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AGRICULTURAL CREDIT IN THE SOUTHWESTERN STATES

Almost \$5.5 billion in farm credit was outstanding in the five states of the Eleventh Federal Reserve District (Arizona, Louisiana, New Mexico, Oklahoma, and Texas) at the beginning of 1969, 8 percent more than in January 1968. Of that, \$3.5 billion was in real-estate loans.

Banks continued to be far and away the largest source of non-real-estate loans, accounting for 70 percent of the almost \$2 billion outstanding. Production credit associations accounted for 23 percent, while the Farmers Home Administration accounted for the remaining 7 percent.

The composition of the credit supply had shifted considerably over the previous decade, with the share extended by banks and PCA's increasing at the expense of the FHA. At the beginning of 1959, the FHA accounted for 13 percent of the nonreal-estate loans outstanding to farmers, PCA's 19 percent, and banks 68 percent. The much faster rise in loans by PCA's may have been due partly to the increased size of commercial farm loans at banks and to the relatively low loan limits of the smaller banks.

Life insurance companies were the principal institutional lender of farm real-estate loans, accounting for 31 percent of those outstanding in the five District states. But 36 percent were held by individuals and other noninstitutional lenders. Banks held 9 percent, Federal land banks 23 percent, and the Farmers Home Administration 1 percent. Although the FHA still had almost \$28 billion outstanding in agricultural loans across the Nation, its importance in real-estate loans had declined in the Southwest over the previous decade.

Non-Real-Estate Farm Loans Held by Principal Lenders

January 1, 1969 (Dollar amounts in thousands)

	Amount	Percent of state	Percent change, 1969 from
Area and lender	held	total	1968
ARIZONA			
Banks	\$ 193,074	91	1
PCA's	15,731	7	10
FHA	3,440	2	20
Total	\$ 212,245	100	1
LOUISIANA			
Banks	\$ 69,757	50	28
PCA's	52,441	37	14
FHA	18,676	13	-11
Total	\$ 140,874	100	16
NEW MEXICO			
Banks	\$ 72,290	57	10
PCA's	45,328	36	13
FHA	8,798	7	-3
Total	\$ 126,416	100	10
OKLAHOMA			
Banks	\$ 295,293	71	5
PCA's	97,213	24	18
FHA	20,936	5	(1)
Total	\$ 413,442	100	7
TEXAS			
Banks	\$ 722,237	70	10
PCA's	224,073	22	15
FHA	88,134	8	-3
Total	\$1,034,444	100	10
DISTRICT	¢1.050.651		0
Banks	\$1,352,651	70	8
PCA's	434,786	23	15
ГПА	\$1 927 421	100	-3
10tai	ψ1,727,721	100	,

¹Less than 0.5 percent.

SOURCE: The American Bankers Association.

FEDERAL RESERVE BANK OF DALLAS DALLAS, TEXAS

Between the beginnings of 1959 and 1969, the total amount of real-estate loans made in the five southwestern states by institutions rose nearly two and a half times, advancing to nearly \$2.3 billion. The other three institutions increased their volume of loans substantially. Holding a fairly constant share of the total, banks increased their share nearly two and a half times. Loans at life insurance companies rose 36 percent. But the share extended by the FHA declined 53 percent.

The amount of farm credit used in each state varied widely, as did the percentage changes and the relative importance of lenders. The largest amount of farm credit was extended in Texas,

Non-Real-Estate Farm Loans Held by Principal Lenders, 1969 and 1959

January I (Dollar amounts in thousands)

				Darcant
Area and lender		1969	1959	change, 1969 from 1959
APIZONA				
Banks PCA's FHA	\$	193,074 15,731 3,440	\$ 79,801 5,863 1,495	142 168 130
Total	\$	212,245	\$ 87,159	144
LOUISIANA Banks PCA's FHA Total	\$	69,757 52,441 18,676 140,874	\$ 24,225 16,713 8,605 \$ 49,543	188 214 117 184
NEW MEYICO				
Banks PCA's FHA Total	\$	72,290 45,328 8,798 126,416	\$ 29,565 10,616 7,251 \$ 47,432	145 327 121 167
OKI ALIOMA				
Banks PCA's FHA Total	\$	295,293 97,213 20,936 413,442	\$105,785 26,433 17,230 \$149,448	179 268 21 177
TEVAS				
Banks PCA's FHA Total	\$	722,237 224,073 88,134 1,034,444	\$289,152 90,221 62,850 \$442,223	150 148 40 134
DISTRICT				
Banks PCA's FHA Total	\$1	1,352,651 434,786 139,984 1,927,421	\$528,528 149,846 97,431 \$775,805	156 190 44 148

but the greatest percentage gains over the 1968 level were in Louisiana, where real-estate loans increased 14 percent and non-real-estate loans advanced 16 percent. The smallest percentage changes were in Arizona, where non-real-estate

Farm Real-Estate Loans Held by Principal Lenders

January 1, 1969 (Dollar amounts in thousands)

Area and lender	Amount held	Percent of state total	Percent change 1969 from 1968
ARIZONA			
Banks FLB's Life ins. cos Individuals ² FHA	\$ 9,768 36,584 103,741 117,946 1,115	4 14 38 44 (1)	4 1 -2 (1) (1)
Total	\$ 269,154	100	-1
LOUISIANA Banks FLB's Life ins. cos Individuals ² FHA Total	\$ 65,011 113,238 133,023 151,202 4,969 \$ 467,443	$ \begin{array}{r} 14 \\ 24 \\ 29 \\ 32 \\ 1 \\ 100 \end{array} $	7 24 12 14 -12 14
NEW MEVICO			
Banks FLB's Life ins. cos Individuals ² FHA Total	\$ 7,566 55,334 83,912 123,921 1,478 \$ 272,211	$ \begin{array}{r} 3 \\ 20 \\ 31 \\ 45 \\ 1 \\ 100 \end{array} $	-8 7 6 5 -6 5
OKLAHOMA Banks FLB's Life ins. cos Individuals ² FHA Total	\$ 84,580 112,006 177,708 217,025 6,504 \$ 597,823	$ \begin{array}{r} 14 \\ 19 \\ 30 \\ 36 \\ 1 \\ 100 \\ \end{array} $	11 13 4 7 -8 7
TEVAS			
Banks FLB's Life ins. cos Individuals ² FHA Total	\$ 163,983 476,365 610,406 667,000 13,658 \$1,931,412	8 25 32 34 1 100	16 8 4 7 -6 7
DISTRICT			
Banks FLB's Life ins. cos Individuals ² FHA Total	\$ 330,908 793,527 1,108,790 1,277,094 27,724 \$3,538,043	9 23 31 36 1 100	11 11 4 7 -7 7

¹ Less than 0.5 percent.

² Estimates—individuals and all other sources of funds. SOURCE: The American Bankers Association.

SOURCE: The American Bankers Association.

loans increased 1 percent and real-estate loans decreased 1 percent.

The cattle industry seems to be a major factor in the increased demand for farm credit in both Louisiana and Texas, but for slightly different reasons. Farmers in Louisiana are becoming more involved in raising and preconditioning feeder calves, many of which will be shipped to the High Plains area of the Southwest. Texas ranchers have

Farm Real-Estate Loans Held by Principal Lenders, 1969 and 1959

January I (Dollar amounts in thousands)

Area and lender		1969		1959	Percent change, 1969 from 1959
APIZONA					
Banks FLB's Life ins. cos FHA	\$	9,768 36,584 103,741 1,115	\$	4,250 13,891 37,763 3,584	130 163 175 -69
1 otal	Φ	151,200	۰Þ	39,400	1.54
LOUISIANA Banks FLB's Life ins. cos FHA Total	\$	65,011 113,238 133,023 4,969 316,241	\$	24,598 28,607 22,874 10,126 86,205	164 296 482 -51 267
NEW MEXICO					
Banks FLB's Life ins. cos FHA Total	\$	7,566 55,334 83,912 1,478 148,290	\$	3,520 15,197 41,612 5,952 666,281	115 264 102 -75 124
OKLAHOMA					
Banks FLB's Life ins. cos FHA Total	\$	84,580 112,006 177,708 6,504 380,798	\$	21,009 37,424 77,288 14,946 5150,667	303 199 130 -57 153
TEXAS Banks FLB's Life ins. cos FHA Total	\$	163,983 476,365 610,406 13,658 1,264,412	\$	42,291 211,063 290,055 24,486 5567,895	288 126 110 -44 123
DISTRICT Banks FLB's Life ins. cos FHA Total	\$	330,908 793,527 1,108,790 27,724 2,260,949	3	95,668 306,182 469,592 59,094 930,536	246 159 136 -53 243

NOTE: State and District totals for 1969 do not equal totals of the preceding table due to incomplete data for the "individuals" category.

SOURCE: The American Bankers Association.

continued to expand their cattle-feeding operations.

Agricultural Export Industry Is Big Employer

A recent study by the Department of Labor shows that exports of food and agricultural products accounted for an estimated 729,000 workers in 1966, or about 30 percent of all jobs related to merchandise exports.

About three-fifths of these workers were on farms. A large number of farm jobs are supported directly by exports of wheat, for example, since about half the crop every year moves to overseas markets. But there are also many other jobs involving exports, such as moving the wheat from farms to ports or turning out fertilizers and other materials required to produce wheat.

On-farm jobs related to exports totaled 433,000, or almost 11 percent of all agricultural employment. Food processing accounted for another 49,000 jobs. The remaining jobs supported indirectly by farm and food exports were concentrated in the trade, transportation, and chemical industries.

The relationship between the value of agricultural exports and the number of jobs supported by exports depends mainly on labor productivity, or output per worker. As the volume of exports expands, employment in exports tends to rise. But the increase is limited by gains in productivity. Between 1960 and 1966, for example, the value of agricultural exports (adjusted for price changes) increased 27 percent but employment related to these exports declined 6 percent.

The effect of productivity gains on export employment can be expressed another way. About 160,000 workers were required, directly and indirectly, for each billion dollars of agricultural exports in 1960. Six years later, only 118,000 were required. Such gains in productivity, are, of course, important in reducing costs, which, in turn, are important in increasing demand and employment. With the increased farm use of chemicals and machinery and the improvements being made in methods of handling and shipping farm products, this trend toward a more efficient use of labor in the production of agricultural products can be expected to continue.

ECONOMIC REFLECTIONS The Cost of Opportunities

One of the main points to be considered in an investment decision is the cost of the investment, which means more than just the dollar cost. In addition to the explicit cost of buying, hiring, or renting various factors of production, allowances must be made for the implicit cost, or value, of resources the owner provides, over and above those hired from outside sources. The problem, then, becomes one of estimating the cost of using resources for one purpose instead of another of estimating the cost of foregoing opportunities that have to be sacrificed.

Although Robinson Crusoe paid out no money, he learned that picking raspberries cost him the time and effort he could have spent picking strawberries. This cost — the sacrifice of doing something else — is called "opportunity cost." The matter of foregone opportunity is a factor in every decision, for if there were no choices to consider, there would be no decisions to make.

A dollar spent today is clearly more costly than a dollar held for a while in some productive use and then spent later. Suppose, for example, that a farmer is trying to decide whether to pay \$10,000 for a new combine with an expected service-life of 10 years or \$6,000 for a used combine with a remaining service-life of 5 years. To simplify the decision process, assume that the combine is needed and will pay for itself, that the maintenance costs are the same either way, that neither machine will have any salvage value at the end of its service-life, and that the farmer has an extra \$10,000 in cash. This last assumption removes any complications involving consideration of interest costs. However, the same kind of analysis would apply regardless of the farmer's cash position.

The farmer's problem is to decide which combine is cheaper, and the answer depends on the opportunity cost of his money. He must decide how productive his money would be if he put it to another use, a decision that would be different, of course, for everyone. Perhaps the farmer is short of capital and the additional money would earn a 15-percent return in his livestock operation. Perhaps he is content with the size of his present operation and has no better alternative use for his money except to invest it in corporate bonds yielding 8.4 percent. Or perhaps he insists on keeping his money in a checking account or safety deposit box. If so, because the money does not earn anything, there is no opportunity cost.

Also involved in this problem is the concept of "discounting," a technique used in determining the present value of future costs and returns. At first glance, the \$10,000 new combine seems to be the cheaper alternative. But the present cost of a \$12,000 expenditure in a situation where half is paid out now and half is paid out for a similar combine 5 years hence may be less than the \$10,000 cost of a new combine. The difference in these costs depends on the rate of return the farmer can receive on the remaining \$4,000 investment for the 5-year service-life of the first used combine. This is his opportunity cost. In this example, calculations show that an 8.4-percent opportunity cost of capital would make the choice a matter of indifference to the farmer. If the opportunity cost of money were more than 8.4 percent, the used machines would be the better buy. If none of his alternatives would yield 8.4 percent, the new machine would be the better buy.

Differences in opportunity cost account for one farmer consistently buying new equipment while his neighbor always buys used equipment. Both are rational, but their situations are different and they face different constraints. The farmer short of capital and with the opportunity to earn a 15percent return on his investment in livestock should buy the used machines. But the choice is a matter of indifference to the other farmer, whose better alternative, barring pride in ownership of the new machine, is investing in 8.4-percent corporate bonds. The present value of both purchases is the same to him. The farmer that would let his money lay idle rather than invest it in something else is apt to lean toward purchasing a new combine, and guite rationally, since the present cost to him is clearly \$2,000 less than he would pay for two used machines.

> Prepared by ARTHUR L. WRIGHT