

The farmers and their bankers: who'll go first?

by Susan Cohen



Agricultural survey

The American farm sector is about to undergo an across-the-board bankruptcy as the result of the Carter administration's decision to clamp credit controls on the U.S. economy. The hardest hit are the nation's largest, most productive, most capital-intensive farm units. If they go under, starvation immediately confronts whole sectors of the world's—and this nation's population.

The warning signals came even before Federal Reserve Chairman Paul Volcker announced his first set of "anti-inflation" measures last Columbus Day weekend. At that time, the U.S. Department of Agriculture calculated that net farm income would drop by at least 20 percent during 1980 from an estimated 1979 net income of \$32 billion to about \$20-25 billion. The USDA estimated that production costs would outpace rising farm receipts.

Then came Volcker's October measures, Carter's embargo, Volcker's February hike in the discount rate, the administration's decision to cancel the paid diversion program, the budget cutting and the credit control measures. With inflation still soaring, these sorts of measures have created the kind of liquidity crisis that can only result in a chain reaction bankruptcy of farm producers and their bankers alike.

Estimates for 1979 farm income are still preliminary, but what they indicate is that the increase in marketing receipts was indeed more than offset by a \$2 billion decline in government payments to farmers and a rise in production expenses of at least \$20 billion. Fuel and interest charges on borrowed funds, which together make up one-sixth of total production expenses, led the rise. The increase in net farm income is totally accounted for by such hallmarks of illiquidity as increased inventories and, to a lesser extent, other nonmoney income sources such as the increased rental value of farm dwellings, and so forth.

The grain embargo exacerbated this cash crisis by halting marketing and backing up stockpiles (10 million tons of corn and about 7 million tons of wheat in particular, out of record crops of both) of grain at the local and producer level. The credit-crunch measures meant that the cost of holding inventories was rising as crop prices plunged. Farmers were stuck without cash to finish paying last season's bills and to buy for the next planting.

The credit controls will make it prohibitively costly if not impossible to get sufficient credit.

The eye of the storm

It is a Carter administration lie that crop prices have recovered to better than pre-embargo levels. When the embargo was announced, prices collapsed at the local level, especially for corn, and have not yet recovered. This situation is especially acute in the upper midwest grain belt, through the states of Iowa, Minnesota, Nebraska and South Dakota where the embargo aggravates

longstanding transport bottlenecks of one sort or another.

Because supplies from the bumper harvest are backed up at the elevator and on the farm, the spread between local prices and the prices quoted at the Chicago Board of Trade has widened by as much as 40 cents, as is the case in Grand Island, Nebraska where the basis fell from 10-20 cents under to 55-59 cents under. And, as Bob Dwyer, farm manager for the First National Bank of Grand Island, pointed out in a recent interview with *Feedstuffs* magazine, this occurred despite the fact that Grand Island has ready access to both the Burlington Northern and Union Pacific rail lines. In areas cut off from markets by rail "reorganization" and liquidation, it is much worse.

In Minnesota, for instance, where the embargo was preceded by several months of strike-bound ports and followed by a quick freeze of the Great Lakes grain routes to market, bankers report that local corn prices

Table 1 Gross and net farm income

	1977	1978	1979
Cash receipts from farm marketings	95.7	111.0	131.6
Livestock and products	47.4	59.0	66.8
Crops	48.2	52.1	64.7
Net change in farm inventories	1.1	1.1	5.5
Nonmoney and other farm income*	11.8	13.8	13.7
Gross farm income	108.5	126.0	150.8
Farm production expenses ...	88.8	98.1	118.0
Net farm income			
Current prices	19.8	27.9	32.8
1967 prices**	10.9	14.3	14.4

* Includes government payments to farmers, value of farm products consumed in farm households, rental value of farm dwellings, and income from recreation, machine hire, and custom work.

** Deflated by the consumer price index for all items, 1967 = 100.

Source: USDA, *Agricultural Outlook*, Jan.-Feb.

Table 2 Farm income flows

(percent change 1979-80 implied by USDA forecast of \$20 billion net 1980 income)

Type of income flow	All farms	Value of sales in 1978 (dollars)						
		100,000 and over	40,000 to 99,999	20,000 to 39,999	10,000 to 19,999	5,000 to 9,999	2,500 to 4,999	Under 2,500
Farm income								
Net income:								
Total	-36	-58	-25	-21	-23	-26	-23	-4
Money	-56	-65	-33	-32	-56	Loss	Loss	Loss
Cash flow:								
Total	-19	-36	-14	-10	-9	-7	-4	4
Money	-25	-39	-17	-13	-15	-21	-26	-15
Farm and off-farm income								
Net income:								
Total	-10	-47	-17	-9	-2	4	8	10
Money	-13	-52	-21	-12	-4	3	7	10
Cash flow:								
Total	-5	-31	-10	-4	1	5	8	10
Money	-8	-33	-12	-5	0	5	8	10

Table 3 Percent distribution of selected income and balance sheet items

Item	All farms	Value of sales in 1978 (dollars)						
		100,000 and over	40,000 to 99,999	20,000 to 39,999	10,000 to 19,999	5,000 to 9,999	2,500 to 4,999	Under 2,500
Number of farms	100.0	7.0	14.6	12.1	11.1	10.5	10.4	34.3
Cash receipts	100.0	56.3	25.0	9.9	4.5	2.2	1.1	.9
Production expenses	100.0	57.6	22.6	8.9	4.5	2.6	1.6	2.3
Real estate	100.0	33.5	22.5	13.5	8.1	5.5	4.8	12.1
Machinery	100.0	28.6	27.2	15.0	8.5	5.6	4.3	10.8
Nonmoney income	100.0	11.9	17.5	12.0	9.9	9.3	9.2	30.2
Off-farm income	100.0	5.9	7.8	7.4	8.7	11.1	13.1	46.0
Outstanding debt	100.0	38.7	32.1	15.6	5.1	3.0	2.0	3.6

are stuck at \$2 to \$2.06 per bushel, compared to quotes of \$2.56 cash prices in Chicago. Country bankers fear that despite the fact that \$2.20 to \$2.25 is viewed as the price it would take to move the corn, farmers will be forced into "distress sales" at prices below cost of production to generate cash to plant the next crop. Banks in Minnesota report upwards of 80 percent loan-to-deposit ratios and an extreme shortage of funds.

Corn and livestock producers from Nebraska interviewed recently in the *New York Times* emphasized the production expense side of this equation. The cost of bank credit has gone up 50 percent on average, fertilizer costs are up approximately 30 percent, and energy costs another 50 percent. "Last year I needed \$2.30 a bushel to break even," one producer told the *Times*. "This year it will be \$2.42. And do you know what the price of corn is today?" And, as a spokesman for one of the major American farm organizations told *EIR*, the distress signals are coming by and large not from the proverbial "little guy" or from the "poor manager," but from large, efficient operators who have not "over-

borrowed" in the recent years and who have not gotten into financial trouble over the past several years.

In fact, as *EIR* reported at the time, the farm income drop projected by the Agriculture Department will have a far more insidious impact on the farm sector than the USDA figures indicate. Analytical work done by Federal Reserve agricultural economist Emanuel Melichar and presented publicly at the time the USDA projections were announced shows that the projected 20 percent or more drop in net income will deal a crippling blow to the *largest, most productive units*, with rates of collapse of net money-income up to 38 percent and a drop in cash flow levels of up to 20 percent.

The accompanying chart shows the relative changes in income flows under conditions of a \$20 billion net income. The impact on the 34 percent of farm units with annual sales in the range of \$20,000 to \$100,000 range that account for the bulk of total U.S. farm output is the most severe and increases geometrically with successive reductions in net farm income.

This 34 percent accounts for 90 percent of total cash

Table 4 Real estate farm debt, 1970 and 1975-1980

Year	Debt owed to reporting institutions						Total
	Federal land banks	Life insurance companies	All operating banks	Farmers Home Administration	Individuals and others	Total	
	<i>Million dollars outstanding Jan. 1</i>						
1970	6,671	5,734	3,545	2,280	18,230	10,953	29,183
1975	13,402	6,297	5,966	3,215	28,880	17,408	46,228
1976	15,950	6,726	6,296	3,369	32,341	18,728	51,069
1977	18,455	7,400	6,781	3,657	36,293	20,266	56,559
1978	21,391	8,819	7,780	3,982	41,972	21,669	63,641
1979	24,619	10,168	8,557	4,121	47,465	24,767	72,232
1980	29,540	11,900	8,972	4,400	54,812	28,310	83,122

Table 4a Non-real estate farm debt, 1970 and 1975-1980

Year	Debt owed to reporting institutions (excluding CCC)					Individuals and others**	Total excluding CCC loans	CCC price support and storage loans	Total including CCC loans
	All operating banks	Production credit assoc.	Federal intermediate credit banks*	Farmers Home Admin.	Total				
	<i>Million dollars outstanding Jan. 1</i>								
1970	10,330	4,495	218	785	15,828	5,340	21,168	2,676	23,844
1975	18,238	9,519	374	1,044	29,175	6,050	35,226	319	35,545
1976	20,160	10,773	350	1,772	33,055	6,350	39,406	358	39,764
1977	23,283	12,223	368	1,877	37,761	7,300	45,061	1,012	46,073
1978	25,709	13,508	374	3,141	42,732	8,410	51,142	4,489	55,631
1979	28,273	15,016	509	5,780	49,578	10,420	59,998	5,242	65,240
1980	30,400	17,570	650	9,900	58,520	11,720	70,240	4,500	74,740

*Financial institutions other than PCA's that obtain funds from the FICM's.

**Includes Small Business Administration farm loans estimated at \$.3 bil., \$1.7 bil., and \$2.0 bil. for Jan. 1, 1978, 1979, and 1980, respectively.

Source: USDA, *Agricultural Finance Outlook*, November 1979.

receipts in the farm sector; 90 percent of production expenditures; and over 70 percent of machinery expenditures annually. Not surprisingly, it is this small group that carry the vast bulk of farm debt outstanding: nearly 90 percent. At the same time, these farms account for relatively little of the "off-farm" income that would otherwise help to cushion them against farm income drops.

If we consider, further, that the *nonmoney* component of farm income is about \$10 billion today, a 25 percent fall in operators' net income necessarily means a proportionally greater reduction in operators' *money* net income of about 32 percent. In addition, like "off-farm" income, nonmoney income is overwhelmingly concentrated on that two-thirds of farm units consisting of very tiny farms.

What the USDA projections, adjusted downward conservatively, mean is a fall in net money income from 32 to as high as 65 percent for farms in the \$20,000 and over annual sales range, accompanied by 13 to 39 percent drops in money cash flow. Since these units are the most highly leveraged, the income projections and performance to date map a cash-flow crisis of monumental proportions.

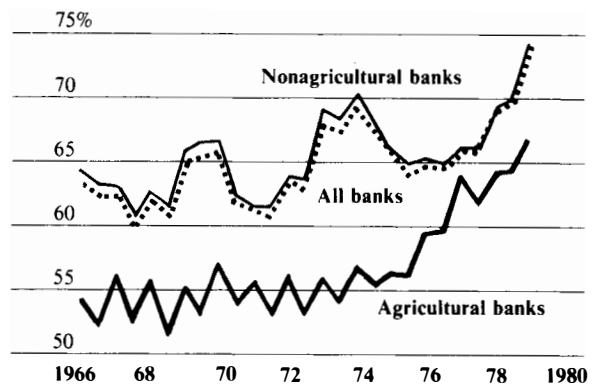
How the banks stand

The banking system is hardly able to be of any help. With stagnant or falling deposit levels now highly constricted, the country banks have been forced to rely increasingly on money-center banks for correspondent relationships, access to federal funds, etc., or on a growth lending policy. As the proportion of money-center funds in their deposit base has grown, they have also been increasingly forced to pass on the high cost of funds to their borrowers.

The growing illiquidity of the regional banking system is reflected in the drop of the rate of growth of non-real estate lending at commercial banks and the slippage of the proportion of outstanding non-real estate debt held by the commercial banks. The very same is true for real-estate debt.

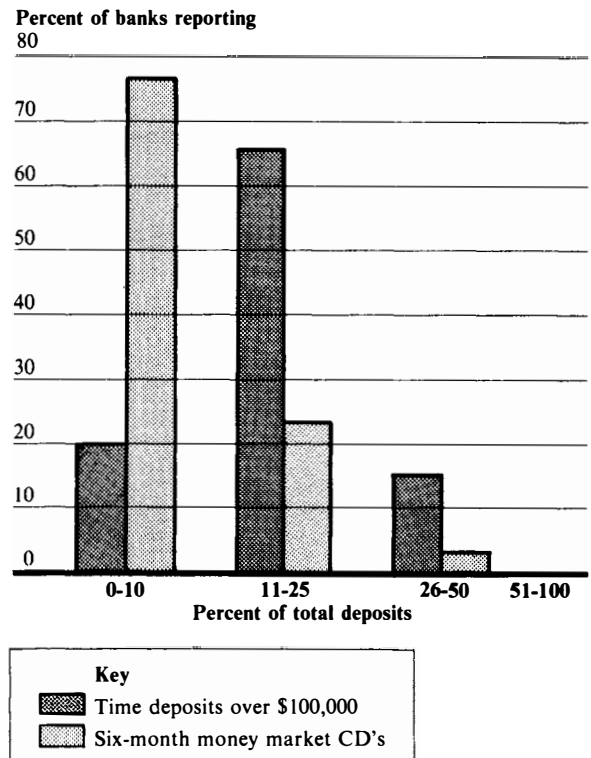
The regional banks were in trouble even before Volcker's latest measures, as January 1980 operating reports and surveys and an earlier, November, survey by the American Bankers Association indicate. The Federal Reserve's Tenth District, for instance, which encompasses Kansas, Missouri, Nebraska, Oklahoma, Colorado, New Mexico and Wyoming, reported that as of Jan. 1, district rural banks had "less liquidity than expected." Bankers were looking forward to implementation of a paid crop diversion program to bring some cash into their coffers early in the year. They got no diversion program, but an embargo, interest rate hikes and credit controls instead.

Graph 1
Average loan/deposit ratio at insured commercial banks



Source: E. Melicher, "A Review of Selected Farm Financial Developments," Nov. 7, 1979.

Graph 2
Deposit structure of agricultural banks of the Tenth Federal Reserve District,* January 1980



* The Tenth Federal Reserve District includes Kansas, Missouri, Nebraska, Oklahoma, Colorado, New Mexico and Wyoming.
Source: Financial Letter, Federal Reserve Bank of Kansas City, Vol. 6, No. 2, Feb. 15, 1980.

In the Ninth Federal Reserve District, encompassing Minnesota, Montana, North Dakota, South Dakota and Wisconsin, loan demand as of Jan. 1 was reported unusually heavy, with a high level of requests to refinance. The reported rate on short-term agricultural loans in the district shot up by nearly two percentage points—from 11.8 to 13.6 percent—in the three months covered by the October to January survey. Lower on average than other farm loan rates, the district rates have been held down by usury limits ranging from 12 to 16.5 percent. Suspension of the usury laws on agricultural loans above \$25,000 by a recently passed federal law was being relied upon to assure that a supply of loan funds will be forthcoming. But the most recent of Volcker's measures, the six to nine percent credit growth rate in particular, means that the supply of loan funds is not assured—no matter what the price!

Even before the Volcker "anti-inflation" measures, an agricultural banking survey conducted by the American Bankers Association and published in November showed the liquidity crisis in the farm sector. The average loan-deposit ratio was 67 percent, compared to 65 percent a year before, and 45 percent of reporting bankers indicated ratios of 70 percent or more. Equally important is the increasing convergence of agricultural bank loan-deposit ratio trends and those of nonagricultural banks.

Despite the fact that country bankers had substantially increased their legal loan limits to farm borrowers over the years, 63 percent reported loan applications from acceptable farm borrowers that exceeded their legal loan limit, the highest proportion

since the recession of 1974. The bulk of these were serviced by participations with other banks about (77 percent), and 16 percent were referred to other institutions or never granted at all. As the ABA notes, due to limited loan funds, the increased cost of funds to the country banks, and strong demand, the price of credit for agricultural purposes had already registered the largest one-year increase ever recorded by the ABA. A year ago most farm bank interest rates averaged about 9.5 percent. By mid-1979, the average was up to about 11 percent and most bankers expected further increases through the end of 1979. Average rates then were about 14 percent. Again the convergence of interest rate trends for farm loans at country banks and those at large banks, is significant.

Historically, the agricultural banks (the nearly one-third of all commercial banks which together account for 6 percent of total banking resources, and yet hold nearly half of all farm loans in the banking system) have been relatively insulated from the vagaries of the national money markets. They have relied almost exclusively on local deposits for their source of loan funds.

Typically, the farm loan interest rate structure at rural banks has been very steady over long periods of time, with rates running higher than those at large money-center banks during loose money periods and lower during tight money episodes. During the 1969 and 1973 credit crunches, when short-term prime commercial paper rates, for instance, went from 5.6 to 8.8 percent and from 4.7 to 11.7 percent respectively, short-term farm loans typically fluctuated by roughly one percent-

Table 5 Percentage distribution of non-real-estate farm loans for all banks*

Effective interest rate (percent)	Feb. 1977	May 1977	Aug. 1977	Nov. 1977	Feb. 1978	May 1978	Aug. 1978	Nov. 1978	Feb. 1979	May 1979	Aug. 1979	Nov. 1979
All loans	100	100	100	100	100	100	100	100	100	100	100	100
Under 7.0	1	7	2	—	—	—	—	—	—	—	—	—
7.0 to 7.9	8	6	11	3	1	—	—	—	—	—	—	—
8.0 to 8.9	46	43	48	42	38	35	20	8	4	4	2	—
9.0 to 9.9	41	40	34	48	50	48	50	32	17	14	11	1
10.0 to 10.9	3	3	4	7	9	11	22	37	35	32	29	7
11.0 to 11.9	—	1	—	1	1	6	6	11	19	22	33	10
12.0 to 12.9	—	—	—	—	—	—	1	7	12	12	14	15
13.0 to 13.9	—	—	—	—	—	—	—	4	6	10	7	35
14.0 to 14.9	—	—	—	—	—	—	—	—	6	5	5	13
15.0 to 15.9	—	—	—	—	—	—	—	—	—	1	1	4
16.0 to 16.9	—	—	—	—	—	—	—	—	—	—	—	6
17.0 to 17.9	—	—	—	—	—	—	—	—	—	—	—	5
18.0 to 18.9	—	—	—	—	—	—	—	—	—	—	—	3
19.0 to 19.9	—	—	—	—	—	—	—	—	—	—	—	—
20.0 and over	—	—	—	—	—	—	—	—	—	—	—	—

* Percentage distribution of the total dollar amount of non-real-estate farm loans of \$1,000 or more.
Source: Federal Reserve Quarterly Survey of Terms of Bank Lending to Farmers.

age point from 7.4 to 8.4 percent and 8.1 to 9.1 percent respectively.

Data from 1976 to the present, however, shows that with a sharp increase in rates in the fourth quarter of 1978 and the first quarter of 1979, farm loan interest rate increases already rivaled the total increases recorded for the farm banks during each of the two previous cycles.

The key to the behavior of farm bank interest rates lie in the changing composition of their deposit structure. For agricultural banks the federal funds market has typically served rather as a place to invest, not to get liquid funds. As of March 31, 1979, agricultural banks were net sellers of \$1.8 billion in federal funds, 2.5 percent of their total assets, while other banks were net buyers of \$61.1 billion worth of federal funds, an amount representing 5.2 percent of their total assets.

Over 1979 this pattern began to change noticeably. Sales of federal funds by agricultural banks declined from an earlier average of 4 percent of assets and the percentage of net buyers of federal funds among agricultural banks jumped from 10 to 18 percent, with net purchases representing 2.9 percent of total assets.

As of March 1979, long term certificates of deposit (\$100,000 or more) made up only 5.2 percent of total resources at agricultural banks, compared to 14.7 percent at other banks. As of Jan. 1, 1980, large-denomination time deposits comprised an average of 7.1 percent of the total deposits of Tenth Federal Reserve district banks.

In March 1978, agricultural banks introduced a new six-month money market certificate of deposit to enable them to compete for funds with money-center banks more successfully. In March 1979, one year after its offering, it made up 5.7 percent of farm bank deposits. As of Jan. 1, 1980, it made up an average of 17.5 percent of total deposits of country banks in the Tenth District.

These two so-called interest-rate-sensitive deposit types accounted for 24 percent of the deposit structure of reporting banks during the fourth quarter of 1979 in the Tenth District. The six-month money market certificate proportion of deposits was increasing dramatically, comprising between 11 and 25 percent of the deposit structure of 63 percent of reporting banks. These types of deposits act as a direct transmission belt for money-center dictated interest rate rises. The banks have to jack up rates to hold the deposits and must pass the hikes on to their farm customers. District-wide interest rates for all categories of loans were reported by an average of 30 percent as of year-end 1979.

Now it is precisely those resources, the bank funds above deposits, the so-called managed liabilities, which are the target of the latest Volcker moves. The new Fed measures raise reserve requirements on these funds from 8 to 10 percent, and lower the base on which the requirements are imposed by at least 7 percent. Nonmember

Table 6 Sources of funds other than deposits
(percent of total)

	Current	3 years
Participations with banks	33	32
Purchase Fed Funds	25	22
Guaranteed loans	18	20
Borrow from Federal Reserve	8	7
Participate with PCA	8	10
Agricultural Credit	5	6
Other	3	3

Source: Agricultural Banker, *Special Report*, November 1979.

banks are required to keep a 10 percent reserve against managed liabilities at the Fed for the first time.

The effect of these measures was foreshadowed in the ABA's November survey where reporting farm bankers' ranking of sources of funds other than deposits shifts significantly away from participation with banks and purchase of federal funds, the two items on the list which most directly bind them to the money-center banks. Guaranteed loans from the FHA as well as participation with the Farm Credit System's Production Credit Associations take a big jump, putting that system under considerable pressure.

The Farm Credit System of Production Credit Associations, Federal Land Banks and Banks for Cooperatives have direct access to loan funds through bond sales in the national money markets. For the past six months, PCA lending has been running at 25 percent greater than year-ago levels. As of January, total loans outstanding at the PCAs were up 22 percent from a year earlier.

The recent sale of Farm Credit System six-month and nine-month bonds saw 17.25 and 17 percent yields respectively, up sharply from the 15.30 and 15.35 percent peaks set in a just one month ago. As knowledgeable observers warn, these rates will catch up quickly in System loans to farmers during the year as the six- to nine-month paper has to be rolled over. Others worry that quantitative controls may be placed on the Farm Credit System's fundraising operations.

There are many potential triggers for the bust that has been set up in the farm sector. The extension of \$2 billion in FHA economic emergency assistance is bottled up in committee, exports are flat, and the administration's miserly approach to compensating producers for the effect of the embargo is hardly encouraging. Putting a lid on the Farm Credit System would certainly do it, but it would also leave the Federal Reserve and the government overlooking the largest bankruptcy and bailout in history.