,960	3,600
Emergency Disaster	2,267	5,113	1,423	566	1,052	491
Economic Emergency	2,185	1,245	0	0	599	0
Other	67	11	28	20	15	10
Fed. Land Bank	10,300	12,200	7,500	4,800	4,300	
Prod. Credit Assn.	32,700	35,000	33,100	30,300	28,300	
Region \3						
Northeast	357	254	177	145	191	188
Appalachia	708	742	359	326	503	347
Southeast	755	1,075	477	303	344	281
Delta	793	1,408	353	459	579	546
Corn Belt	816	769	521	506	1,041	1,112
Lake States	504	356	185	218	384	665
N. Plains	638	800	395	299	419	616
S. Plains	728	840	502	401	462	565
Mountain	480	252	164	190	198	259
Pacific	402	208	128	115	132	144
Other	47	25	23	19	17	20

1. Data drawn from FmHA Report No. 205, various years, and are based on fiscal years.
2. Data are for Federal Land Banks and Production Credit Associations and are drawn from Farm Credit System Annual Reports, various years and are based on calendar years.
3. Regions are composed of the following states:
 Northeast: CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT.
 Appalachia: KY, NC, TN, VA, WV.
 Southeast: AL, FL, GA, SC.
 Delta: AR, LA, MS.
 Corn Belt: IL, IN, IA, MO, OH.
 Lake States: MI, MN, WI.
 N. Plains: KS, NE, ND, SD.
 S. Plains: OK, TX.
 Mountain: AZ, CO, ID, MT, NV, NM, UT, WY.
 Pacific: CA, OR, WA.
 Other: AK, HI, PR, Western Pacific Territories, Virgin Islands

Wichita District Farm Credit Bank. Wichita reports that average loan size peaked at \$116 thousand per loan in 1981 and has fallen to \$97 thousand per loan in 1984.⁶ The smaller loan size is probably the result of several factors. Farmers who are in the market may be acquiring relatively smaller parcels. In addition, lenders are probably requiring larger down payments. Finally, because land prices have fallen, a smaller loan is required per unit of land purchased.

The smaller decline in operating credit lending by the FCS and the expansion by FmHA reflect the considerable pressure on all lenders to "go an extra mile" with their borrowers. This is partially the result of a desire to avoid large scale disruptions associated with a rapid exodus of assets (including human assets) from the agricultural sector. It also stems from the fact that many lenders have few choices. Faced with the choice of granting additional operating capital and hoping conditions improve or foreclosing and facing disposal of acquired assets in a weak market, many lenders appear to be opting for the former.

Regional Summary - FmHA Annual Loan Volumes

In addition to changes in the relative importance of programs within FmHA, there have been significant changes in the regional distribution of lending. Table 2 indicates that in both absolute and relative terms, FmHA has expanded in the Corn Belt over this period and contracted in the Southeast. In 1980, 12 percent of all lending by FmHA was done in the Southeast and 13 percent in the Corn Belt. By September, 1985, lending in the Southeast had fallen to 6 percent of the total, with 23 percent going to the Corn Belt. As of September, 1985, the Corn Belt had the highest number of total loans in all of the major farmer loan programs. Given FmHA's role as lender of last resort and the severity of the economic downturn in this region, it is not surprising that FmHA has expanded strongly in the Corn Belt.

Debt Outstanding - FmHA and FCS

Table 3 shows that the total debt held by FmHA has increased steadily since 1980. In 1980, \$18.6 billion was owed to FmHA. By September 30, 1985, \$27.6 billion was owed to the agency. The continuous increase in total debt outstanding is in contrast to annual FmHA loan obligations which, we noted, declined during the period 1980-1983 and have risen since. In 1980, FmHA held 8.3 percent of the real estate debt and 11.2 percent of the nonreal estate debt. By 1984 the comparable figures were 8.5 percent and 15.1 percent respectively.

Total debt outstanding at FCS has followed a different path. The FCS portfolio expanded very rapidly between 1980 and 1983 and has fallen since then. Attention is drawn to 1981, when the level of FCS outstandings expanded by more than 17 percent in a single year. The percentage of debt held by FCS in 1980 was 34.7 percent of the real

6. Annual Report, Farm Credit Bank of Wichita, Wichita, KS., Dec. 31, 1984, page 9

Table 3: Summary of Debt Outstanding, (\$1,000,000)

	YEAR					
	1980	1981	1982	1983	1984	1985
Outstanding Debt						
Total FmHA \1	18,577	23,034	23,777	23,872	25,233	27,609
Total FCS \2	59,300	69,700	74,200	70,000	68,800	69,224 \3
Program Summary						
FmHA						
Farm Ownership	4,685	5,242	5,724	6,200	6,799	7,449
Farm Operating	1,951	2,134	2,717	3,475	4,103	6,158
Emergency Disaster	7,454	10,681	10,713	9,850	10,020	9,862
Economic Emergency	4,487	4,976	4,624	4,347	4,311	4,140
FCS						
Fed. Land Bank	39,100	48,000	52,600	50,700	50,900	51,859 \3
Prod. Credit Assn.	20,200	21,700	21,600	19,300	17,900	17,365 \3
FmHA Regional Summary \4						
Northeast	1,164	1,341	1,384	1,389	1,404	1,469
Appalachia	1,877	2,360	2,409	2,415	2,602	2,688
Southeast	1,939	2,618	2,590	2,512	2,470	2,473
Delta	2,075	2,992	3,104	3,061	3,183	3,350
Corn Belt	2,460	3,071	3,416	3,526	4,141	4,854
Lake States	1,684	1,946	1,995	2,040	2,207	2,695
N. Plains	2,647	3,188	3,266	3,279	3,391	3,770
S. Plains	1,866	2,332	2,367	2,376	2,428	2,681
Mountain	1,624	1,802	1,817	1,825	1,832	1,984
Pacific	1,131	1,258	1,288	1,297	1,411	1,484
Other	109	125	142	150	165	181

1. Data drawn from FmHA Report No. 616, various years.
2. Data are for Federal Land Banks and Production Credit Associations and are drawn from Farm Credit System Annual Reports, various years.
3. Outstanding balance as of June 30, 1985.
4. For definition of regions, see footnote 3 in Table 2.

estate debt and 23.2 percent of the nonreal estate debt. By 1984 the system held 43 percent of the real estate and 19.1 percent of the nonreal estate market.

Program Summary - Debt Outstanding - FmHA and FCS

The level of debt outstanding grew substantially in three of the four major FmHA farmer programs. Between 1980 and 1985, debt outstanding grew by 59 percent in the FO program, 216 percent in the OL program, and 32 percent in the ED program. The EE program registered little change over the period. However, since new EE loans were made in only three of the six years considered, we would not normally expect to see a constant level of debt outstanding.

The level of debt outstanding within the FLBs grew rapidly between 1980 and 1982. Outstanding debt in 1983 and 1984 was slightly lower than the 1982 peak. FLB debt outstanding through the first two quarters of 1985 is slightly higher than the 1984 figure but is not strictly comparable because of the differences in time of measurement. PCA debt outstanding was fairly constant between 1980 and 1982 but by 1984 had fallen by \$3.8 billion dollars from the 1981 peak. It appears that PCA outstandings will decline again in 1985 based on the second-quarter figure presented in Table 3.

The differences between trends in debt outstanding at FmHA and FCS are more pronounced than was the case for annual lending levels. For example, trends in FO and FLB annual lending followed similar patterns during the period we are considering. On the other hand, debt outstanding in the FO program grew throughout the period while FLB debt grew until 1982 then began to fall. As was the case with annual lending obligations, trends in PCA and the OL program outstandings are quite different. OL debt outstanding more than doubled between 1980 and 1984 while PCAs contracted by 11 percent over the period.

Regional Summary - Debt Outstanding - FmHA

Table 3 indicates that FmHA's debt outstanding increased in most regions. In fact, in virtually every region total FmHA debt outstanding increased in every year. The Southeast is the only significant exception to this pattern since debt outstanding declined slightly between 1981 and 1985. The largest percentage increase between 1980 and 1985 was in the Corn Belt (a 97 percent increase).

Performance Measures

Thus far the paper has concentrated on measures of the level of FmHA and FCS activities. In this section performance measures will be considered. The proportion of loans granted to initial FmHA customers, the level of delinquencies at FmHA and FCS, property

acquisitions, and the amount written off by the two lenders will be discussed.

FmHA Lending to Initial Borrowers

There are at least two reasons for being interested in the proportion of funds going to initial FmHA borrowers. First, given FmHA's mandate with respect to beginning farmers, knowing the percentage of loans going to initial borrowers will give us an indication of the agency's activity in this area. Second, since FmHA is the "lender of last resort", an increase in the proportion of loans going to initial borrowers might indicate financial stress in the sector.

The task of interpreting data on initial borrowers is complicated by FmHA's definitions. A borrower at FmHA is classified as an initial or a subsequent borrower. An initial borrower is either a first-time FmHA borrower or a borrower who receives a new loan after completely repaying all previously received FmHA loans. Thus, if a farmer applies for an operating loan and is still repaying a farm ownership loan received twenty years earlier, he is classified as a subsequent borrower. It makes no difference if the farmer has relied exclusively on commercial sources of credit during the intervening twenty years. In many ways this type of borrower could be thought of as a "new" customer for FmHA. Data do not currently permit us to distinguish this type of borrower from one who uses FmHA to satisfy his credit needs on a regular basis.

Given these qualifications, the data show that the percentage of FmHA loans going to initial borrowers decreased between 1980 and 1983 and, in recent years, has returned to 1980 levels. One hypothesis consistent with this pattern is that as the farm economy began to deteriorate in the early 1980s, borrowers already on FmHA's books required additional financing. During this period commercial lenders showed considerable amounts of forbearance toward their own borrowers under financial stress. As the downturn continued, the inclination and ability of private lenders to stick with their borrowers diminished, increasing the pool of candidates for FmHA loans and thus the proportion of initial borrowers at FmHA.

The criteria by which FmHA evaluates its loan officers may have contributed to the decrease in initial borrowers. An FmHA loan officer is evaluated on the basis of the volume and quality of loans he makes. These criteria could work against initial borrowers in two ways. First, there is an incentive for loan officers to extend additional credit to questionable accounts to buy time with which to attempt to make those loans sound. Second, in periods of economic stress, borrowers with whom the loan officer is familiar and who have performed satisfactorily in the past may receive preferential treatment.

Program Summary - FmHA Initial Borrowers

In looking at the experience within the major farmer programs, we see that over the period 1980 to 1985, the proportion of

Table 4: Initial Borrowers at FmHA \1

	Fiscal Year					
	1980	1981	1982	1983	1984	1985
Total Amount						
Received (\$1,000)	3,390,140	2,805,498	1,333,248	1,524,400	2,517,390	2,737,114
Percent of						
Total Lending	54.4%	41.7%	40.6%	51.1%	58.9%	57.7%
Program Summary						
Percent of						
FO Loans	88.1%	84.4%	78.7%	78.8%	81.3%	82.8%
Percent of						
OL Loans	63.9%	70.9%	57.5%	53.8%	50.0%	53.8%
Percent of						
ED Loans	20.9%	30.3%	8.7%	7.7%	47.6%	53.2%
Percent of						
EE Loans	71.3%	\2	\2	\2	83.6%	\2
FmHA Regional Summary \3						
Northeast	65.6%	61.8%	46.7%	49.5%	57.2%	48.9%
Appalachia	61.7%	46.1%	42.2%	53.2%	59.2%	50.5%
Southeast	37.4%	29.5%	18.8%	37.1%	51.2%	53.1%
Delta	38.3%	34.8%	37.2%	43.3%	47.2%	46.7%
Corn Belt	71.7%	55.6%	58.0%	63.5%	69.1%	62.5%
Lake States	66.6%	55.9%	58.5%	58.8%	64.6%	71.5%
Northern Plains	63.6%	43.0%	45.4%	56.9%	64.1%	64.3%
Southern Plains	44.9%	40.1%	24.8%	45.5%	47.2%	45.2%
Mountain	57.3%	45.1%	50.0%	51.6%	57.5%	54.7%
Pacific	41.2%	27.2%	49.4%	46.5%	60.0%	60.1%
Other	86.6%	83.5%	79.7%	78.3%	76.8%	77.3%

1. Data drawn from FmHA Report No. 205, various fiscal years.
2. No program during this year.
3. For definition of composition of regions see footnote Table 2.

loans going to initial borrowers in the FO and ED programs conformed to the pattern noted above. The experience in the OL program has been considerably different. The percentage of initial OL borrowers has trended downward over most of the period. Initial borrowers made up seventy-one percent of all OL borrowers in 1981 and only fifty percent in 1984. In 1985, the proportion rose by a moderate amount, to 54 percent.

Regional Summary - FmHA Initial Borrowers

Many of the regions exhibit the same general pattern of a falling percentage of initial borrowers in the early years of the period and an increasing one in latter years. There are, however, some interesting variations on this pattern. For example, in the Southeast, the increase in the proportion of initial borrowers in the post 1983 years was much more pronounced than elsewhere. It should be noted, however, that the Southeast has had the lowest proportion of initial borrowers over most of the period. In the Corn Belt, the Northeast and Appalachia the national trend was being followed until fiscal year 1985. In the current year, all three of these areas have experienced substantial declines in the proportion of initial borrowers relative to the year earlier figure. Given the economic stress observed in the Corn Belt, the 1985 figure is somewhat surprising. Details of these trends are provided in Table 4.

Delinquencies - FmHA and FCS

FmHA delinquencies show a marked seasonal pattern. There is a peak in January because most FmHA loan payments are due in December. Delinquencies trend downward throughout the year, reaching a low point after the fall harvest.

Delinquencies in FmHA's farmer programs have registered large increases since 1980. For the four major FmHA farmer programs, delinquencies were less than \$714 million in 1980 and nearly \$5.8 billion in 1985, an eight-fold increase. In 1980, delinquencies in the four major farmer programs accounted for 78 percent of FmHA delinquencies for all programs. By 1985 farmer programs accounted for 96 percent of all delinquencies but only 48 percent of total FmHA outstanding loans.

Delinquencies measured as a proportion of the value and the number of farmer program loans have also increased. As shown in Table 5, 4 percent of the debt outstanding in the farmer programs and 13 percent of these loans were delinquent in 1980. Comparable figures for 1985 are 21 percent of the portfolio and 31 percent of the loans.

FCS has also had increasing problems with delinquencies during this period. Table 5 shows that delinquencies and non-accruals at FCS totaled \$2.8 billion in 1980. By 1984 they had more than doubled to \$5.7 billion. Compared to the total portfolio, delinquencies are still less than nine percent. However, the 1984 figure is 73 percent greater than the percentage in 1980. FCS has not had the rate of growth in delinquencies experienced by FmHA but the trend is upward.

Table 5: Summary - Delinquencies (\$1,000,000)

	Year					
	1980	1981	1982	1983	1984	1985
Total						
FmHA \1	715	1,380	2,674	3,777	5,041	5,785
% of Outstanding \$s	4%	6%	11%	16%	20%	21%
% of Cases	13%	14%	20%	25%	26%	31%
FCS \2	2,827	3,844	4,766	4,794	5,689	5,991 \3
% of Outstanding \$s	4.8%	5.5%	6.4%	6.8%	8.3%	8.7%
Program Summary						
FmHA						
Farm Ownership	48	71	127	199	279	344
Farm Operating	186	250	332	455	682	821
Emergency Disaster	408	812	1,697	2,427	3,239	4,206
Economic Emergency	74	248	519	697	840	1,155
FCS						
Fed. Land Bank	1,735	2,405	3,290	3,524	4,299	4,662 \3
Prod. Credit Assn.	1,092	1,439	1,476	1,270	1,390	1,329 \3
FmHA Regional Summary \4						
Northeast	46	72	101	121	181	186
Appalachia	61	119	215	277	361	416
Southeast	118	304	568	801	990	1,095
Delta	98	178	425	672	875	1,083
Corn Belt	51	93	212	334	488	588
Lake States	52	72	132	191	258	321
N. Plains	53	88	156	238	339	395
S. Plains	135	257	445	605	748	810
Mountain	67	117	223	293	393	426
Pacific	31	78	191	236	393	448
Other	3	4	6	9	14	16

1. Data report delinquent principal and are drawn from FmHA Report No. 616, various years.
2. Data are for FLBs and PCAs and come from Report of Operations, FCA, various years. FLB Delinquencies are the sum of delinquent principal and advances, accrued interest and loans in liquidation. PCA delinquencies are the sum of nonaccrual loans and accrued interest on loans.
3. In 1984 FCS broadened their definition of non-accrual loans, therefore figures for 1983 and before are not strictly comparable to the 1984 and 1985 numbers. 1985 numbers are as of June 30.
4. For definition of composition of regions, see footnote 3 in Table 2.

To interpret these figures, three important institutional differences must be borne in mind. First, FmHA is much more lenient with its borrowers than are commercial lenders. Table 6 tabulates delinquencies by length of time past due. The table shows that as of September, 1985, FmHA had over \$4.1 billion that was more than three years overdue. A private lender, such as the FCS, could not tolerate such chronic delinquencies nor would their regulators allow it. Such chronic delinquency would be acted upon by the FCS (it would be renegotiated or foreclosure proceedings would be initiated).

Second, FCS and FmHA use different definitions for delinquencies. FmHA classifies an account as delinquent if an amount greater than \$10 is past due for more than 15 days. However, FmHA reports delinquent principal only. Given that a substantial amount of money is more than three years past due, the accumulated interest that is delinquent is almost certainly substantial. FCS, on the other hand, classifies an account as delinquent when payments are past due for 30 to 90 days and delinquent principal and interest are reported. Finally, FmHA figures represent conditions at the end of the fiscal year and FCS at the end of the calendar year. Since seasonality is important in delinquencies, the different reporting dates makes institutional comparisons more difficult.

Even with the above caveats, several observations can be made. First, it is interesting to note that the proportion of FmHA's portfolio classified as delinquent was less than FCS's in 1980. In addition, the rate of growth in FmHA's delinquencies (exclusive of accrued interest) has been so rapid that we can safely say that there are some very serious financial problems among its borrowers. Even though forbearance means that delinquencies are removed very slowly from FmHA's books, the rate of growth indicated in Table 5 implies that significant amounts of new delinquencies have been added each year.

Program Summary - Delinquencies - FmHA and FCS

The amount classified as delinquent increased in all four of FmHA's loan programs and in each of the five years considered. The increases during the period were substantial in all four programs. By 1985 delinquencies were more than 7 times greater in the FO program than in 1980, more than 4 times greater for OL, nearly 9 for ED and 13 for EE.

At the end of FY 1985, ED loans comprised 63 percent of FmHA farmer program delinquencies, 17 percent were EE loans, 14 percent were OL and 6 percent were FO loans. Delinquencies by length of time for each of the four programs are detailed in Table 6. There are several figures of interest in Table 6. First, it is striking that more than \$2 billion of ED loans are more than four years delinquent with nearly \$900 million more in the delinquency pipeline for 3 to 4 years. Second, OL loans account for the greatest amount of delinquencies less than two years past due. Given the tremendous growth in OL lending during the past two years, it will be interesting to watch the growth and aging of OL delinquencies. Third, the

structure of delinquencies is an inverted pyramid, exactly the opposite of what we would expect for a commercial lender for the reasons stated above. The inverted pyramid shape indicates two things. First, it illustrates the degree of forbearance shown by FmHA. Second, it reflects the relatively poor quality of the loans made under the emergency programs in the late 1970s and early 1980s.

Table 6: Age of FmHA Delinquencies, as of June 30, 1985.

Program	Amount Delinquent (\$1,000s)				
	Length of Delinquency				
	< 1 Year	1-2 Years	2-3 Years	3-4 Years	> 4 Years
Farm Ownership	44,718	52,856	67,246	61,577	117,807
Operating Loan	155,648	190,409	155,752	114,313	205,098
Emergency	135,098	184,176	355,399	896,138	2,085,658
Econ. Emergency	86,431	93,867	110,446	249,727	422,631
Total	421,895	521,308	688,843	1,321,755	2,831,194

Source: FmHA Report 616C, October, 1985.

Regional Summary FmHA Delinquencies

As noted in Table 5, a large portion of FmHA's delinquencies are concentrated in the South. Combined, delinquencies in the Southeast, Delta and Southern Plains regions accounted for more than half of all FmHA farmer program delinquencies as of September, 1985. The Southeast had the greatest amount (almost \$1.09 billion, or 18.9 percent) of total delinquencies. The Delta region ranks second in total delinquencies, with almost \$1.08 billion, or 18.7 percent of total farmer program delinquencies. The Southern Plains region has the third highest amount of total delinquencies, \$810 million, or 14 percent of the total. Texas is largely responsible for the poor performance of this region, accounting for 11.5 percent of total delinquencies. This percentage far surpasses the portion of all states except Georgia, which accounted for 11.7 percent of total delinquencies. Thus, Georgia and Texas combined account for almost one fourth of the FmHA's total farmer program delinquencies.

Write-offs - FmHA and FCS

Writing off debts owed is the final act for a non-performing loan. FmHA personnel caution that the data in their report on write-offs do not necessarily represent write-offs in a given year. Discrepancies arise because there is often a lag between the time of a

Table 7: Summary - Annual Write-offs (\$1,000,000)

	Year					
	1980	1981	1982	1983	1984	1985
FmHA Total \1	11	5	23	44	55	48 \2
As % of Farm Outstandings	0.06%	0.02%	0.10%	0.18%	0.22%	0.18%\2
Amount Principal	10	5	19	30	45	37
Amount Interest	2	1	4	14	11	11 \2
FCS Total \3	0	43	161	247	375	219 \4

Program Summary

FmHA (Principal and Interest)

Farm Ownership	0	0	1	1	3	3 \2
Farm Operating	9	5	13	17	24	13 \2
Emergency Disaster	3	0	7	10	18	20 \2
Economic Emergency	0	0	2	16	11	11 \2

FCS Loan Losses

Fed. Land Bank	0	1	2	10	90	98 \4
FLB Loss Provision	60	77	59	18	71	80 \4
Prod. Credit Assn. \5	42	159	237	285	121	\4
PCA Loss Provision	98	101	111	197	225	55 \4

FmHA Regional Summary (Principal and Interest) \6

Northeast	1	1	2	5	6	3
Appalacia	1	1	3	4	5	3
Southeast	1	1	2	5	7	7
Delta	0	0	2	3	5	3
Corn Belt	1	0	3	4	6	7
Lake States	1	0	2	5	9	7
N. Plains	2	0	2	4	8	4
S. Plains	2	1	3	3	3	6
Mountain	1	1	2	2	4	4
Pacific	1	0	1	1	1	3

1. Data drawn from FmHA Report No. 752, various years.
2. Writeoffs as of March 31, 1985.
3. Data for Farm Credit System drawn from Annual Reports, various years.
FCS losses for 1980 include FLB losses only.
4. Loan losses as of June 30, 1985.
5. Loan losses at PCAs were not reported in the FCS annual report for this year.
6. For definition of composition of regions, see footnote 3 in Table 2.

write-off and the time FmHA acknowledges it. It might also be noted that recent improvements in the accounting system are said to have reduced this lag and may be a factor in explaining the large volume of write-offs in the first six months of FY 1985.

Table 7 illustrates that FmHA write-offs grew from \$11.4 million in 1980 to \$55.3 million in 1984. Through March 31, 1985 \$47.9 million had been written off. The magnitude of write-offs in 1984 and 1985 are even more remarkable when we consider that FmHA has had a moratorium on foreclosures for much of this time. Given the decline in land values and the fact that FmHA is often the junior lienholder or has otherwise subordinated its debt, it is highly probable that FmHA's write-offs would have been much higher in the absence of the moratorium. An additional factor keeping write-offs down is the degree of forbearance practiced by FmHA, as illustrated in Table 6. A third reason for relatively low levels of write-offs is FmHA's semi-official policy of holding land it has acquired off the market. This has been done to reduce downward pressure on the land market. Write-offs, though they have been growing rapidly, still represent a very small percentage of FmHA's outstanding debt.

Loan losses have also grown rapidly in recent years in the FCS. Loan losses more than doubled between 1982 and 1984, reaching a level of \$375 million for FLBs and PCAs combined. As was the case for FmHA, loan losses in the FCS represent a small, but increasing, percentage of outstanding debt.

Program Summary - Write-offs - FmHA and FCS

There have been large increases in the amount of write-offs in virtually every year for every FmHA program. Based on results during the first six months of fiscal year 1985, this pattern is likely to continue this year. Likewise, net charge-offs at both FLBs and PCAs have increased consistently. The amount of PCA write-offs are still considerably larger than those of the FLBs but the rate of growth in FLB loan losses has been much greater. In addition, in 1984 the market value of acquired properties in FLBs exceeded that of PCAs for the first time. If land values continue to fall, FLBs write-offs will soon exceed those of PCAs.

Regional Summary - FmHA Write-offs

When considered on a regional basis, there are two remarkable aspects of FmHA's write-off experiences during the 1980s. First, with the exception of 1981, annual increases in total write-offs were experienced in almost every region of the country. Second, the distribution of write-offs across regions is unexpectedly uniform. Relatively large amounts were written off in the Southeast, the Northern Plains and the Lake States. The relatively large amount written off in the Northeast and the relatively small amount in the Corn Belt are more surprising.

Property Acquisitions - FmHA and FCA

FmHA has recently improved its data on acquired property.

Table 8 summarizes the inventory of property held by the agency as of September, 1985. FmHA classifies acquired property as either suitable for sale or as unsuitable (because of erosion potential, uneconomic size, etc.). FmHA is suppose to dispose of "suitable" land within two years of acquisition while surplus land is not to be resold. Table 8 indicates that of the 3,819 properties held by FmHA, roughly two-thirds were classified as suitable. In total, slightly more than one million acres have been acquired by the agency and the current market value of these holdings is estimated to be \$664 million.

The final three columns indicate that during the past fiscal year, most properties acquired by FmHA were via voluntary conveyance or as the result of a foreclosure proceeding intitiated by another lender. Fewer than one in ten properties were acquired by an FmHA initiated foreclosure action.

Table 8 reflects the financial difficulties being felt in the Midwest. In terms of both acres and value, the two regions with the largest inventories of acquired properties are the Corn Belt and the Northern Plains. The single largest inventory at the state level is Missouri. In excess of 107,000 acres of land with an estimated value of more than \$70 million is held by FmHA in Missouri. These represent 10 percent of total acres and 11 percent of total value of FmHA's inventory of acquired property.

Table 8: FmHA's Farmer Program Property Inventory, 1985

Regional Totals	: Total : Suitable : Farms	Total Surplus Farms	Total Acres Farms	Value Farms (\$1,000)	FY Vol. Convey.	FY FmHA Forclsr.	FY Other Forclsr.
Northeast	82	160	43,182	30,478	100	10	53
Appalachia	263	194	69,758	59,343	204	40	88
Southeast	107	175	67,827	44,755	78	10	127
Delta	217	130	97,270	83,461	107	22	113
Corn Belt	724	226	187,099	140,786	333	26	207
Lake	302	113	90,518	67,616	92	25	103
N. Plains	328	118	182,279	70,455	195	17	107
S. Plains	157	18	65,523	32,699	76	15	45
Mountain	184	127	168,019	68,019	130	36	73
Pacific	114	90	51,889	63,823	28	14	66
Total	2,498	1,321	1,014,901	663,980	1,345	224	984

Source: FmHA report on Farmer Program Inventory, September, 1985.

The FCS is also a major land owner. The increased volume of acquired property has helped keep FCS's loan losses relatively low, by keeping this land off an already weak market. The market value of FCS's acquired property was less than \$34 million in 1980.⁷ At the end of the third quarter of 1985, FCS listed \$694

7. Report of Operations of the Federal Land Banks and of the Production Credit Associations, FCA, Washington, D.C., various years.

million in other owned property. The bulk of this property is land, though some held by PCAs would be machinery and inventories of crops or livestock. Given the magnitude of this inventory, continued weakness in land markets will result in additional FCS loan losses of substantial size.

The Farm Credit Initiative

In the Fall of 1984 the Reagan Administration announced a special credit initiative designed to deal with the serious farm financial stresses that were then becoming apparent. The Farm Credit Initiative (FCI) was composed of two parts, the Debt Set-Aside Program (DSA) and the Debt Adjustment Program (DAP).

Debt Set-Aside

The DSA allows qualified FmHA borrowers to defer, without interest, up to twenty-five percent (or \$200,000, whichever is less) of their indebtedness for a period of five years. Loans made under all individual farmer programs are eligible as are rural housing loans which were made for farm service buildings. To qualify for the program the borrower must show that a positive cash flow cannot be achieved without some action being taken by the borrower, lender or both. For example, if the borrower can achieve a positive cash flow by rescheduling and reamortizing his debt at the limited resource rate (if applicable), the set-aside provision does not apply. Likewise, if disposing of a borrower's "non-essential assets" will result in a positive cash flow, the set-aside provision will not apply. Finally, it must be shown that no more than the 25 percent/\$200,000 maximum set-aside is needed for the borrower to achieve a positive cash flow. A borrower can qualify for only one set-aside and the terms of the set-aside cannot be changed once granted.

Performance of the DSA

As of September 30, 1985, FmHA had received 108,740 requests for set-asides. At that time, FmHA had 278,892 active borrowers, meaning that 39 percent of all FmHA borrowers sought to take advantage of the DSA program. Table 9 shows that 14.5 percent of the applicants have been granted set-asides and that most received the maximum set-aside possible. The table also indicates that slightly more than three-quarters of the successful applicants were rescheduled at the lower, limited resource interest rate. The total amount set-aside was in excess of \$676 million out of \$2.9 billion in outstanding principal and interest owed by borrowers granted a DSA. Approximately 20 percent of the applicants were rejected because they could not achieve a positive cash flow projection given all of the options available or could not project an ability to repay the debt after the five-year set-aside period had expired.

It is not entirely surprising that fully three-fifths of the program benefits went to farms in the Corn Belt, Lake States and Northern Plains regions. The three largest state programs were Wisconsin, Iowa, and North Dakota, with set-asides totalling \$68.7,

Table 9: Summary of 1984 Farm Credit Initiative \1

Debt Set-Aside Program
(Cumulative through September 30, 1985)

Regional	: #	: #	: % Rshd : at Ltd	: % Rej-Neg : Cashflow	: P & i Pre- : Set-Aside	: Amount : (\$1,000)	: Set-Aside : (\$1,000)	: % Total : P & I
Totals \2	: Requests	: Granted	: Rsrs Rate	: Inab Repay				
Northeast	6,054	1,285	81.5%	9.6%	256,343	57,634	24.3%	
Appalachia	11,481	1,320	73.9%	13.1%	271,680	63,246	23.5%	
Southeast	6,648	359	62.3%	17.8%	63,075	14,957	23.7%	
Delta	11,602	571	59.5%	29.2%	113,494	25,133	21.6%	
Corn Belt	23,586	4,353	74.5%	16.5%	713,140	169,535	23.7%	
Lake	11,252	3,503	77.0%	19.6%	613,781	144,748	23.8%	
N. Plains	16,384	2,198	78.6%	23.7%	394,358	93,593	23.8%	
S. Plains	10,467	803	38.0%	13.0%	131,954	29,115	22.3%	
Mountain	6,669	984	72.7%	14.9%	231,206	55,702	24.1%	
Pacific	3,415	355	66.7%	14.7%	85,717	19,943	23.7%	
Other	1,182	62	38.9%	7.4%	9,735	2,619	31.1%	
U.S. Total	108,740	15,793			2,884,483	676,224		
U.S. Ave.			73.9%	19.8%				23.4%

Debt Adjustment Program
(Cumulative through September, 30, 1985)

Regional	: #	: #	: P & i : Pre-DAP	: Write- : off P.	: Write- : off i.	: % : Write- : off	: Amt DAP : Guarantee	: Amt DAP : Guarantee
Totals \2	: Appli- : cations	: # : Given	: (\$1,000)	: (\$1,000)	: (\$1,000)	: off	: OL-(\$1,000)	: FO-(\$1,000)
Northeast	5	3	467	29	37	14.2%	536	0
Appalachia	13	7	1,884	345	133	25.4%	657	386
Southeast	11	8	1,567	716	74	50.5%	457	465
Delta	7	5	1,044	188	0	18.0%	347	878
Corn Belt	340	202	34,939	5,367	4,297	27.7%	25,451	2,875
Lake	89	35	7,794	870	902	22.7%	4,437	389
N. Plains	193	139	37,547	4,244	3,523	20.7%	20,418	1,461
S. Plains	42	16	1,600	262	119	23.8%	1,326	163
Mountain	24	7	1,241	83	164	19.9%	968	197
Pacific	4	4	0	0	0	0.0%	0	0
Other	0	0	0	0	0	0.0%	0	0
U.S. Total	728	426	88,083	12,105	9,248		54,597	6,813
U.S. Ave.						24.2%		

1. Data drawn from FmHA Farm Credit Initiative Report. Note, granted and rejected will not in general sum to requests since requests may be withdrawn, rejected because of a positive cash flow, etc.
2. For definition of composition of regions, see footnote 3 in Table 2.

\$67.6 and \$52.3 million respectively.

There is a wide variation in the performance of the program across states. This can be illustrated by considering the proportion of delinquent debt enrolled by different states in the DSA program. Delinquent debt is almost certainly associated with negative cash flow. Therefore, this group of borrowers will define most of those eligible for the DSA. Comparing the amount of delinquent debt with the amount enrolled in the DSA indicates the success of each state in using the program to reduce its exposure to high risk loans.

Table 10 compares the delinquencies and DSA enrollment in Wisconsin, North Dakota and Iowa. The first column of numbers is the total level of delinquencies in September, 1984, when the DSA was begun. Of these three states, Wisconsin had the least in delinquent accounts in September. Despite this, Wisconsin has the largest state DSA program. In the final column of Table 10 we see that the principal and interest owed by those enrolled by Wisconsin in the DSA was 152 percent of the amount classified as delinquent on September 30, 1985. The comparable percentages for Iowa and North Dakota were 92 and 54 percent respectively. It appears that Wisconsin has been very adept at using the DSA program.

Table 10: A Comparison of DSA in Wisconsin, N. Dakota and Iowa.

State	Outstanding Principal Delinquent :Accts-9/30/84:	Total Principal and Interest :Applicants Granted: Set-Aside	Column 2 as Percent : Column 1 :
Wisconsin	193,764,000	295,261,298	152
Iowa	308,753,000	285,579,459	92
North Dakota	405,848,000	219,327,614	54

It is interesting also that the state programs with the largest delinquency problems (Texas, Georgia and Mississippi), have small DSA programs. Texas and Georgia have set-aside only \$6.1 and \$1.6 million respectively, while Mississippi has included \$3.8 million in the program. The geographic distribution of participation in the DSA program probably reflects the fact that current economic trends are less favorable in the Corn Belt, Lake States and Northern Plains than they are in the Southeast and Southern Plains.

Debt Adjustment Program

The DAP is designed to provide assistance to non-FmHA borrowers. To participate in the DAP, a commercial lender must agree to write-off a minimum of ten percent of the interest or principal due

on existing loans. The amount written off must allow the borrower to project a positive cash flow (including living expenses and tax liabilities). In return for writing off this portion of the amount due, the lender receives a guarantee from FmHA for up to 90 percent of any loss of principal. The Administration allocated \$650 million for this loan guarantee program.

Performance of the DAP

The demand for DAP guarantees has fallen far short of expectations. Through the end of September, 1985, a total of 728 DAP applications had been received and 426 approved. The total amount of principal written off plus the estimated value of the interest write-down was \$21.3 million over this period. Guarantees for \$61.4 million in debt have been issued. The average write down was 24.2 percent of the total principal and interest due prior to the DAP adjustment.

Within this national perspective, there are a number of interesting regional trends. For example, roughly half of all applications and approvals were located in the Corn Belt. More than 75 percent of all DAP applications and approvals occurred in the Corn Belt and Northern Plains regions combined. In contrast, major agricultural regions such as the Pacific, the Southeast and the Delta regions essentially did not participate in the program.

Several hypotheses have been put forward to explain the lack of participation in DAP:

Hypothesis 1: Lenders felt that they would get a better deal by withholding their participation. This expectation was, in fact, justified. As first proposed, DAP allowed write-offs of principal only and required a 10 percent margin for error in the cash flow projection. Both requirements were subsequently relaxed. Despite these changes, however, participation has remained low, indicating that either more "sweeteners" were expected to be added to the program or that this is not a complete explanation of the problem.

Hypothesis 2: Lenders expected future declines in collateral values to be less than 10 percent, so a 90% guarantee of principal offered little protection. While this is a plausible hypothesis, its validity would require a great deal of optimism on the part of lenders, given the macroeconomic projections that have been made since the program has been in place.

Hypothesis 3: Lenders were not in a financial position to write-off the required minimum 10 percent. This would apply to banks which are hovering on the brink of financial ruin. For such banks, the immediate recognition of a minimum 10 percent loan loss might impair their financial position to such an extent that their regulators would force them into liquidation. This might describe the situation for a certain number of banks, but it is unlikely to apply to very many.

Hypothesis 4: The requirements placed on participation

substantially reduced the number of loans a bank could qualify for the program. U.S.D.A. data indicate that approximately 18% of all farmers have debt loads that are sufficiently large to pose financial difficulties. Only 12% were projected to be unable to cover production expenses, family living requirements, and principal payments on their debt in 1985.⁸ Of the roughly 214,000 farms that fall into this category, three subgroups could be defined. First, some farms are facing a relatively minor amount of financial stress and could be helped by means that would be less expensive to the lender than the DAP program (rescheduling, reamortizing, partial liquidation, and so on.). A second group is in such severe financial difficulties that DAP participation is also uneconomic. In this instance, the amount of outstanding principal and accrued interest that would have to be written off would exceed the expected value of the 90 percent guarantee on remaining principal. This leaves a third group of uncertain size that lenders might consider for the DAP program. Having defined potential candidates for the program, the lender's decision regarding enrollment of loans in the program would depend upon his evaluation of the factors discussed in the first three hypotheses.

FmHA Activities in Iowa

When farm financial stress is mentioned, most people think of Iowa. Land values in Iowa have fallen by nearly 50 percent since 1981. Between January and October, 1985, 10 agricultural banks failed in Iowa. As of December, 1984, there were 32 agricultural banks in Iowa in which the value of loans that were past due or non-performing was greater than the bank's capital. Such banks are in serious financial trouble and have an increased probability of failure. The Farm Credit System's FICB for the Omaha region, which includes Iowa, has required an infusion of more than \$400 million in capital from other parts of the system to stave off liquidation. Given the current situation, it should come as no surprise that FmHA has assumed a more important role in agricultural finance in Iowa. Details of this greater level of activity are provided in Table 11.

Direct lending by FmHA in Iowa increased from \$226 million in 1980 to over \$400 million in 1985. The expansion of FmHA's loan guarantee program has been even more impressive, rising from \$1.6 million in 1980 to \$262.3 million during 1985. More than one-fifth of all loan FmHA guarantees in 1985 were issued in Iowa. Other measures of FmHA's expanded role in Iowa are the more than doubling of the number of loans made by FmHA between 1983 and 1985 and the 40 percent increase in borrowers over this period. Total debt outstanding at FmHA in Iowa increased slowly between 1980 and 1983 and more rapidly since then. Delinquencies are also on the rise though they remain low by FmHA standards.

As shown in Table 11, most of the expansion by FmHA in Iowa

8. "Financial Characteristics of U.S. Farms, January, 1985", U.S.D.A., AIB-495, Washington, D.C., page vi.

Table 10: FmHA Activities in Iowa

	Year					
	1980	1981	1982	1983	1984	1985
Total						
Lent (\$1,000,000)	226	135	117	123	297	448
Annual Cases	5,328	1,894	3,461	3,401	8,791	8,358
Active Borrowers	\1	\1	11,226	11,208	13,822	15,636
Debt Outstanding (\$1,000,000)	751	854	873	895	1,092	1,424
% Debt Delinquent	1.2%	1.9%	4.0%	6.3%	7.7%	85.0%
Annual Obligations (\$1,000,000)						
Farm Ownership	39	35	33	44	48	46
Percent Initial	90.9%	85.6%	77.3%	80.2%	84.1%	87.5%
Farm Operating	37	37	62	76	119	358
Percent Initial	64.6%	78.4%	50.8%	44.2%	57.8%	69.7%
Emergency Disaster	21	63	21	3	104	44
Percent Initial	8.2%	28.0%	5.2%	3.8%	81.0%	74.2%
Economic Emergency	139	0	0	0	49	0
Percent Initial	83.5%	0.0%	0.0%	0.0%	85.4%	0.0%
Delinquencies (\$1,000,000)						
Farm Ownership	0.2	0.3	2	4	8	17
Percent	0.1%	0.1%	0.6%	1.3%	2.3%	3.4%
Farm Operating	3	4	6	11	20	29
Percent	3.2%	3.8%	4.0%	6.1%	8.2%	5.6%
Emergency Disaster	4	6	13	21	28	38
Percent	2.3%	2.9%	6.8%	11.8%	10.8%	13.5%
Economic Emergency	2	6	14	21	29	39
Percent	0.7%	1.9%	5.2%	8.2%	11.1%	15.5%
Write-off (Principal and Interest, \$1,000,000) \2						
Farm Ownership	0.0	0.0	.0	0.0	0.1	0.4
Farm Operating	0.2	0.1	0.4	0.9	0.8	0.6
Emergency Disaster	0.1	.0	0.4	0.4	0.2	0.2
Economic Emergency	0.0	.0	0.2	0.5	0.8	0.5
Farm Credit Initiative (\$1,000,000)						
Amount Set-Aside						68
Amount DAP Write-Off						6

1. Data are not available for these years.
2. Write-offs as of March 31, 1985.

has been in the OL program. The OL program increased by more than 50 percent between 1983 and 1984 and nearly tripled in size in 1985. A fairly high proportion of FmHA's lending in Iowa has gone to initial borrowers. Lending to initial borrowers has been quite volatile in the ED program but, in the last two years, Iowa has been well ahead of the national average in this category as well.

As noted above, delinquencies in Iowa are rising but are at a much lower level, in percentage terms, than the national average. This is true for all individual loan programs as well. At the end of the fiscal year in 1985, 4.6 percent of FmHA's total outstanding debt in the FO loan program was delinquent compared to 3.4 percent in Iowa. Similar figures for the OL program are 13 percent for the U.S. and 5.6 percent in Iowa, for the ED program, 37 percent for the U.S. and 13.8 percent for Iowa, and for the EE program, 23 percent for the U.S. and 15.5 percent for Iowa.

Relatively small sums have been written off in Iowa by FmHA but the trends indicates a growing problem. In 1980 the total amount written off was less than \$300,000. In the first six months of fiscal year 1985, more than \$1.7 million had been written off. In the absence of the foreclosure moratorium the increase in write-offs would have been much greater. The most dramatic increases in write-offs have occurred in the FO and EE programs. The increase in FO write-offs reflect the extremely weak land market in Iowa. Problems in the EE program are not confined to Iowa, a fact noted in Table 7 which showed total write-offs in excess of \$10 million in each of the past 3 years.

Lenders in Iowa have been among the most active participants in the Administration's FCI. Iowa accounted for 164 of the 426 loan guarantees approved under the DAP. As of the end of July, Iowa bankers had written off more than \$6.5 million in debts in order to qualify for the benefits offered in DAP. This is fully 30 percent of the total amount written down in DAP. The \$6.5 million was 25 percent of the principal and interest owed by Iowa farmers participating in DAP. Iowa's lenders received 37 percent of the total amount guaranteed nation wide. Despite this, only \$22.8 million in guarantees have been extended in Iowa, an amount dwarfed by the total debt that might be considered at risk in that state (FmHA alone has over \$143 million in Iowa that is classified as delinquent).

As noted above, the \$67.6 million in set-asides makes Iowa's the second largest state DSA program in the nation. Table 12 compares the DSA in Iowa to the rest of the U.S. Several interesting patterns are revealed in Table 12. First, a higher proportion of FmHA's borrowers in Iowa (46 percent) applied for the DSA than was the case for the rest of the U.S. (39 percent). Second, Iowa farmers were more likely to be granted a set-aside, 25 percent of all applicants in Iowa were granted a set-aside compared to 15 percent in the rest of the U.S. Third, Iowa farmers were less likely to be rejected because of an inability to project a positive cash flow even with a set-aside than were farmers in the U.S. more generally (13% of applicants in Iowa were rejected for this reason versus 20% nationally). This pattern indicates that a greater proportion of FmHA farmers in Iowa were interested in and able to meet the requirements for participation

in the DSA. This suggests that either financial stress among FmHA borrowers in Iowa is more widespread but somewhat less intense than is the case for FmHA borrowers elsewhere or that Iowa's FmHA officials interpret the qualification requirements more liberally than elsewhere. In other respects (the proportion of those granted a set-aside who rescheduled their loans at the limited resource rate, the proportion of principal and interest set-aside, etc) the Iowa DSA program is similar to the aggregate experience.

Table 12: A Comparison of the Iowa and U.S. Debt Set-Aside Programs, September 30, 1985.

Variable	Iowa	U.S. Total
Total # Borrowers	15,113	275,612
Total Requests	7,205	108,740
Total Granted	1,800	15,793
Percent Rescheduled at Limited Resource Rate	71	74
Percent Rejected due Negative Cash Flow	13	20
Total P & i Prior Set Aside (\$1,000)	285,579	2,884,483
Total Set-Aside (\$1,000)	67,564	676,224
Set-Aside as percent Total Prior P & i	24	23

In summary, FmHA appears to have responded quite vigorously to the current financial stress in Iowa agriculture. Based on the DAP data and the amount of regular FmHA guarantees used, it can also be argued that commercial lenders in Iowa have been active in their response to this stress. Because data are not currently available to analyze FmHA's response at the farm level, it is impossible to examine the likely long-term implications of the expansion of FmHA activities in Iowa and the Corn Belt more generally. Without access to data on individual loans, we cannot predict if FmHA's recent actions are likely to assist a troubled sector weather a difficult period or will merely put off the day of reckoning.

Conclusions

A number of conclusions can be drawn from the above discussion. First, within FmHA there has been an important shift from the emergency lending programs to the OL program. The question could be asked, "Has the OL program become the functional replacement for the emergency lending programs?" Certainly the growth path and the

funding levels of the two programs during their expansionary phases are similar. Lending in the EE and ED programs expanded rapidly in the late 1970s and early 1980s in response to problems that were perceived as short term in nature. Likewise, the OL program has expanded rapidly in response to problems that are being treated as short term ones. The OL program, like the EE and ED programs, has expanded in areas hardest hit by the current "short term" problems. Because the necessary data are not available, it is impossible to compare the farms receiving OL loans in 1985 to those who received an EE or ED loan in the late 1970s. Such a comparison would be very useful in determining the likely impact of the expanded OL program. It is also significant that FmHA's expanded OL program has come at a time when virtually all other sources of capital for agriculture are reducing the amount they are willing to commit to the sector.

The proportion of lending going to initial borrowers declined fairly sharply between 1980 and 1982 and has since returned to the 1980 level. Forbearance on the part of commercial lenders during the early portion of the downturn probably kept many potential FmHA borrowers away from the agency. As expectations that the problem would be short term faded, more of these borrowers found their way to FmHA, resulting in the recent increase in the proportion going to initial borrowers. Again, farm level information on the demographic characteristics of initial FmHA borrowers would be useful in testing this hypothesis.

Delinquency rates at FmHA are extremely high. As of the end of fiscal year 1985, 21 percent of total debt outstanding, \$5.8 billion, was classified as delinquent by FmHA. Delinquencies increased in all programs, with the largest percentage increase occurring in the emergency programs. A substantial portion of the delinquencies have been past due for more than three years. The age and amount of these delinquencies suggest that a substantial write-off will eventually be required to get these loans off FmHA's books.

Delinquencies have also increased in the FCS. The rate of increase has been much less than at FmHA. Recent changes in FCS accounting practices may reduce the reported difference. However, because FmHA reports only delinquent principal but uses a more stringent definition, the true difference in delinquency rates at the two institutions is difficult to determine.

Relatively small amounts of debt have, to date, been written off by FmHA and FCS. For FmHA this reflects, in part, the degree of forbearance practiced by the agency. For both FCS and FmHA write-offs have been kept down by holding land off of the market. Increases in the amount written off in the past three years are probably indicative of things to come.

In examining the Administration's FCI we noted that the Debt Set-Aside portion has been used more actively than the Debt Adjustment portion. Most using the DSA were able to reamortize their debts at the lower, limited resource rate of interest. Most also obtained the maximum set-aside possible, 25 percent of the amount of principal and interest outstanding. More than half a billion dollars has been set-

aside by FmHA. By contrast, the DAP has attracted little attention outside of the Midwest. Those who obtained a DAP write-down did receive a substantial write-down of principal and interest owed (24.2 percent was the national average).

Finally we examined FmHA's activities in Iowa. The Iowa portion of FmHA's portfolio is in better than average shape. Delinquencies are increasing but are still low compared to delinquencies at FmHA as a whole. Likewise, write-offs in Iowa have been quite modest, thus far. A greater proportion of FmHA loans have gone to initial borrowers in Iowa than for the country as a whole. There is some evidence that suggests that the breadth of the financial crisis in Iowa has widened the pool of candidates for FmHA's services. The proportion of FmHA borrowers in Iowa who applied for and were granted a DSA was greater than in the rest of the U.S. The proportion of Iowa's FmHA borrowers who were rejected for the DSA because they could not project positive cash flow was lower than for the rest of the U.S. This is consistent with a pattern of stress that is more widespread but less intense in Iowa than for FmHA borrowers more generally.

In conclusion, the data presented indicate that there are serious problems in the FmHA portfolio. These problems reflect, in part, the fact that FmHA is the lender of last resort and will generally have a riskier portfolio than commercial lenders. Given their higher risk portfolio, it is not surprising that FmHA borrowers will be the first to exhibit the symptoms associated with financial stress.

It was also shown that the FCS portfolio has also become much less secure during the 1980s. Given data differences and the different mandates for FmHA and FCS, a direct comparison of seriousness the deterioration of the two portfolios is difficult. The problems in both portfolios are indicative of the seriousness of the current economic problems facing agriculture. A more detailed appraisal of both portfolios awaits the availability of more comprehensive, farm level data.