# F ARM AND $\therefore$ ANCH B ulletin 

## 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 non-real-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 I, 1969
(Dollar amounts in thousands)

| Area and lender | Amount held | $\begin{aligned} & \text { Percent } \\ & \text { of } \\ & \text { state } \\ & \text { total } \end{aligned}$ | Percent change, 1969 from 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 |  |  |  |
| Banks | \$1,352.651 | 70 | 8 |
| PCA's | 434,786 | 23 | 15 |
| FHA | 139,984 | 7 | -3 |
| Total | \$1,927,421 | 100 | 9 |

${ }^{1}$ Less than 0.5 percent.
SOURCE: The American Bankers Association.

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)

| Area and lender |  | 1969 | 1959 | Percent change, 1969 from 1959 |
| :---: | :---: | :---: | :---: | :---: |
| ARIZONA |  |  |  |  |
| Banks | \$ | 193,074 | \$ 79,801 | 142 |
| PCA's |  | 15,731 | 5,863 | 168 |
| FHA |  | 3,440 | 1,495 | 130 |
| Total | \$ | 212,245 | \$ 87,159 | 144 |
| LOUISIANA |  |  |  |  |
| Banks | \$ | 69,757 | \$ 24,225 | 188 |
| PCA's |  | 52,441 | 16,713 | 214 |
| FHA |  | 18,676 | 8,605 | 117 |
| Total | \$ | 140,874 | \$ 49,543 | 184 |
| NEW MEXICO |  |  |  |  |
| Banks | \$ | 72,290 | \$ 29,565 | 145 |
| PCA's |  | 45,328 | 10,616 | 327 |
| FHA |  | 8,798 | 7,251 | 121 |
| Total | \$ | 126,416 | \$ 47,432 | 167 |
| OKLAHOMA |  |  |  |  |
| Banks | \$ | 295,293 | \$105,785 | 179 |
| PCA's |  | 97,213 | 26,433 | 268 |
| FHA |  | 20,936 | 17.230 | 21 |
| Total | \$ | 413,442 | \$149,448 | 177 |
| TEXAS |  |  |  |  |
| Banks | \$ | 722,237 | \$289,152 | 150 |
| PCA's |  | 224,073 | 90,221 | 148 |
| FHA |  | 88,134 | 62,850 | 40 |
| Total |  | ,034,444 | \$442,223 | 134 |
| DISTRICT |  |  |  |  |
| Banks |  | ,352,651 | \$528,528 | 156 |
| PCA's |  | 434,786 | 149,846 | 190 |
| FHA |  | 139,984 | 97,431 | 44 |
| Total |  | ,927,421 | \$775,805 | 148 |

SOURCE: The American Bankers Association.
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 I, 1969
(Dollar amounts in thousands)

| Area and lender | Amount held | Percent of state total | Percent change, 1969 from 1968 |
| :---: | :---: | :---: | :---: |
| ARIZONA |  |  |  |
| Banks | \$ 9,768 | 4 | 4 |
| FLB's | 36,584 | 14 | 1 |
| Life ins. cos. | 103,741 | 38 | -2 |
| Individuals* | 117,946 | 44 | (1) |
| FHA | 1,115 | (1) | (1) |
| Total | \$ 269,154 | 100 | -1 |
| LOUISIANA |  |  |  |
| Banks . . . | \$ 65,011 | 14 | 7 |
| FLB's | 113,238 | 24 | 24 |
| Life ins. cos. | 133,023 | 29 | 12 |
| Individuals ${ }^{2}$ | 151,202 | 32 | 14 |
| FHA | 4,969 | 1 | -12 |
| Total | \$ 467.443 | 100 | 14 |
| NEW MEXICO |  |  |  |
| Banks ..... | \$ 7,566 | 3 | -8 |
| FLB's | 55.334 | 20 | 7 |
| Life ins. cos.. | 83,912 | 31 | 6 |
| Individuals2 | 123.921 | 45 | 5 |
| FHA | 1,478 | 1 | -6 |
| Total | \$ 272,211 | 100 | 5 |
| OKLAHOMA |  |  |  |
| Banks . | \$ 84,580 | 14 | 11 |
| FLB's | 112,006 | 19 | 13 |
| Life ins. cos.. | 177,708 | 30 | 4 |
| Individuals ${ }^{\text {2 }}$ | 217,025 | 36 | 7 |
| FHA | 6,504 | 1 | -8 |
| Total | \$ 597,823 | 100 | 7 |
| TEXAS |  |  |  |
| Banks | \$ 163,983 | 8 | 16 |
| FLB's | 476,365 | 25 | 8 |
| Life ins. cos. | 610.406 | 32 | 4 |
| Individuals? | 667.000 | 34 | 7 |
| FHA | 13,658 | 1 | -6 |
| Total | \$1,931,412 | 100 | 7 |
| DISTRICT |  |  |  |
| Banks | \$ 330,908 | 9 | 11 |
| FLB's | 793,527 | 23 | 11 |
| Life ins. cos. | 1,108,790 | 31 | 4 |
| Individuals* | 1,277,094 | 36 | 7 |
| FHA | 27,724 | , | -7 |
| Total | \$3,538,043 | 100 | 7 |

[^0]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 1

(Dollar amounts in thousands)


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 cxpected to continue.

## 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 opera-
tion. 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 15 percent 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 quite rationally, since the present cost to him is clearly $\$ 2,000$ less than he would pay for two used machines.

Prepared by
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[^0]:    ${ }^{1}$ Less than 0.5 percent.
    ${ }^{2}$ Estimates-individuals and all other sources of funds.
    SOURCE: The American Bankers Association.

