AGRICULTURAL FINANCE AND BANKING DEVELOPMENTS

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Emanuel Melichar

Senior Economist, Economic Activity Section
Division of Research and Statistics
Board of Governors of the Federal Reserve System
Washington, D.C. 20551

Table 1

Annual percentage change in farm debt outstanding

Type of debt and lender group	1980	1981	1982	1983	1984	Amount outstanding, billions of dollars, 12/31/84
Total debt..................	9.8	10.9	7.5	-.5	-1.5	213
Banks......................	1.7	2.5	7.9	8.5	3.2	50
Farm Credit System.........	16.7	16.3	4.7	-.2	-1.6	68
Life insurance companies...	6.3	1.1	-2.1	-.7	-2.1	12
Farmers Home Adm...........	21.0	19.1	2.8	.5	7.0	26
Commodity Credit Corp......	-1.8	60.9	92.6	-30.0	-17.7	9
Individuals and others.....	7.7	5.5	1.9	-.5	-6.2	48
Real estate debt............	11.9	10.5	4.0	2.2	-.8	112
Banks......................	1.4	-4.1	.6	10.4	9.2	10
Federal Land Banks.........	21.3	21.1	8.8	2.3	.5	49
Life insurance companies...	6.3	1.1	-2.1	-.7	-2.1	12
Farmers Home Adm...........	8.5	13.3	3.9	2.7	7.3	10
Individuals and others.....	8.2	5.3	.7	1.0	-7.5	30
Non-real-estate debt.........	7.6	11.3	11.3	-3.4	-2.2	101
Banks......................	1.7	4.4	9.7	8.0	1.8	40
Production credit assns....	8.9	7.5	-3.4	-5.8	-7.2	18
Farmers Home Adm...........	30.9	22.9	2.1	-.8	6.9	16
Commodity Credit Corp......	-1.8	60.9	92.6	-30.0	-17.7	9
Individuals and others.....	6.7	6.0	4.0	-3.0	-3.9	18

Farm debt trends during the first quarter of 1985 were marked by unusually large declines in outstanding farm production loans at both commercial banks and production credit associations, as shown in Table 2. Since quarterly data became available in 1976, farm production loans at commercial banks on average have changed little during the first quarter, as changes have ranged only from -1.7 percent to +2.0 percent. This year, such loans at banks fell by 3.4 percent in the first quarter, and this decline came on top of a relatively large drop in the preceding quarter. By March 31, outstanding farm production loans at banks had fallen to 2.0 percent below a year earlier, the first such year-over-year decline since quarterly data have been collected.

At banks, the recent decline in production loans has been offset in small part by continued strength in loans secured by farm real estate, in which significant growth resumed in 1983 after a relatively flat period dating back to 1978. Given that the volume of farm real estate transactions reportedly has been depressed along with land prices, the recent growth in mortgage loans at banks probably represents refinancing of production loans.

Table 2

Change in farm debt outstanding at farm lending institutions
First quarter, 1985

Type of debt and lender group	Billions of dollars	Percent
Total debt..................	-1.3	-.8
Banks.....................	-1.2	-2.4
Farm Credit System.........	-1.5	-2.2
Life insurance companies...	-.3	-2.6
Farmers Home Adm...........	.5	1.7
Commodity Credit Corp......	1.3	14.7
Real estate debt............	-.1	-.2
Banks.....................	.2	1.4
Federal Land Banks.........	-.2	-.3
Life insurance companies...	-.3	-2.6
Farmers Home Adm...........	.2	1.9
Non-real-estate debt.........	-1.1	-1.4
Banks.....................	-1.3	-3.4
Production credit assns....	-1.2	-6.9
Farmers Home Adm...........	.3	1.7
Commodity Credit Corp......	1.3	14.7

Farm loan experience at commercial banks

Farm loan charge-offs. During the first quarter of 1985, net charge-offs of farm production loans at commercial banks totaled about $200 million, equal to 0.5 percent of such loans outstanding, and up by 60 percent over charge-offs in the first quarter of 1984 (Table 3). First quarter results are an uncertain indicator of full-year charge-offs, however, because a disportionately large share of annual charge-offs is taken at year-end. But in view of the rising loan delinquencies discussed in the next section, it appears likely that farm loan charge-offs will continue to exhibit year-over-year increases in coming quarters.

In the first quarter, banks in Iowa accounted for one-fifth of the national charge-offs of farm production loans. Four states--Iowa, California, Nebraska, and Missouri--accounted for over half the total. These states plus Minnesota, Kansas, and South Dakota had two-thirds of national charge-offs.

In 1984, net charge-offs of farm production loans totaled about $900 million, equal to 2.2 percent of such loans outstanding at year-end. Of this total, about $240 million was charged off by banks in California, equal to 6.1 percent of their year-end farm loans outstanding. In other states, net charge-offs were equal to 1.8 percent of outstanding loans. This average was exceeded in eight midwestern states, Alabama, and Georgia. After California, the highest charge-off rates were in Missouri, at 3.0 percent, and in Iowa, at 2.9 percent.

Delinquent farm loans. Estimated delinquency rates on farm production loans have been trending upward since such data were first required of some banks in December 1982. In particular, the relative amount of nonaccrual loans is estimated to have risen each quarter, reaching 4.7 percent of farm production loans outstanding at the end of March (Table 4). (Estimates of delinquent loans as of December 31, 1984, have been corrected as shown in the table on the back cover.) Barring unexpected improvement in farm income and asset values, the continued rise in nonaccrual loans portends further increases in farm loan charge-offs.

In contrast to the rather steady climb in nonaccrual loans, farm production loans past due but still accruing have shown considerable seasonal variation, with each year's peak occurring in March. On March 31 of this year, total nonperforming loans had risen to about 7.0 percent of outstanding production loans, up from about 5.7 percent a year earlier. Another 3.4 percent of production loans were past due 30 to 89 days; thus, over 10 percent of farm production loans were delinquent at the end of the first quarter.

Table 4

Estimated delinquent farm production loans at commercial banks
March 31

Class of delinquent loans	1983	1984	1985
	Billions of dollars		
Total	2.5	3.3	4.0
Past due 30 to 89 days and still accruing	1.0	1.0	1.3
Nonperforming	1.5	2.3	2.7
Past due 90 days or more and still accruing	.7	.7	.8
Nonaccrual	.8	1.5	1.8
Renegotiated	*	.1	.1
	As percentage of outstanding farm production loans		
Total	6.8	8.4	10.4
Past due 30 to 89 days and still accruing	2.8	2.7	3.4
Nonperforming	4.0	5.7	7.0
Past due 90 days or more and still accruing	1.8	1.8	2.1
Nonaccrual	2.2	3.8	4.7
Renegotiated	.1	.1	.2

* Less than $0.05 billion.

Data are estimates of national totals for farm non-real-estate loans. Estimates of loans past due and still accruing are based on reports from banks that hold about 92 percent of the outstanding national volume of such loans. However, only large banks that account for about one-fourth of such volume report nonaccrual and renegotiated farm loans; for other banks, the amount of such farm loans was estimated using their reports on the amount of toal loans in these categories. On the June 1985 report of condition, small banks will also report nonaccrual and renegotiated farm loans. The estimates shown above will be revised as indicated by this new information.

Conditions at agricultural banks

Farm financial difficulties have most affected those small rural banks with relatively high concentration in farm lending. There are now about 5,000 "agricultural" banks with a farm loan ratio that is above the current average (about 17 percent) of the farm loan ratios at all banks. On average at these banks, farm loans constitute 37 percent of total loans; however, many of their other loans are to businesses and individuals significantly affected by the farm economy.

Conditions at many agricultural banks have been dominated by recent adverse loan experience. Their farm loan delinquencies are not fully known, as most of these banks have not been required to report their nonaccrual farm loans. They do, however, report fully on their total loan experience.

Total loan charge-offs. Net charge-offs of all loans at agricultural banks have risen substantially since 1980, as shown in Table 5. In 1984, such charge-offs were equal to 1.2 percent of loans outstanding at year-end. This was about double the relative level at other small banks, the reverse of the situation that had prevailed for many years before 1983.

Among all agricultural banks, relative charge-offs in 1984 rose with the degree of concentration in farm lending. At banks at which farm loans constituted over half of the loan portfolio, average net charge-offs exceeded 1.5 percent of loans outstanding. And, as shown in Table 5, average charge-offs at all agricultural banks in several key farm states also exceeded that level.

In the first quarter of 1985, net charge-offs at agricultural banks were equal to 0.28 percent of loans outstanding at the end of the quarter, nearly double the relative charge-offs a year earlier. Agricultural banks in Iowa had the highest average charge-off rate, 0.55 percent, followed by banks in Nebraska, at 0.45 percent.

Table 5

Net charge-offs of loans at agricultural banks
as a percentage of loans outstanding at end of period

Area	1980	1981	1982	1983	1984	First quarter 1984	First quarter 1985
United States....	.32	.43	.69	.93	1.22	.15	.28
Selected midwestern states:							
Illinois.......	.37	.42	.63	.68	.81	.08	.24
Iowa...........	.31	.34	.67	.92	1.71	.21	.55
Kansas.........	.38	.53	.87	1.02	1.71	.18	.20
Minnesota......	.19	.25	.41	.67	1.11	.10	.26
Missouri.......	.40	.49	.68	.96	1.54	.15	.37
Nebraska.......	.34	.32	.74	.93	1.85	.24	.45

Agricultural banks are insured commercial banks with an above-average farm loan ratio; that is, a farm loan ratio above the average of the farm loan ratios at all insured commercial banks (16.67 percent on March 31, 1985).

Agricultural bank earnings. Net income at agricultural banks has been sharply reduced by their greater loan losses and higher levels of nonperforming loans. However, these banks had been relatively profitable--from 1973 to 1982, average annual returns on equity had ranged from 14 to 16 percent--and their return on equity in 1984 still averaged 9 percent. And, as this average implies, many agricultural banks continued to enjoy relatively favorable loan experience. For example, in 1984 loan loss provisions were under 0.4 percent of outstanding loans at nearly one-third of agricultural banks, and under 1.0 percent at nearly three-fifths of the banks. Such relatively low losses enabled nearly a fifth of all agricultural banks to earn more than 15 percent on equity in 1984, and over half earned more than 10 percent, as shown in Table 7.

But in each year since 1980, an increased proportion of agricultural banks experienced loan losses larger than could be covered by annual net earnings. In 1984, 17 percent of agricultural banks made loan loss provisions that exceeded 2.5 percent of year-end loans outstanding. Mostly because of such adverse loan experience, 12 percent of agricultural banks reported negative net income for 1984, compared with an average of only 1 percent during the 1970s.

Table 8

Agricultural bank failures and farm loans at failed commercial banks

Period	Number of bank failures			Farm loans at all failures	
	Total	Agricultural	Agricultural as percentage of total	Millions of dollars	As percentage of total loans at failures
Annual					
1981......	7	1	14	3	4
1982......	35	11	31	49	3
1983......	45	7	16	62	2
1984......	78	32	41	199	10
1985 through July 26:					
	63	39	62	292	24
Quarterly					
1981-Q1...	3	1	33		
-Q2...	1	0	0		
-Q3...	1	0	0		
-Q4...	2	0	0		
1982-Q1...	5	2	40		
-Q2...	10	3	30		
-Q3...	11	3	27		
-Q4...	9	3	33		
1983-Q1...	11	1	9		
-Q2...	15	1	7		
-Q3...	12	2	17		
-Q4...	7	3	43		
1984-Q1...	13	3	23		
-Q2...	30	7	23		
-Q3...	17	10	59		
-Q4...	18	12	67		
1985-Q1...	20	13	65		
-Q2...	32	21	66		

Agricultural banks are insured commercial banks with an above-average farm loan ratio; that is, a farm loan ratio above the average of the farm loan ratios at all such banks (16.97 percent on December 31, 1984).

Vulnerable agricultural banks. During the past two years, banks that failed came predominantly from the group that had earlier reported levels of delinquent loans that exceeded total capital; thus changes in the relative number of such banks help to indicate probable changes in failure rates. The number of banks with such relatively high loan delinquencies rose by about one-third during 1984, to over 600 banks at year-end, or 4 percent of all banks. There were significant increases in the number of such banks in several highly agricultural states. However, in most of these states--Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and Wisconsin--the proportion of banks in this condition at the end of 1984 was still only roughly equal to the national average of 4 percent. Furthermore, farm loans at such banks nationally averaged only 7 percent of total loans at the banks. In several states with a relatively high number of these potentially vulnerable banks--California, Colorado, Florida, Louisiana, Oklahoma, Tennessee, and Texas--the low average farm loan ratio at these banks indicates that, on average, farm loans are not responsible for the delinquency problems.

Nevertheless, the number of agricultural banks identified as potentially vulnerable by this measure increased sharply last year, from 133 to 240. If rural economic conditions do not improve, it is logical to expect a roughly corresponding increase in failures of agricultural banks during 1985--as is in fact being experienced. Five midwestern states--Iowa, Kansas, Minnesota, Missouri, and Nebraska--accounted for over one-half of the national total of such potentially vulnerable agricultural banks. And, in the first seven months of this year, 26 of the 39 agricultural banks that failed were located in these five states.

Table 9

Banks at which past due and nonperforming loans exceeded total capital
December 31

State	Insured commercial banks			Agricultural banks		
	1982	1983	1984	1982	1983	1984
United States...	459	453	613	94	133	240
Arkansas........	3	6	8	1	3	3
California......	56	46	45	0	1	3
Colorado........	15	16	36	3	5	11
Florida.........	6	9	17	0	0	1
Illinois........	35	25	22	3	6	7
Indiana.........	6	14	12	2	5	4
Iowa............	6	6	33	6	4	32
Kansas..........	6	13	28	5	7	26
Kentucky........	7	7	10	3	2	2
Louisiana.......	19	24	40	4	4	3
Michigan........	20	13	4	4	3	1
Minnesota.......	21	30	33	6	14	25
Missouri........	14	15	32	8	8	21
Montana.........	12	8	20	3	5	13
Nebraska........	8	14	22	8	13	21
New Jersey......	11	6	6	0	0	0
North Dakota....	4	5	9	4	5	8
Ohio............	7	4	9	3	0	5
Oklahoma........	16	23	37	4	7	9
Oregon..........	23	19	13	2	4	4
Tennessee.......	31	33	23	2	5	3
Texas...........	27	29	54	4	6	9
Utah............	14	9	9	1	2	1
Washington......	6	5	9	0	0	2
West Virginia...	6	8	11	0	1	0
Wisconsin.......	13	17	19	8	14	15
Wyoming.........	8	8	15	2	0	3

Data are shown for states that accounted for at least 1 percent of the national total of all insured commercial banks at which past due and nonperforming loans exceeded total capital in 1984, or for at least 2 percent of that total in 1982 or 1983.

Farm loan interest rates at commercial banks

At large banks, farm loan interest rates have recently declined roughly in line with changes in the prime rate. At small banks, the average effective rate on farm production loans remained above 14 percent during the past two years, but fell to 13.6 percent in the most recent (May 1985) quarterly survey (Table 10).

Table 10

Average effective interest rate on farm loans made
at commercial banks
(percent)

Period	All banks	Large banks	Other banks
Annual			
1977..........	8.8	8.5	9.0
1978..........	9.6	10.2	9.4
1979..........	11.9	13.6	11.4
1980..........	15.2	16.2	15.0
1981..........	18.5	19.8	18.1
1982..........	16.7	16.1	17.0
1983..........	13.6	12.1	14.1
1984..........	14.2	13.1	14.5
Quarterly			
1983-Q1.......	13.8	12.5	14.2
-Q2.......	13.3	12.0	13.9
-Q3.......	13.7	12.2	14.2
-Q4.......	13.6	11.8	14.2
1984-Q1.......	13.5	12.2	14.1
-Q2.......	14.3	13.3	14.5
-Q3.......	14.9	14.4	15.0
-Q4.......	14.3	13.4	14.5
1985-Q1.......	13.5	11.7	14.1
-Q2.......	13.1	11.6	13.6

Effective rates shown are estimates from the Federal Reserve survey of terms of bank lending to farmers.

In recent quarters, most "large banks" (survey strata 1 to 3) had over $500 million in total assets, and most "other banks" (survey strata 4 to 6) had total assets below $500 million.

Farm sector financial experience

Real farm cash flow in 1984 was little changed from the average of this decade (Table 11, lines 3 and 5). Net income was boosted somewhat by PIK payments distributed early in the year (lines 9 and 11). Farm asset values fell sharply, however. By year-end agricultural equity, in constant dollars, was reduced to only two-thirds of its level at the beginning of the decade (line 16). The average rate of income return on farm assets rose to 2.9 percent (line 17), which was still far below the average interest rate on outstanding farm debt (line 20) or the yield on alternative investments available to owners of farms. In midwestern areas where farm land prices have dropped most, however, income returns of 6 to 9 percent on current market value are being reported by farm managers and investors.

Data for 1984 shown in Table 11 are based primarily on projections published by the USDA, except that the value of assets reflects the result of the survey of farm real estate values as of April 1, 1985, and also revised historical data on the amount of land in farms, and the amount of debt reflects year-end reports from lenders and also revised historical data on debt owed to the Farm Credit System. As usual, further revisions in most of the series shown will be published by the USDA in September.

Preliminary indications from bankers responding to Federal Reserve Bank surveys of agricultural credit conditions conducted as of June 30 are that farm land prices during the second quarter continued to fall in the Chicago, Minneapolis, Kansas City, and Richmond districts while remaining relatively stable in the Dallas district. During the next week or so, these Reserve Banks will be reporting these findings in the publications in which the results of their quarterly surveys are customarily released.

Table 11

Farm cash flow, income, and balance sheet data, selected periods
(Data excluding farm households)

	Item		Pre-boom 1970-71	Boom I 1972-75	Recession I 1976-77	Boom II 1978-79	Recession II 1980-84	Addendum 1984
	Derivation of cash flow (annual average, billions of 1984 dollars)							
1		Gross income	134	173	162	184	163	162
2	Less:	Operating expenses	76	90	96	104	95	90
3	Equals:	Cash flow before interest	58	83	66	80	67	72
4	Less:	Interest	8	10	12	16	21	22
5	Equals:	Cash flow after interest	50	74	53	64	46	50
	Derivation of net income and total return (annual average, billions of 1984 dollars)							
6		Cash flow before interest	58	83	66	80	67	72
7	Less:	Depreciation	14	17	20	22	21	19
8	Less:	Imputed return to operators' labor and management	31	30	29	29	27	26
9	Equals:	Income from assets	13	37	16	29	19	26
10	Less:	Interest	8	10	12	16	21	22
11	Equals:	Income from equity	5	27	4	14	-2	5
12	Plus:	Real capital gain	14	62	76	90	-54	-116
13	Equals:	Total real return from equity	19	89	79	104	-57	-112
	Balance sheet (end of period, billions of 1984 dollars)							
14		Assets	683	880	1017	1191	853	853
15	Less:	Debt	124	146	177	201	196	196
16	Equals:	Equity	559	734	840	991	656	656
	Rates (percent)							
17	Income return to assets		1.9	4.7	1.7	2.6	1.8	2.9
18	Real capital gain on assets		1.4	6.7	7.0	6.7	-6.1	-13.4
19	Total real return to assets		3.4	11.3	8.7	9.3	-4.3	-10.6
20	Interest paid		6.4	7.1	7.7	8.3	10.4	10.7
21	Real rate of interest		2.5	.7	2.8	.3	5.1	7.6
22	Total real return to equity		3.5	13.5	9.9	11.2	-6.6	-15.7

Data are from Agricultural Finance Databook, Statistical Release E.15, Board of Governors of the Federal Reserve System, Tables 101, 112, and 122, July 1985 (forthcoming).

Corrected data for Table 3 of Agricultural Banking Experience, 1984

Estimated delinquent farm production loans at commercial banks
December 31

Class of delinquent loans	1982	1983	1984
	Billions of dollars		
Total	2.0	2.5	3.2
Past due 30 to 89 days and still accruing	.9	1.0	1.1
Nonperforming	1.0	1.5	2.1
Past due 90 days or more and still accruing	.4	.4	.4
Nonaccrual	.6	1.1	1.6
Renegotiated	*	.1	.1
	As percentage of outstanding farm production loans		
Total	5.5	6.4	8.0
Past due 30 to 89 days and still accruing	2.6	2.5	2.8
Nonperforming	2.9	3.9	5.3
Past due 90 days or more and still accruing	1.2	1.1	1.1
Nonaccrual	1.6	2.7	4.0
Renegotiated	.1	.1	.2

* Less than $0.05 billion.