Farm Credit at Second District Commercial Banks*

The Federal Reserve System since 1946 has conducted, at ten-year intervals, a nationwide survey of commercial bank farm lending for the purpose of gathering information on the types and terms of farm credit and the characteristics of borrowers and lending banks.[1] Such data have become important as a means of keeping abreast of the developments in the farm loan market that have accompanied the many changes in the character of the agricultural economy during the postwar years. The latest survey in the series was conducted as of mid-1966, and this article summarizes the results for the Second Federal Reserve District.[2]

*Robert B. Platt, Economist, Statistics Department, had primary responsibility for the preparation of this article.

[1] The 1966 Agricultural Loan Survey provided for a randomly selected sample, which covered about 12 per cent of the commercial banks in the country and about 11 per cent of total farm loan volume. The sample results were expanded to provide estimates of total bank farm debt and related measures. Nationwide results of this survey will be published in the *Federal Reserve Bulletin* by the Board of Governors of the Federal Reserve System.

[2] The Second Federal Reserve District comprises New York State, the twelve northern counties of New Jersey, and Fairfield County in Connecticut.

DEVELOPMENTS IN THE FARM ECONOMY AND IN FARM CREDIT

The demand for funds by the nation's farm economy has been steadily increasing in the postwar years. Total outstanding farm debt, for example, has grown by more than five times since the end of World War II, reaching a level of over $40 billion at the beginning of 1966. This development has partly reflected the growing use of capital in farm production which, in turn, has often required recourse to outside sources of funds. The increased use of capital shows up clearly in the indexes of farm inputs. These indicate that from 1945 to 1964 the amount of labor used in farm production actually declined by 55 per cent, while the use of fertilizers and mechanical power and machinery rose by an impressive 244 per cent and 87 per cent, respectively.

The increasing capital investment in farms has also encouraged growth in the scale of operations in order to spread fixed costs over a larger volume of output. Thus, while total farm acreage in the country has changed little since 1935, the number of farms has declined from a peak of 6.8 million in that year to about 4.4 million in 1956 and to an estimated 3.5 million in 1966.

These developments in the national farm economy have been paralleled by trends in the Second Federal Reserve District. The number of farms in the District have been de-

Table I

SECOND DISTRICT FARM BORROWERS AND BANK LOANS

June 1956 and June 1966

Net worth	Number of farm borrowers		Number of farm bank loans		Outstanding farm bank loans (in thousands of dollars)	
	1956	1966	1956	1966	1956	1966
Under $3,000	3,390	507	4,548	654	2,121	1,218
$3,000 to 9,999	20,638	4,823	28,421	6,859	25,041	9,208
$10,000 to 24,999	25,000	12,140	38,389	19,742	55,999	43,617
$25,000 to 99,999	10,973	18,857	18,039	31,714	50,212	130,588
$100,000 and over	991	2,655	1,863	5,422	12,569	54,678
Net worth not known	8,972	10,143	9,779	12,783	7,375	37,064
Total	69,964	49,125	101,039	77,174	153,317	276,373

clining steadily since the mid-1930's, but the remaining units have grown in size and productivity as their owners and operators have increasingly relied on capital inputs. As a consequence, important changes have taken place in District farm credit. In the ten years after the 1956 Federal Reserve farm loan survey, for example, total outstanding farm loans of District commercial banks rose more than 80 per cent, while the number of individual farm borrowers at banks dropped nearly 30 per cent, and the total number of notes outstanding fell by about 24 per cent. With more debt spread over fewer borrowers, the average bank debt per borrower increased from $2,200 in 1956 to about $5,600 in 1966.

While farm borrowing at banks has increased rapidly, and incomplete statistics indicate perhaps an even faster rate of expansion in nonbank credit, the strength of farm finances in the Second District appears to have been well maintained. This shows up in the increased net worth of farm borrowers between the two survey dates. In 1966, the "typical" or most frequent farm borrower in the District had a net worth of between $25,000 and $100,000. In contrast, farm borrowers at the time of the previous survey in 1956 most frequently had a net worth of between $10,000 and $25,000 (see Table I).

Despite the large rise since 1956, farm loans at Second District banks have neither been growing so fast as bank farm loans in other sections of the country nor so rapidly as the other types of credit extended by District banks. Outstanding District bank farm loans grew at an average annual rate of about 6 per cent during the ten years ended in mid-1966, while for the nation as a whole they rose at an average rate of 9 per cent a year. Over the same period, nonfarm loans at District banks increased by almost 9 per cent annually. On the other hand, partial evidence indicates that credit to District farmers from nonbank sources grew at a slightly faster pace than did bank credit during the ten years 1956-66. Although their share of total Second District farm credit may have declined a bit, commercial banks have continued to be the principal source of farm credit in the area. As of mid-1966, District commercial banks supplied about 29 per cent of the average total debt of the District's farm borrowers, almost identical with the commercial bank share of farm credit in the nation as a whole.

BORROWER CHARACTERISTICS

The changed nature of farming operations in the past ten years has been reflected in changes in the characteristics of the farming population generally and of farm borrowers in particular. Farm borrowers now average a little older than before, are more likely also to hold a nonfarm job, stand a little better chance of being a corporation, and are more likely to own rather than rent their farms.

Of the farm businessmen who had loans outstanding at District commercial banks in mid-1966, 57 per cent were forty-five years of age or older, up from 52 per cent ten years earlier. Apparently, the greater investment now required for entry into farming, as well as other factors, has discouraged younger people from pursuing careers in agriculture. Also, the increasing capital requirements in agriculture may account for the growth of the corporate form of business organization in farming. Corporations, while still representing only ½ per cent of all farm borrowers in the District, have increased in number by about four times since 1956. Corporations accounted for 6 per cent of total outstanding farm loans at District banks in the most recent survey, up from only 0.2 per cent ten years earlier.

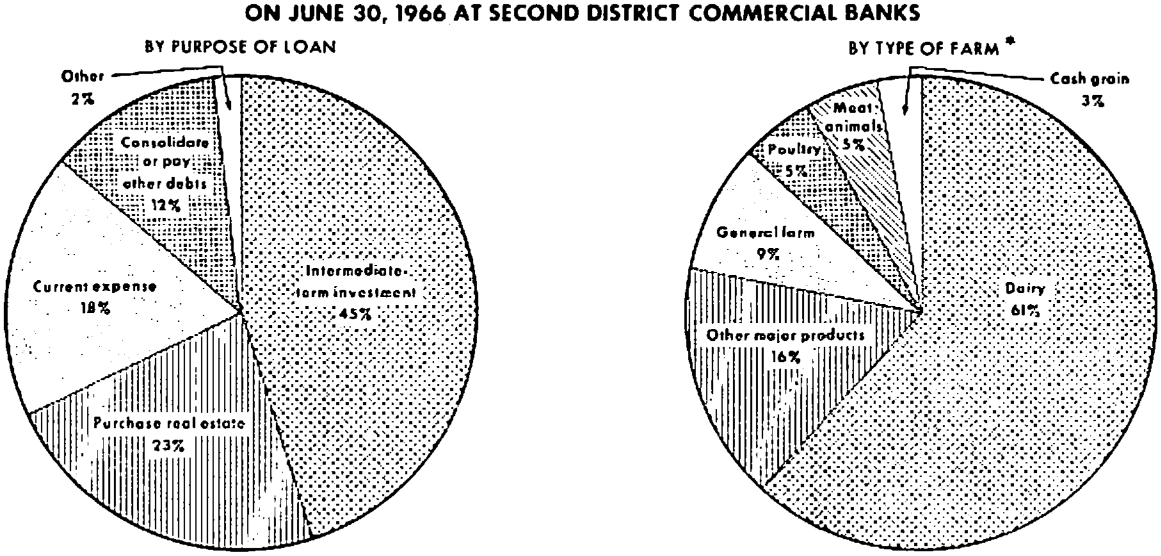
The proportion of total farm borrowers at District banks operating their farms on a part-time basis increased to 20 per cent in 1966 from 12 per cent ten years earlier. This could, in part, reflect the increasingly uneconomical nature of small-scale farming which, in turn, has made it necessary for many farmers to supplement their incomes with nonfarm employment. The difficulties of small-scale farming may also underlie the drop at District banks in the proportion of tenant farmers among total farm borrowers. Tenant farm operators accounted for only 5 per cent of total borrowers and 1 per cent of total outstanding farm loans in mid-1966, down from 7 per cent of borrowers and 4 per cent of loans in 1956. Moreover, tenant operations in the Second District are much less important than in the nation as a whole, where they account for 19 per cent of all farm borrowers.

LOAN CHARACTERISTICS

TYPE OF FARM AND PURPOSE OF LOAN. New York farmers accounted for about 92 per cent of total outstanding farm loans at all Second District commercial banks as of June 1966, and this fact, of course, had considerable bearing on the distribution of loans by type of farm. Credits extended to dairy farms, which constitute about 47 per cent of all New York State farms, were 61 per cent of total outstanding bank farm loans as of June 1966 (see chart), about the same proportion as in the 1956 survey. Borrowing by owners and operators of farms that produce a variety of vegetable or fruit crops, while still second in overall District farming activity, declined in importance. These borrowers accounted for 9 per cent of total outstanding farm loans at District banks as of June 1966, down from 18 per cent reported ten years earlier. Farmers raising meat animals, on the other hand, increased their share of the loan volume to 5 per cent of the total in 1966, up from a negligible 0.7 per cent in 1956.

Despite these shifts in the types of farm borrowers between the two survey dates, the stated purposes for which the loan proceeds were used remained largely unchanged. For example, the proportion of outstanding District bank loans for intermediate-term investments—primarily the purchase of farm equipment and livestock—held fairly constant at about 45 per cent (see chart). In the Second District, such loans represented the highest proportion of total farm loan volume, ranking ahead of loans for the purchase of real estate and for current expenses. In the country as a whole, however, current expense loans ranked first in volume by loan purpose as of mid-1966. The relatively smaller importance of current expense loans in the District reflects the predominance of types of farming activity, such as dairy farming, which do not require lengthy periods of produc-

DOLLAR AMOUNT OF FARM LOANS OUTSTANDING
ON JUNE 30, 1966 AT SECOND DISTRICT COMMERCIAL BANKS



* Total does not add to 100 per cent because of rounding.

Table II

SECOND DISTRICT FARM LOANS BY SIZE OF BANK

June 1966

Total deposits (in millions of dollars)	Number of banks	Total outstanding farm loans (in thousands of dollars)	Average original amount of note (in dollars)	Net loans and discounts as percentage of total deposits	Loans to farmers* as percentage of gross loans and discounts	Percentage of outstanding farm loans acquired from merchants and dealers
Under 5	78	10,096	2,355	60.6	15.8	3.7
5 to under 10	100	42,375	3,655	64.7	8.1	6.5
10 to under 25	119	50,855	3,934	60.5	3.8	10.3
25 to under 100	103	55,316	3,430	63.9	1.4	21.9
100 and over	75	117,731	6,914	79.5	0.2	3.3
Total	475	276,373	4,431	77.5	0.5	8.8

* Excluding loans to Second District farmers by the Commodity Credit Corporation.

tion and hence provide the farmers with a steady inflow of funds from the sale of their products.

MATURITY AND SECURITY. Term loans (original maturities of over one year) made up a substantially higher proportion of District bank farm loan volume than was the case at the time of the last farm credit survey. As of June 1966, roughly 50 per cent of outstanding farm loans at Second District banks had maturities in excess of one year, up 6 percentage points from the 1956 survey. Nationally, however, term loans were far less significant, accounting for only about 27 per cent of bank farm loans outstanding in mid-1966. This difference is not surprising in view of the greater nationwide importance of loans for current expense purposes, which generally are short term.

Inasmuch as the increased importance of term loans to farmers in the past ten years was not associated with any significant shifts in stated purposes for borrowing, the lengthening maturities of farm debt may have reflected greater willingness of District bankers to extend longer term credits to farmers. Such a development might be expected, moreover, in view of the rapid growth in time and savings deposits at Second District banks since the last farm credit survey. The relatively high cost and greater stability of these deposits have encouraged bankers to search for higher yields such as those obtainable on farm term loans. Thus, as of June 1966, farm loans with maturities of over one year earned an average interest rate of 7.2 per cent, compared with 6.3 per cent on shorter term farm credits.

The growing proportion of farm debt with maturities of over one year, together with the rise in the average size of farm loans, has been accompanied by some increase in the proportion of outstanding loan volume secured by some form of collateral. Even though secured notes at Second District banks were about two thirds of the total number of notes in both 1956 and 1966, the proportion of secured dollar volume increased to 83 per cent in 1966 from 75 per cent ten years earlier. Loans secured by chattel mortgages and by mortgages on farm real estate were about of equal importance in the current survey. Combined, they accounted for approximately 81 per cent of secured dollar volume. Not surprisingly, security was related to purpose of loan. The increased importance of chattel and real estate mortgages as collateral for District farm loans reflects the large amount of loans for intermediate-term investments and for the purchase of real property.

BANK CHARACTERISTICS

As might be expected, results of the latest farm loan survey indicate that the smaller commercial banks, which are located for the most part in rural areas, put a greater share of their loan resources into farm loans than do the larger banks in the District. As of June 1966, farm loans constituted about 16 per cent of total loans of those banks with less than \$5 million of total deposits, but accounted for only 0.2 per cent of all loans of those banks with deposits of \$100 million or more (see Table II). Nevertheless, the larger District banks with deposits of at least \$100 million together accounted for about 43 per cent of total outstanding farm credit. To a considerable extent, this reflects the fact that these larger banks as a group command far greater total financial resources than do the smaller banks, and keep a greater percentage of these resources in loans.

Bank size is also an important factor in explaining the proportion of total farm loans made directly to farm customers rather than through the purchase of farm paper from merchants or dealers. For Second District banks, about 9 per cent of total outstanding farm loans represented purchased notes, a notable drop from the 15 per cent reported ten years earlier. The volume of purchased loans increased as a percentage of total farm loans for banks up to $100 million in total deposits but dropped sharply at the larger banks.

The 1966 farm loan survey, on the other hand, generally found no significant relationship between the size of the borrower and the size of the lending bank except for loans to farmers with a net worth of at least $100,000, which were made proportionately more often by District banks with total deposits of $100 million or more. Credits extended to larger borrowers are often too great in amount for many of the smaller banks in the District to handle, either because of legal lending limits or because of the bank's own desire to maintain a well-balanced portfolio of loans. For the larger banks, loans to farmers with a net worth of $100,000 or more accounted on the average for 33 per cent of their total outstanding farm loans, compared with 16 per cent for all other District banks combined.

AVAILABILITY AND COST OF FARM CREDIT

AVAILABILITY OF CREDIT. The year 1966 was one of tight conditions in the loan market generally. But judging from the results of the survey, there still appears to have been an ample supply of bank credit for farmers at Second District commercial banks. Less than 2 per cent of banks surveyed in the District reported greater difficulty in meeting the credit needs of their regular farm customers during the year ended in June 1966 than during previous years. The banks experiencing difficulty in meeting farm credit demand, moreover, were some of the most heavily "loaned-up" banks in the District. All but one had a loan deposit ratio of 70 per cent or more.

Apparently, a factor at times significantly affecting the availability of farm credit at individual small banks in the Second Federal Reserve District is the legal limit on size of any one loan.[3] Thirty-two banks were reportedly unable to grant some farm loans during the year ended in June 1966, because the request exceeded the legal limits for loans to any one borrower. For thirty of these banks, the loans not granted for this reason equaled or exceeded 10 per cent of their outstanding amount of farm loans.

In some cases, District banks experiencing difficulty in filling the applications for large farm loans were able to arrange for part of the loans to be supplied by nonbank credit sources such as insurance companies or Federally owned or supervised credit agencies. However, the most common method used by District banks to accommodate a loan request they themselves were unable to satisfy in full was through "participating" part of the loan to a correspondent bank. Twenty-five banks in the District—5 per cent of the total—used this technique during the year ended in June 1966.

INTEREST RATES. As of June 1966, the average effective interest rate on Second District farm loans was 6.7 per cent, exactly the same as the national average. Farm loans repayable in instalments earned an average of 11 per cent for District banks, compared with about 6 per cent on all other types of farm credit. Also, rates paid on farm loans in the Second District varied greatly with the net worth of the borrower. Farmers with a net worth of less than $3,000 paid an average effective interest rate of 8 per cent in 1966 on their outstanding loans from banks, as against 6 per cent paid by farmers with a net worth of $100,000 or more (see Table III). However, this relationship between size of borrower and interest rate paid largely results from the fact that loan size also varies sharply with the net worth of borrowers. When the data were classified by both size of loan and net worth, thus permitting the effect of loan size on interest rates to be separated out, the relationship between loan rates and

Table III

AVERAGE EFFECTIVE INTEREST RATES ON SECOND DISTRICT FARM LOANS

June 1966

Size of original note	Net worth of farm borrowers					
	Under $3,000	$3,000-9,999	$10,000-24,999	$25,000-99,999	$100,000 and over	Total
	In per cent					
Under $1,000	8.6	8.9	7.5	7.7	6.7	8.0
$1,000 to 1,999	9.6	9.4	8.2	7.7	6.1	8.2
$2,000 to 4,999	9.2	7.8	8.2	7.1	6.1	7.5
$5,000 to 9,999	—	6.4	6.8	7.0	6.1	6.9
$10,000 to 24,999	6.2	6.1	6.3	6.3	6.2	6.3
$25,000 and over	6.2	—	6.2	6.5	6.0	6.1
Total	8.0	7.7	7.2	6.7	6.0	6.7

[3] District banks are generally limited in the size of loans they may make to a single borrower. These limitations vary by type of collateral, if any, used as security. Also there are minor differences in regulations depending on whether the bank is chartered under Federal or state laws.

borrower size remained but was diminished. The remaining importance of borrower size as it affects the cost of farm credit probably reflects the greater creditworthiness of borrowers with a larger net worth. The lower rates on larger loans, on the other hand, are consistent with the fact that costs incurred by banks in granting and administering loans tend to decrease per dollar of loan as the principal amount increases.

The interest cost of farm credit at District banks also varied in 1966 according to the distance from the lending bank office to the borrower. This relationship of distance of borrower to cost of credit was most obvious when distance was measured in terms of multiples of the radius in miles within which a bank obtains 75 per cent of its direct farm loan volume. The average interest rate on loans within one such radius from the lending bank office was 6.7 per cent, but for loans made at greater distances from the bank office the average interest rate was 7.3 per cent.[4] Here too, however, the size of the borrower may be a factor in explaining the changes in the cost that occur with borrower distance since the average net worth of the borrower diminished somewhat with distance from lending bank office. Nonetheless, bankers are more familiar with business conditions and individual circumstances in areas near to their operations, and this, coupled with the community orientation of banks, would be expected to produce lower rates for local borrowers.

The size of the lending bank, on the other hand, apparently bore little relationship in 1966 to the cost of farm credit. Also, there was no significant difference between the average interest rate on secured and nonsecured farm loans. Within the category of secured farm loans, however, there were differences depending on the nature of the collateral. Loans guaranteed or insured by the Federal Government, for example, carried an average interest rate of 5.1 per cent, compared with 7.5 per cent on chattel mortgage loans and 6.8 per cent on all secured loans combined. In addition, there was a differential in the interest charges on secured real estate credit and other farm loans. This differential, however, was substantially reduced from the one reported in the 1956 farm credit survey. As of June 1966, the average interest rate on loans secured by farm real estate was 6.3 per cent and that on other farm credit was 6.9 per cent. The 0.6 percentage point differential between these two average rates was less than half as large as the spread between the corresponding rate averages of 5.1 per cent and 6.6 per cent in 1956.

[4] On average, banks made 75 per cent of their loans to farmers within a radius of nine miles from the bank office.