What Does It All Mean?

The trend in poultry production has been toward increasing efficiency. There seems to be no end to developments yet in sight.

With increased efficiency have come increased poultry numbers and greatly increased production since 1940. Consumers have responded by eating more eggs per capita, but only at lower prices relative to pork and dairy products. Hence, a part of the advantage of increased efficiency was quickly passed on to the consumer and not retained by farmers. The upward trend in efficiency is likely to continue regardless of price changes. Farmers cannot retrogress in efficiency without sacrificing income.

It appears likely that under the general economic conditions which prevailed from 1946 to 1950 poultry production expanded a little too far in relation to competing enterprises such as hogs and dairy. On the average, the same quantities of feed and labor devoted to either hogs or dairy paid better during 1946-50 than those used in poultry production. Thus, farmers have no general incentive to expand poultry at the expense of the other enterprises. In fact, some relative curtailment in poultry production would be necessary to bring poultry earnings in line with those of other products.

If general economic conditions become less favorable, the poultry enterprise probably would be in better shape to weather the storm than either the hog or dairy enterprises. This is because increased efficiency and lower costs in poultry production have made eggs and poultry meat relatively cheap food.

Although the average farmer has no general incentive to increase his poultry enterprise now, individuals may find the situation different.

- Farmers who are unusually efficient in poultry production but only average in hog or dairy production may find it profitable to expand their poultry enterprise even though it means curtailment of either or both of the other enterprises.
- Farmers who have family labor that is available for poultry but not for hogs or dairy may find that an expansion of poultry will add to their total net income.
- Some farmers may not have taken full advantage of improved production practices. By increasing their efficiency through adoption of these practices, they may put themselves in the above-average class.

Farmers face a two-fold problem. Their first concern is whether or not their returns enough to pay the costs. But if they have
Loans of Production Credit Associations
To Minnesota Farmers
Sherwood O. Berg, E. Fred Koller, and O. B. Jesness

The amount of capital required to operate a farm has increased greatly in the last half century. This has been especially true in recent years with rapid and far-reaching changes in technology and mechanization. Farmers today have large investments in power-driven machinery, improved livestock, and other equipment. Seeds, feeds, sprays, and fertilizers require additional operating capital. While these improvements increase returns, the outlays they involve often have to be made long before returns are realized.

Many farmers need more financial resources for operating their farms than they own. The role of farm production credit is to supply this need. Farmers in need of production credit are concerned with the amounts, terms, and costs of such credit available to them. Lenders are concerned with making sound loans and fitting them to the production requirements and repayment procedures peculiar to agriculture.

The Development of Production Credit Associations
The sharp break in prices in the early 1920's focused attention on the need of farmers for production credit for longer periods than the usual 60- or 90-day commercial loans. The Agricultural Credit Act of 1933 was intended to serve this need by providing for 12 intermediate credit banks organized to discount agricultural loans for banks and other lenders. Partly as a result of the severe depression conditions of the early 1930's and the inadequacy of farm credit at that time, legislation creating the Farm Credit Administration was passed. The Farm Credit Act of 1933 included provisions for the establishment of a production credit corporation in each of the 12 farm credit districts and for the organization of production credit associations by farmers desiring to avail themselves of this source of loans. The 21 production credit associations (PCA's) included in this study are representative of these enterprises. To help start the production credit associations, the government provided the initial capital with the understanding that it would be retired as the farmer members acquired a sufficient amount of capital stock and the associations built up adequate reserves. The

1 The authors acknowledge with appreciation the cooperation and assistance of Reynold P. Dahl, division director for the Division of Agricultural Economics; George Susens, president of the Production Credit Corporation; St. Paul; secretaries of the production credit associations, and officers of the country banks surveyed.
associations are organized on a cooperative basis and are designed to become completely farmer-owned and farmer-controlled. Active membership is based on the purchase of stock at the rate of $5 for each $100 of money borrowed. This entitles a farmer to one vote only, regardless of the amount of stock owned. Annual dividends not to exceed 7 per cent may be paid on the stock. Refunds of all returns over costs in the operation financed and the repayment of loans are made include the breeding, raising, and fattening of livestock and poultry; dairying; the growing, harvesting, and marketing of crops; the purchase and repair of farm machinery, refinancing short-term debts, and supplying other family and farm credit needs. Terms of the loans vary with the operation financed and the repayment possibilities of the farm business.

The principal purposes for which PCA's in Minnesota loaned approximately $28.9 million dollars to 8,100 farm borrowers during 1950. The loans outstanding on January 1, 1951, totaled more than 13.5 million dollars. The PCA's obtain their loan funds by endorsing and rediscounting their farmer borrowers' notes at the Federal Intermediate Credit Bank of the Farm Credit District in which they are located. The Federal Intermediate Credit Banks, in turn, obtain funds by selling their debentures in the investment market.

Purposes and Scope of Study
This bulletin is a report of a study of the operations of production credit associations in Minnesota. The purpose of this study was to find out how the production credit associations have met the short-term agricultural production credit needs of Minnesota farmers. An analysis was made of a sample of PCA loans to determine their characteristics, adjustment to farmer needs, and liquidity. A similar analysis of a sample of commercial bank loans provided the basis for ascertaining the nature and characteristiscs of lending policies and practices of these credit agencies (figure 1). Particular attention was given to types and amounts of loans; the effects of terms, methods of disbursement, and repayment on the ease of carrying loans; the security or collateral requirements; rapidity of liquidation; and to differences among regions in the state.

Representatives of the Division of Agricultural Economics of the University of Minnesota visited 21 PCA's in the state during 1949 to obtain information regarding their loans. A 10 per cent sample was randomly selected of all members who had borrowed from the association one or more times during the previous year. Information was sought not only on types of disbursement, amounts, purposes, terms, security requirements, and the like, but also on the disposition of each loan. In addition to the foregoing information, the farmer-borrowers' assets, liabilities, and net worth positions, their income and expense relationships and chattel commitments were recorded when such data were available.

A large share of the material used in the analysis was obtained by interviews with PCA secretary-treasurers and other officials of these associations. This information was supplemented by credit records at the Federal Intermediate Credit Bank, St. Paul, and by accounting and statistical reports made quarterly and annually to the Production Credit Corporation, St. Paul.

Characteristics of PCA Borrowers

The size of the farm business, the tenure status of the operator, the major type-of-farm enterprise, and the financial position of the operator are some of the major characteristics of borrowers and their business which affect the terms, arrangements, and cost of PCA loans.

Most Borrowers Operate 140-to 260-Acre Farms
There was a considerable range in the total acres operated by the 685 PCA borrowers in the sample. About one-half of the farms were from 140 to 259 acres in size. Twenty-three per cent of the farms were smaller than 140 acres; 28 per cent were 260 acres or larger (table 1).

Size of farm varied among regions in the state. In Region I, which comprises roughly the western part of the state, 10 per cent of the farms were under 140 acres in size. In Region II, in the southeastern part of Minnesota, more than one-third of the farms were less than 140 acres. Less than one-fourth of the farms were under 140 acres in Region III.

Tenure Status Varied by Regions
One-half of the PCA borrowers in this study were owners, one-fourth...
were part owners, and another fourth were tenants (Table 2). The percentage of full owners and tenants varied considerably among regions. Nearly two-fifths of the borrowers in Region I were tenants as compared with only one-seventh in Region III. These findings agree with the observations that tenancy in the state tends to be highest where land values are highest.

Diversified Farming Most Common

The majority of the borrowers represented in the sample were engaged in general farming (Table 3). Farms for which the value of products from any one source of income (that is, dairy, livestock, poultry, or small grain) did not exceed 50 per cent of the total value of all farm products sold were classified as general farms. The feeding of livestock was the major enterprise on approximately one-fourth of the farms and dairying on about one-fifth. Small grain farming and the raising of poultry were of minor importance and constituted the major enterprise on only 9 and 2 per cent, respectively, of the farms.

Aside from the general farms, feeding of market livestock and raising of small grain were the principal enterprises of the farmers located in the western part of the state. Dairying constituted the major enterprise on one-fourth and feeding livestock on one-fifth of the farms in both Region II and Region III. The high percentage of general farms in each region is indicative of the diversification found on many farms.

Financial Position of Borrowers

Strong

The average farm operation had $20,375 in total assets, of which $16,425 represented owner equity and $3,950 was debt (Table 4). One-third of the latter amount was short-term obligations. The borrowers had a very high owner equity in their business, averaging around 80 per cent.

The average total assets ranged from $332,927 in Region I to $15,050 in Region III. While total assets varied among regions, the proportion of money that farmers had tied up in current assets compared with real estate showed very little variation. In all regions, the value of the current, or non-real estate assets, was slightly over 50 per cent of all farm assets. This emphasizes the relative importance of non-real estate capital in present-day farm organization. In pre-war years, farm record studies at the University of Minnesota showed a ratio of one to three between current and fixed assets. Since 1940, this ratio has been narrowed substantially. Similar studies in 1949 showed a ratio of one to 1.3.

This study revealed three distinct seasonal “peak” periods of borrowing. The demand for new loans was greatest in March-April, June-July, and October. In Regions I and III, the greatest needs for credit were not in the spring but in October (figure 2). The large volume of credit extended in the fall of the year was no doubt a reflection of the importance of livestock in the state economy. Although some of the PCA’s were in areas that had certain specialties, nevertheless, the operations of most borrowers were widely diversified. This diversity led...
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January, February, March, April, May, June, July, August, September, October, November, December.

Fig. 2. Index of volume of new loans and repayment by regions, 21 PCA's, during 1948.
(Index: 100 = average of 12-month period.)

to a succession of credit needs and tended to distribute the demands for credit over the year.

Greatest Number of Loans Closed in Spring of Year

Most of the loan advances were made during the spring of the year (figure 3). The peak months of activity were in March and April in all regions of the state. However, this does not mean that most of the credit extended by the PCA's was used during those months. In fact, more farmers were extended credit in the spring than in the fall, but the total amount of credit advanced was greater in the fall than in the spring. This means that the average size of advances were substantially smaller for the users of credit early in the year. Many farmers were extended credit in the spring of the year for current production expenses. Usually such expenses are comparatively small. Fewer farmers were loaned funds in the fall, but their purposes, primarily the purchase of feeders, required far larger amounts per loan or advance.

Repayments Highest in Fall of Year

In general, the months of August through October were months in which farmers made their largest repayments. During this period farmers were moving much of their produce into the markets. The high percentage of repayments in August and September was the result of cash crop sales, sale of hogs, and long-fed cattle marketings. The sharp rise in December repayments resulted from the heavy marketing of spring hogs.

Operating Expenses, Machinery Purchases, and Renewals Important

For the state as a whole, about one-fifth of the total amount loaned was extended for each of the purposes of general operating expenses, machinery and equipment purchases, and renewals (figure 4). About one-sixth was for livestock purchases and farm improvements. The refinancing of old debts constituted about 4 per cent of total borrowings. Living expenses and miscellaneous expenses were relatively unimportant in the over-all loan volume of the PCA's. About one-tenth of the total disbursements were classed as multi-purpose loans. In such cases, numerous loan purposes were lumped together and allocation could not be made to specific uses. After the experience of shortage, obsolescence and wear and tear on farm equipment during the war years and with the appearance of improved equipment on the market, the demand for credit for the purposes of buying machinery and equipment to re-tool and modernize farms was great. The

Fig. 4. Purpose of loans of PCA's during 1948 for the state and by regions based on 3,048 disbursements.

Fig. 5. Machinery purchases accounted for nearly one-fifth of the total amount loaned.
PCA's and many other lending agencies during the period of this study, found their greatest single demand for new loans to be for the purchase of machinery and equipment.

The variation in the volume of renewals among regions was explained largely by (1) the differences in the proportion of credit extended for various purposes and (2) the price-cost relationship prevailing in the main types of farming of the region. The percentage of credit extended for renewal purposes ranged from 17 per cent in Region I to 24 per cent in Region III. A high proportion of renewals was common to Regions II and III where associations loaned relatively large amounts of money for land purchases and farm improvements, machinery and equipment purchases, and to refinance debts. On the other hand, the proportion of renewals tended to be low in Region I where loaning was primarily for operating expenses and livestock purchases.

Another factor accounting for the high volume of renewals and refinancing in Regions II and III was where associations loaned relatively large amounts of money for land purchases and farm improvements, machinery and equipment purchases, and to refinance debts. On the other hand, the proportion of renewals tended to be low in Region I where loaning was primarily for operating expenses and livestock purchases.

Livestock Purchases Resulted in Large Loans

The financing of livestock feeding operations resulted in large loans. The price of feeder livestock at the time of this survey was high. Livestock and feed accounted for 15 per cent of the amounts loaned.

Size of Loans

The maximum size of loan balances varied considerably. The average size of maximum loan balance for all farmers was $2,450. The median size was $1,574, meaning that 342 loans were larger than and 342 loans were smaller than this amount (table 5). Approximately 20 per cent of the accounts were for sums less than $750; 20 per cent were for amounts greater than $3,000.

![FIG. 6. Livestock and feed accounted for 15 per cent of the amounts loaned.](image)
Poultry and Livestock Loans Large

Farmers specializing in turkey or other poultry had the largest maximum loan balances. Dairy farmers had the smallest loan balances (table 7). Although the average size of poultry loans was large, the aggregate volume of funds loaned to poultry producers was relatively small and the number of loans few. Poultry loans, particularly turkey loans, are attractive loans in that they are short-term, normally self-liquidating, and the funds are used to promote the growth of birds appreciating in value as they develop. However, the success of poultry enterprises is highly dependent upon the skill of management. As a result, loans usually are screened thoroughly to take on only those cases in which management is experienced and necessary facilities and equipment are available.

The high cost of feeders and feed was reflected in the large size of loans being made to farmers engaged in fattening livestock. The purchases of large quantities of machinery at inflated prices and higher operating costs tended to swell the size of loans on small-grain farms.

That loan balances on dairy farms did not average as large as on other types of farms does not necessarily mean that the former used less credit. Expenses on dairy farms are less seasonal in nature, and income more evenly distributed throughout the year. The volume of indebtedness at any one point during the year is kept fairly low by frequent repayments. On other types of farms the indebtedness is more cumulative in nature, giving rise to larger maximum loan balances.

The highest aggregate ratio of current assets to current liabilities was found among poultry and grain farms. The economic well-being of the grain farmer arising out of increased war and post-war demands for cereals is reflected in the high per cent of equity (net worth to total assets) on such farms.

Size of Loan Increased with Size of Borrower’s Net Worth

In general, the size of the maximum loan balance of the PCA members increased with an increase in size of net worth (table 8). Farmers with net worth up to $5,000 held loans averaging $1,295, while farmers with equities in dollars of more than $50,000 had balances averaging $10,550. It can be assumed that the farms with highest net worths had the largest volumes of business. It follows from the standpoint of size of business alone that large farms would employ larger amounts of credit in carrying out their production operations than small farms.

The current liquidity position was poorest among farmers having smallest net worths. It was strongest among borrowers having large equities, although the relationship was not consistent for all equity groups. The proportion of operator claims against total assets (net worth to total assets) increased with an increase in size of equities in dollars.

It is often said that lending agencies tend to lend a relatively larger amount of money to operators with large net worth than operators with small PCA maximum loan balances were found to be, on the average, a substantially higher proportion of net worth among borrowers having small net worth than large net worth. Among borrowers having average net worth of $3,600, the average maximum loan balance was $1,295, or 36 per cent of the net worth. However, among farmers who averaged $34,600 and $91,000 in equity, the maximum loan balances were only 11.7 per cent and 11.6 per cent respectively of net worth (figure 7).

Table 8. Size of Maximum Loan Balances and Selected Financial Relationships by Net Worth, 685 PCA Borrowers, 1948-49

<table>
<thead>
<tr>
<th>Size of net worth</th>
<th>No. of borrowers</th>
<th>Average size of maximum loan balance</th>
<th>Ratio of current assets to current liabilities</th>
<th>Ratio of net worth to total assets per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $5,000</td>
<td>90</td>
<td>$1,295</td>
<td>6.7</td>
<td>76.2</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>156</td>
<td>1,797</td>
<td>9.3</td>
<td>78.0</td>
</tr>
<tr>
<td>10,000-14,999</td>
<td>156</td>
<td>2,797</td>
<td>7.7</td>
<td>78.9</td>
</tr>
<tr>
<td>15,000-24,999</td>
<td>156</td>
<td>4,061</td>
<td>8.5</td>
<td>83.6</td>
</tr>
<tr>
<td>25,000-49,999</td>
<td>21</td>
<td>10,551</td>
<td>9.6</td>
<td>88.6</td>
</tr>
<tr>
<td>50,000 and over</td>
<td>685</td>
<td>$2,450</td>
<td>7.7</td>
<td>80.6</td>
</tr>
</tbody>
</table>

Loans Large with Respect to Estimated Income Among Small-Income Farmers

In the final analysis, the returns from a farm business in relation to fixed and operating costs determine its success or failure. It is this relationship also, of course, that determines the success or failure in the repayment of any borrowed funds used for operating expenses or capital investment purposes. The ability which a farm business has in repaying a loan is termed its repayment capacity. Repayment capacity usually is expressed in terms of net income. It is the purpose here to explore how estimated net income is related to loan size.

Information regarding expected income, expenses, and funds for debt retirement was available for 434 of the 685 accounts. The size of maximum loan balances increased as size of estimated net income increased (table 9). Farmers with an annual estimated net income of less than $1,000 had loan balances averaging $1,236, while farmers with incomes of more than $5,000 had balances averaging $5,464.

The ratio of current assets to current liabilities and that of net worth to total assets declined as size of estimated net income increased. However, the proportion which loan balances were of the estimated net income was far greater among low income groups than high (figure 8). Loan balances of those in the lowest income groups averaged nearly twice the amount of income available for debt retirement. In the highest income group they averaged only 60 per cent of the net income.

![THOUSANDS OF DOLLARS](image)

**FIG. 8. Relationship of estimated net income to maximum loan balances, 434 PCA loans, 1948-49.**

<table>
<thead>
<tr>
<th>Size of estimated net income</th>
<th>No. of borrowers</th>
<th>Average size of maximum loan balance</th>
<th>Current assets to current liabilities</th>
<th>Ratio of Net worth to total assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $1,000</td>
<td>59</td>
<td>$1,236</td>
<td>8.2</td>
<td>83.6</td>
</tr>
<tr>
<td>$1,000-$1,999</td>
<td>130</td>
<td>1,565</td>
<td>6.1</td>
<td>76.2</td>
</tr>
<tr>
<td>2,000-$2,999</td>
<td>104</td>
<td>2,433</td>
<td>5.8</td>
<td>78.6</td>
</tr>
<tr>
<td>3,000-$3,999</td>
<td>66</td>
<td>2,976</td>
<td>6.2</td>
<td>76.8</td>
</tr>
<tr>
<td>4,000-$4,999</td>
<td>29</td>
<td>3,286</td>
<td>5.6</td>
<td>73.4</td>
</tr>
<tr>
<td>5,000 and over</td>
<td>46</td>
<td>5,464</td>
<td>5.1</td>
<td>73.6</td>
</tr>
<tr>
<td>Total</td>
<td>434</td>
<td>$2,471</td>
<td>5.9</td>
<td>76.2</td>
</tr>
</tbody>
</table>

In fact, additional advances served as the principal means of disbursing PCA funds. On the average, 2.9 out of 4.5 advances per borrower were additional advances (table 10). These were 65 per cent of all disbursements. Only 11 per cent of all disbursements were budget advances. The rapid shifts in cost-price relationships of this period may have lowered the accuracy of budgeting and tended to discourage the practice. Also the general drop in farm income is believed to have resulted in more additional advances than would have occurred in a period of more stable prices.

There was no appreciable difference in the number of advances and repayments per borrower among tenure groups. The principal factors which give rise to variation in advances and repayments are type and size of loan.

**Livestock Farmers Had Most Advances**

Livestock farmers averaged the greatest number of advances, 5.4 (table 11). The frequent outlays for feed and...
of loan. In dairying, the number of repayments was twice the number of disbursements, probably a result of the practice of using a certain amount from each milk or cream check for this purpose. On general farms, for the state as a whole, the average number of advances and repayments were about equal. However, on general farms in the southeastern and northeastern dairy regions, repayments exceeded advances in number. This reflected the heavy weighting of the dairy enterprise in the organization of the general farms in these areas.

**Advances and Repayments Increase with Size of Loan**

The number of advances increased with size of loan, the average for loans under $1,000 being 2.2 and for those of $10,000 and over, 9.3 (table 12). The smaller loans usually covered some minor, timely operating expense or provided the means of purchasing a single piece of equipment. The larger loans not only provided funds for purchasing more goods of a working capital nature but also for meeting expenses on various operations at different times during the year.

**Length of Time Loans Were Outstanding**

THREE-FOURTHS of the PCA loans were outstanding for a period from 11 to 13 months. Fewer than 20 per cent were in force for less than seven months (table 13).

A consistent relationship existed between tenure groups and the time which loans were outstanding. For the state as a whole and in all three regions, tenants held loans for the longest period of time. The contract term on most loans was 12 months. Tenants found it necessary to make use of virtually all the time permitted them under the contract terms.

**Poultry and Grain Loans Outstanding for Short Periods**

The number of months the loans were outstanding was influenced by the type of farming of the borrower. Eighty per cent of the dairy and general farm loans were outstanding for approximately 12 months. This was true of about 70 per cent of the livestock loans and only 60 per cent of the poultry and crop loans (table 14). Considerable variation in time the loan was outstanding was common to all types of enterprises. This means that the needs or uses of credit on all types of farms vary greatly. To a large extent, the differences in the patterns of loan time outstanding are dependent upon the biological nature of the enterprises.

The average time outstanding among loans by type of enterprise ranged from 9.6 months for crop loans to 11.2 months for dairy loans. For all types of loans the most typical term was from 11 to 13 months. Only 16 per cent of the loans in the entire study ran for a period of six months or less.

This suggests that lending agencies to serve adequately the needs of farmers for production credit must be prepared to make loans for longer periods than six, or even nine months. Shorter-term loans in many instances will require renewals if they are to serve the purpose. A desirable arrangement is that of fitting the period of the loans so that repayment will coincide with receipt of income by borrowers.

**Larger Loans Outstanding for Longer Periods**

More than four-fifths of the loans over $2,000 were outstanding for about a year. Only two-fifths of loans under $500 were outstanding for this length of time. Approximately 60 per cent of the group of smallest loans were outstanding for a period of less than seven months while this was true of only 10 per cent of the larger loans (table 15). Many small loans were for minor expenses. Often they were used to tide over farmers for short periods await-
ing receipts from marketings. The liquidity positions of farmers holding small loans, as reflected in their current assets to current liabilities ratio, also was very good (20:1). Under such conditions, early retirement of debt would be expected.

In the large loans, the financing presumably was for more items of a durable capital goods nature. Buildings, other farm improvements, motor vehicles, machinery, and tractors usually do not pay for themselves in one season. It was apparent that large loans would run for longer periods of time. Both lender and borrower had in mind renewing the loan at the end of the customary one-year contract term. A relatively shorter period of time characterized the loans over $10,000. Here the major portion of the funds was used to finance large feeding operations in which liquidity and early payment were reasonably assured.

**Budgeting of Loans**

The applications for the loans included in the study were examined to note the number of cases for which there was evidence of budgeting at the time the application was made (figure 9). Customarily the repayment program with data and source of repayment was set up at the same time. The repayment program was considered a part of the budget of income and expenses and was found in the PCA field representatives’ report. Three out of every 10 PCA borrowers made full provision for the budgeting of disbursements and repayments at the time they applied for their loans.

Tenants Led in Budgeted Loans

The highest proportion of budgeted loans was found among the tenant group (table 16).

The differences indicated clearly a tendency to plan more closely the extension of credit to tenants than to part owners. Because of larger size of business, the repayment ability of part owners may have been greater than tenants'. In view of the smaller income prospects of tenants, more prior planning may have been brought to bear on their cases. Part owners, who, on the average, the strongest ratio of current assets to current liabilities among the tenure groups; tenants, the weakest. It is also likely that PCA officials, in view of the possibility of less experience among tenants, may have considered closer analysis of the tenant loans advisable.

Type of Farm Enterprise Played Small Role in Use of Budgeting

The type of farm enterprise in which farmer-borrowers specialized appeared to play a minor role in determining whether or not the loans were budgeted (table 17).

If it is assumed that there were differences in credit risks inherent in the various types of farming, the PCA's evidently relied on means other than budgeting to control the actions of the borrower or to minimize the chances of financial loss.

**Budgeting Important on Large Loans**

As the loans increased in size, the association officials made greater use of the loan budgeting technique (table 18). Only about one-tenth of the loans under $500 were budgeted. One-fourth of the loans between $500 and $3,000 were placed on a system of planned disbursements and repayments, while one-half of all loans above $3,000 were treated in this manner.

The advantages of budgeting were greater for farmers using large amounts of credit than small. The use of large sums usually meant that there

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Table 15. Number of Months Loans Outstanding by Size of Maximum Loan Balance, 633 Minnesota PCA Loans, 1948-49

<table>
<thead>
<tr>
<th>Size of maximum loan balance</th>
<th>No. of loans</th>
<th>Under 5</th>
<th>5-7</th>
<th>8-10</th>
<th>11-13</th>
<th>Over 13</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $499</td>
<td>83</td>
<td>20.0</td>
<td>38.3</td>
<td>1.7</td>
<td>40.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>$500-$999</td>
<td>106</td>
<td>4.7</td>
<td>18.3</td>
<td>6.6</td>
<td>69.8</td>
<td>0.9</td>
<td>100.0</td>
</tr>
<tr>
<td>1,000-1,999</td>
<td>218</td>
<td>5.0</td>
<td>10.8</td>
<td>1.8</td>
<td>82.1</td>
<td>0.5</td>
<td>100.0</td>
</tr>
<tr>
<td>2,000-2,999</td>
<td>119</td>
<td>5.1</td>
<td>6.7</td>
<td>4.2</td>
<td>84.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>3,000-3,999</td>
<td>1</td>
<td>4.4</td>
<td>2.2</td>
<td>6.7</td>
<td>94.4</td>
<td>2.3</td>
<td>100.0</td>
</tr>
<tr>
<td>4,000-9,999</td>
<td>68</td>
<td>2.9</td>
<td>7.4</td>
<td>2.9</td>
<td>88.8</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>10,000 and over</td>
<td>17</td>
<td>5.9</td>
<td>11.8</td>
<td>17.6</td>
<td>52.9</td>
<td>11.8</td>
<td>100.0</td>
</tr>
<tr>
<td>All loans</td>
<td>633</td>
<td>6.2</td>
<td>13.0</td>
<td>3.9</td>
<td>78.1</td>
<td>0.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

---

Table 16. Loans Budgeted by Tenure Status, 685 Minnesota PCA Borrowers, 1948-49

<table>
<thead>
<tr>
<th>Tenure status</th>
<th>Per cent of loans budgeted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full owner</td>
<td>28.1</td>
</tr>
<tr>
<td>Part owner</td>
<td>24.4</td>
</tr>
<tr>
<td>Tenant</td>
<td>35.4</td>
</tr>
<tr>
<td>All loans</td>
<td>29.1</td>
</tr>
</tbody>
</table>

---

Table 17. Loans Budgeted by Major Type of Farm Enterprise, 685 Minnesota PCA Borrowers, 1948-49

<table>
<thead>
<tr>
<th>Major type of farm enterprise</th>
<th>Per cent of loans budgeted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock</td>
<td>31.3</td>
</tr>
<tr>
<td>Poultry</td>
<td>31.3</td>
</tr>
<tr>
<td>General</td>
<td>30.5</td>
</tr>
<tr>
<td>Grain</td>
<td>26.7</td>
</tr>
<tr>
<td>Dairy</td>
<td>23.1</td>
</tr>
<tr>
<td>All loans</td>
<td>29.1</td>
</tr>
</tbody>
</table>
Table 18. Loans Budgeted by Size of Maximum Loan Balance, 685 Minnesota PCA Borrowers, 1948-49

<table>
<thead>
<tr>
<th>Size of maximum loan balance</th>
<th>Per cent of loans budgeted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $4,999</td>
<td>10.6</td>
</tr>
<tr>
<td>5,000-4,999</td>
<td>25.2</td>
</tr>
<tr>
<td>1,000-1,999</td>
<td>28.8</td>
</tr>
<tr>
<td>2,000-2,999</td>
<td>26.0</td>
</tr>
<tr>
<td>3,000-3,999</td>
<td>30.8</td>
</tr>
<tr>
<td>4,000-4,999</td>
<td>47.8</td>
</tr>
<tr>
<td>10,000 and over</td>
<td>60.0</td>
</tr>
<tr>
<td>All loans</td>
<td>28.1</td>
</tr>
</tbody>
</table>

Table 19. Loans Budgeted by Size of Net Worth, 685 Minnesota PCA Borrowers, 1948-49

<table>
<thead>
<tr>
<th>Size of net worth</th>
<th>Per cent of loans budgeted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $4,999</td>
<td>26.7</td>
</tr>
<tr>
<td>5,000-4,999</td>
<td>25.9</td>
</tr>
<tr>
<td>10,000-14,999</td>
<td>34.0</td>
</tr>
<tr>
<td>15,000-24,999</td>
<td>23.7</td>
</tr>
<tr>
<td>25,000-49,999</td>
<td>26.2</td>
</tr>
<tr>
<td>50,000 and over</td>
<td>28.6</td>
</tr>
<tr>
<td>All loans</td>
<td>26.1</td>
</tr>
</tbody>
</table>

The one-or-two-advance loan serves some credit needs adequately. The farmer who needs to borrow for some specific outlay rather than for use to cover a series of expenditures may find a straight loan suitable. In the case of PCA loans, provisions are made for repayments at any time with interest charged only on the unpaid balance. This permits the borrower to economize in the use of borrowed funds.

Little Relationship between Size of Net Worth or Net Income and Budgeting

No relationship was found between budgeting and the size of net worth or the size of net income (table 19). Prospects for income, including uncertainty, may carry more weight in budgeting than net worth. While budgeting may appear more important in case of borrowers of small income, the returns on smaller loans limit the amount of time and effort which the lender can afford to give them (table 20).

Security for Loans

Eighty-seven per cent of the loans included were secured by collateral. A rather general practice among PCA's in most Farm Credit Districts is to take individual chattel mortgages on all machinery, equipment, and livestock.

Table 20. Loans Budgeted by Size of Net Income, 434 Minnesota PCA Borrowers, 1948-49

<table>
<thead>
<tr>
<th>Size of net income</th>
<th>Per cent of loans budgeted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $999</td>
<td>38.0</td>
</tr>
<tr>
<td>$1,000-$1,999</td>
<td>33.8</td>
</tr>
<tr>
<td>2,000-2,999</td>
<td>26.9</td>
</tr>
<tr>
<td>3,000-3,999</td>
<td>34.4</td>
</tr>
<tr>
<td>4,000-4,999</td>
<td>37.3</td>
</tr>
<tr>
<td>5,000 and over</td>
<td>37.0</td>
</tr>
<tr>
<td>All loans</td>
<td>33.9</td>
</tr>
</tbody>
</table>

On grain farms, crop liens are taken on growing crops. Other lending agencies which employ chattel mortgages often apply them only to selected equipment or livestock.

There are several reasons advanced for employing the all-inclusive mortgages. One is that it adds to the quality of the loans and aids the Intermediate Credit Banks in selling their debentures at favorable rates. Another is that the farm business needs to be viewed as a whole and that this method avoids having other creditors foreclose on equipment or livestock necessary to maintain the earning capacity of the farm. PCA's also point out that it is their purpose to handle all of the production credit of its members and complete coverage of chattels facilitates the extension of additional credit where appropriate.

Ninety-five Per Cent of Tenant Loans Secured

The loans studied showed that PCA's required a higher proportion of tenants to furnish security than of part owners. The percentage for the latter was slightly greater than for full owners (table 21). Not all tenants have had an opportunity to establish a credit rating. Other factors may include their relatively lower liquidity status, more limited farming experience, and the like.

Fewer Grain Loans Backed by Collateral

The proportion of loans secured was very similar for farms of different enterprises except for grain and poultry (table 22). Grain farms had the lowest proportion secured with about three-fourths while the loans of specialized poultry producers were all secured.

Repayment of Loans

Borrowing for production purposes implies that the loan is to be paid from current farm production. A short-term loan which is renewed repeatedly may become a loan for fixed capital needs rather than current production.

Two measures of liquidity were used in this study. The first was to view the individual farmer-borrower's accounts for the year 1948 in terms of months which the borrower remained indebted to the PCA's. The second method involved tracing the history of the loans until they matured and noting whether...
Liquidity of borrowers' accounts

or not the volume of debt of the borrower was increased or decreased during the period of the loan. The former method referred to the liquidity of the accounts; the latter method referred to the disposition of the loans.

The liquidity of a borrower's account plays an important role in the analysis of the financial progress of the individual farmer-borrower. It is particularly important for a lending agency in the short-term credit field to strive for a periodic "clean up" of the borrower's account. Such a procedure permits the lending agency to review the progress of its borrowers and to evaluate the desirability of granting further credit in individual cases.

For the purposes of determining credit liquidity, the accounts were classified into four groups:

1. Group A: Those accounts in which loans were originated within the year 1948 and were repaid by the end of the year.
2. Group B: Those accounts in which loans were originated in the previous year (1947) and repaid by the end of 1948.
3. Group C: Those accounts in which the loans were originated within the year 1948, but were not repaid by the end of the year.
4. Group D: Those accounts in which the borrowers were indebted to the PCA's for the entire 12 months of 1948.

The accounts classified in Group A were considered highly liquid. They were the type of loan that was taken out at the beginning of a seasonal production period and liquidated at the end of that period. On the other hand, loan accounts in which the borrower was indebted to the PCA for the entire 12 months were considered to be characterized by a high degree of non-liquidity.

Disposition of a loan was defined as the ultimate action taken with respect to the particular loan under consideration; that is, was the loan (1) paid off in full, (2) renewed at a greater amount than the principal of the loan it replaced, or (3) renewed at a lesser amount than the principal of the loan it replaced? This measure of liquidity also was indicative of the trend in the volume of indebtedness among PCA borrowers.

The methodology adopted in this study was to take the borrower's last loan during 1948 and follow through on its disposition. This meant that if a borrower had negotiated two or more loans in 1948, only the most recent loan entered into the analysis. It also meant, in certain cases, that the "last loan during 1948" was a loan originated in 1947. This type of loan was of the type found in Group B above, for such loans were originated in 1947 but were paid off in 1948. For loans which were renewed, it was possible in many instances to determine the relative increase or decrease in the amount of the renewal loan in comparison with the loan that it replaced.

Repayment of Loans Showed Little Variation among Tenure Groups

Four out of every 10 borrower accounts fell into the non-liquid category. In only 11.5 per cent of the accounts were loans taken out and repaid within the same calendar year; 8.3 per cent of the loans fell into Group B, and 41.0 per cent into Group C, loans which were originated in 1948 but not repaid within that year. No significant relationship was found between liquidity and type of tenure. The slight differences which existed could have resulted from chance errors in the sampling process (table 23).

For the state as a whole, 43.4 per cent of the loans of 685 borrowers were paid in full, 47.4 per cent were renewed, and 9.2 per cent were "unclassified." Of all loans, 26.1 per cent were renewed at an amount greater than the original amount of the loan they replaced, and 21.3 per cent were renewed at an amount less than the original amount of the loan replaced. At the time of the field survey, certain of the loans originated in 1948 were still outstanding. In such cases, the disposition of the loans was indeterminate and they were listed as "unclassified." No significant differences were found in the relation between tenure status and the disposition of the loans (table 24).

Dairy Loans Were "Slow" Loans

There was a great deal of variation in the liquidity of the accounts among major types of farm enterprise. Nearly one-half of the dairy accounts were indebted to the PCAs for the entire 12 months of 1948. This was true of 40 per cent of the general and 38 per cent of the livestock accounts. Crop and poultry accounts, on the other hand, were most liquid (table 25).

Liquidity, in the sense here used, was associated closely with the seasonality of the major farm products produced. Grain and poultry loans were highly seasonal and were relatively liquid. The income situation in the various enterprises also may influence the liquidity. Among dairy, general, and livestock farms, it was apparent that a large number of members were depending on the associations for capital of an intermediate nature rather than

<table>
<thead>
<tr>
<th>Tenure status</th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
<th>Group D</th>
<th>Unclassified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full owners</td>
<td>12.6</td>
<td>12.8</td>
<td>12.9</td>
<td>12.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Part owners</td>
<td>11.3</td>
<td>10.9</td>
<td>11.0</td>
<td>10.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Tenant</td>
<td>9.7</td>
<td>10.5</td>
<td>10.6</td>
<td>10.3</td>
<td>0.5</td>
</tr>
<tr>
<td>All loans</td>
<td>11.5</td>
<td>11.7</td>
<td>11.8</td>
<td>11.6</td>
<td>1.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major type of farm enterprise</th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
<th>Group D</th>
<th>Unclassified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry</td>
<td>37.5</td>
<td>36.0</td>
<td>35.5</td>
<td>34.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Grain</td>
<td>21.7</td>
<td>21.0</td>
<td>20.5</td>
<td>20.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Livestock</td>
<td>7.5</td>
<td>7.0</td>
<td>6.5</td>
<td>6.0</td>
<td>1.5</td>
</tr>
<tr>
<td>General</td>
<td>11.6</td>
<td>11.0</td>
<td>10.5</td>
<td>10.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Dairy</td>
<td>8.3</td>
<td>7.8</td>
<td>7.3</td>
<td>6.8</td>
<td>1.5</td>
</tr>
<tr>
<td>All loans</td>
<td>11.6</td>
<td>11.0</td>
<td>10.5</td>
<td>10.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>
than for merely seasonal or peak-load requirements of greater liquidity.

The findings with regard to the disposition of the loans correspond quite closely with the liquidity of the accounts during 1948. Two-thirds of the poultry and grain loans were repaid fully upon maturity. Complete repayment was made on slightly more than two-fifths of all livestock and general loans, but on only one-third of the dairy loans (table 26).

As an indication of the trend in the volume of indebtedness, 31 per cent of the livestock loans were renewed at an amount greater than the loan they replaced. Among dairy and general farms, 27 per cent of the loans also were increased upon renewal. Increases in loans were experienced among only 13 per cent and 6 per cent of grain and poultry loans, respectively.

The slow repayment record of dairy loans during the period of this study has been mentioned earlier. In a typical year, butterfat and milk prices usually rise as production falls off during the autumn months and remain above the annual average until the following spring. However, the opposite movements in butterfat and milk prices occurred in 1948. These prices declined 25 to 33 per cent beginning in August of that year. As a result of this substantial decline, many dairy farmers obtained renewals. In many cases these renewals involved use of additional funds as well.

Small Loans Were Paid Off Quickly

The larger the size of the farmers’ PCA accounts, the higher the proportion of farmers who were indebted to the association for the entire 12 months of 1948. About 30 per cent of the small accounts were highly liquid in nature; in that they were made and paid off within a year. Accounts ranging from $4,000 to $9,999 were at the other end of the liquidity scale, for only one borrower out of 60 repaid the loan within the year (table 27).

Likewise, the smaller the amount of the farmers’ accounts up to $10,000, the higher was the proportion of loans repaid by loan maturity date. Two-thirds of the loans under $500 were fully repaid by maturity, but this was true of only one-third of the loans between $4,000 and $9,999 (table 28).

Small loans often were made to help meet previous commitments and debt installments, or to tide over the borrower between the time of a miscellaneous expense and receipts from marketing. When the loan was negotiated, it was viewed as an interim proposition. The repayments usually were geared to the sale of some commodity to be marketed at an early date.

The loan accounts from $1,000 to $10,000 included some farmers who were relying on the associations for a great deal of their working capital. In many cases, the proceeds of the loans were applied toward the purchase of articles of a durable nature. These loans could not be repaid from one year’s earnings. In a few cases, some farmers who always seemed short of cash were borrowing as much as they could for farming operations and living expenses. Such farmers experienced difficulty in paying off their loans. In many situations, particularly as the size of the loan increased, a renewal of the loan was anticipated at the time the funds were initially granted to the farmer.

Special attention was given the loans over $10,000. This group of loans frequently showed a departure from general tendencies associated with size of loan. The borrowers had a larger equity in working capital than borrowers of small amounts of money. The loans were outstanding for a relatively short period of time. The liquidity of the accounts was better than the group of loans from $1,000 to $10,000, and the repayment record also was higher. Because of the amount involved, the large loans undoubtedly were screened very carefully by association officials. For extremely large loans, approval of the Production Credit Corporation of St. Paul is required. The size of the operations usually meant that the farms had large capacities to repay. As many of the large loans were for feeding operations, the liquidity was reasonably assured.

Farmers with Largest and Smallest Net Worth Had Best Repayment Records

The liquidity of the PCA accounts showed very little variation among farmers grouped by size of net worth.
Few Differences among Income Groups

No significant differences were found in the over-all relation of size of estimated net income to the liquidity of the borrowers' accounts or to the final disposition of the loans (table 31). The findings indicate that small loans are used more often for current operating or consumption purposes rather than for capital expenditures. The latter normally require a longer period than one year and usually involve loan "carry-over." Associations knowing the limited income possibilities on small units, also may have given special attention to keep loans to small farmers on a relatively liquid basis.

Agricultural Production Loans of Banks

A SURVEY of the short-term lending of eight selected country banks was made to obtain data for some comparisons between loans of banks and of PCA's. The sample included 40 loan cases from each of the eight state banks, or a total of 320.

Four of the banks included were in Region I and there were two banks in each of Regions II and III (see figure 1). In Region I, two were in the southwestern livestock-cash crop area and two in the Red River Valley area. The sample is too small to provide an adequate basis for detailed comparisons. However, it is believed that the following preliminary observations may be of interest.  

PCA's Average Larger Loans

The loans made by the PCA's averaged substantially larger than those included in the sample study of banks, the maximum loan balances averaging $2,450 and $1,664, respectively (table 32). Fifty per cent of the bank loans were below $750, compared with only 20 per cent of the PCA loans below this amount.

Several considerations are involved in this difference. PCA's make mainly production loans. Banks in addition make many convenience loans. These usually are comparatively small and reduce the average materially. PCA's seek to handle all of the production financing of its members while banks commonly do not insist on this arrangement. Average size of loans at times may be reduced by arrangements under which borrowers employ split lines of credit. Certain fixed charges on PCA loans for searching records, recording chattel mortgages, and making inspections add relatively more to the costs.
4.5 Payments in livestock-cash grain areas

greater numbers of advances and
costs to warrant drawing

small and the differences not suffi­
ciently striking to warrant drawing

farmers by holding down the number

of dollar-days for which interest must
be paid. The sample of banks was too

geared more closely to the credit re­
tends to reduce interest expense to

requirements of the borrowers.

amounts. A larger number of advances

to be expected with loans of larger

banks studied (table 33). This is

greater for the

repayments per loan was somewhat

sufficient number of cases to alter av­
avages greatly.

More Advances and Repayments

Among PCA Borrowers

The average number of advances and
repayments per loan was somewhat

greater for the PCA's than for the banks
studied (table 33). This is
to be expected with loans of larger

amounts. A larger number of advances

and repayments suggests that these are

gleared more closely to the credit re­

quirements of the borrowers. It also
tends to reduce interest expense to

farmers by holding down the number

of dollar-days for which interest must

be paid. The sample of banks was too

small and the differences not suffi­
ciently striking to warrant drawing
definite conclusions on this score. The

loans of both PCA's and banks showed

greater numbers of advances and re­

payments in livestock-cash grain areas

than in dairy regions.

Table 34. Number of Months Loans Outstanding, Commercial Bank and

PCA Farm Production Loans, 1948-49

<table>
<thead>
<tr>
<th>Lender</th>
<th>Number</th>
<th>Under 4</th>
<th>5-6</th>
<th>7.5</th>
<th>10-12</th>
<th>12+</th>
<th>Unclassified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>1,094 notes</td>
<td>58.1</td>
<td>28.2</td>
<td>56.6</td>
<td>2.2</td>
<td>0.5</td>
<td>4.4</td>
</tr>
<tr>
<td>PCA</td>
<td>685 loans</td>
<td>4.4</td>
<td>10.5</td>
<td>4.8</td>
<td>62.3</td>
<td>10.4</td>
<td>7.6</td>
</tr>
</tbody>
</table>

of small loans than large loans. The

PCA's are restricted by law from mak­
ing loans smaller than $50 while state

banks ordinarily cannot lend an indi­

dividual borrower more than 15 per cent

of the bank's capital and surplus. These

limitations probably do not affect a

sufficient number of cases to alter av­

verages greatly.

Loans Made for Different Time

Periods

PCA loans were outstanding for an

average of 10.6 months while bank

loans averaged 3.3 months. About 69

per cent of the PCA loans were in

force for 10 to 12 months while about

the same percentage of bank notes

were for less than four months (table

34). One important reason for this

arose from differences in the method

of handling loans. In the case of PCA

loans, the maturity date for the initial

advance became the maturity date for

the subsequent advances. Commercial

banks set a maturity date for each

disbursement or note.

Higher Proportion of PCA Loans

Secured

The loans to about one-half of the

bank borrowers were secured, usually

by chattel mortgage but sometimes by

certificates of deposit, conditional sales

contracts, and cream or milk assign.
ments. This compares with about 90

per cent of PCA loans secured by

chattel mortgages (table 35). Here

again it is well to bear in mind that

a considerable proportion of the bank

loans were small.

Generalizations on this score cannot

be drawn from the bank loans studied

because of the considerable variations

found among banks in security re­

quirements. Of the banks included,
those in the Red River Valley and the

northeastern dairy area required se­

curity more generally than those in

southern Minnesota, the percentage of

secured loans being 70 and 40, re­

spectively.

Interest Rates Vary

Differences in interest rates are im­

portant in comparing different sources

of credit. Specific comparisons are not

made here because the number of

banks included was insufficient for this

purpose and because of the consider­

able variations in interest rates and

terms. Moreover, such a comparison

involves more than the contract rates.

Differences in fees and other charges

for inspection, filing, abstracting, and

other services must be included in

comparing effective interest rates. The

obligation to purchase stock by PCA

borrowers may or may not represent an

addition to cost depending on whether

dividends are paid on such stock and

at what rates.

The contract rate is uniform for

PCA loans, but service fees and pur­

chase of stock help determine the effec­
tive rate. Because the fees usually do

not increase proportionately with the

size of the loan, the effective rate tends
to be somewhat lower on the larger

loans. In the case of loans by banks

there was some tendency for contract

rates to decline as the size of the loan

increased, in recognition of the differ­

ences in costs of servicing. Contract

rates also indicated some tendency for

rates to vary among type-of-farming
areas. The higher rates were in the

northeastern dairy and the Red River

Valley areas, with lower rates in the

southwestern livestock and central
dairy areas.

Bank Loans More Liquid

Because of differences in methods of

operation, attempts to compare the

liquidity of farm loans of commercial

banks with PCA loans may not be too

significant. When the proportion of

borrowers continuously indebted to the

lender during the period of the study

is used as an indicator of liquidity,
banks loans are more liquid because

a larger proportion of them are made

for shorter terms. When the extent to

which borrowers meet their obligations

in full at maturity is used as a meas­

ure of liquidity, some differences be­
tween the two were found. Sixty per

cent of the bank notes were liquid in

the sense of being paid at maturity.

Slightly less than 50 per cent of the

PCA loans were paid off in full at ma­
turity. It should be noted that about

half of the PCA loans were for ma­

chinery, livestock, feed for livestock,

and land improvements. Moreover, the

bank loans on the average were

smaller and, in general, the smaller

the amount, the greater the proportion

paid at maturity.

Banks Make Shorter Loans, More

Renewals

Renewals were three times as nu­

merous for the bank loans studied as

for PCA loans. Renewals constituted

32 per cent of total advances for these

banks during the period reviewed and

11 per cent for the PCA loans. An im­
important reason for this is that the relatively short periods common for bank loans are not sufficiently long to meet many of the credit needs of farmers. Where renewals do not involve added costs and do not create uncertainties about the availability of funds for the full period no particular difficulties arise. Sound financing from the farmer's point of view calls for adapting the maturity dates to the time of anticipated income or receipts.

**PCA's Make More Use of Financial Statements**

The financial statements and income and expense statements of prospective borrowers supply information regarding the earning capacity of the farm business and the sale value of the assets. This is information of use to the lender in deciding upon whether or not a loan is to be made and for what amount. PCA's commonly obtain financial statements with applications for loans. The commercial banks surveyed obtained financial statements from four out of every ten borrowers, although the practice varies considerably among banks and in different regions. The use of income and expense statements was confined to the PCA's (figure 10). Only two of the eight banks maintained a credit file for each borrower.

Various factors account for these differences. Banks may have access to a greater variety of sources of information regarding the financial situation of their patrons and be better acquainted with them than is true in the case of PCA's. The fact that many bank loans are for smaller amounts also is a consideration. Financial statements are required more generally in the case of PCA loans over $500. The banks studied dispensed with financial statements in the case of secured loans. The practices of the banks studied suggest that commercial banks may not be following too closely the suggestions of the American Bankers Association and others that financial statements be obtained and credit files be maintained for farmer borrowers.

<table>
<thead>
<tr>
<th>PCA</th>
<th>Income</th>
<th>Outlay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948-49</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Summary and Conclusions**

**Size of Loans**

The average size of PCA loans was $2,450. The most typical size of loans was $1,574 for one-half of the loans or less than this amount. Poultry and livestock loans were larger in size; dairy loans, smallest. Loans to part owners were larger than those to full owners or tenants. The size of loan increased with size of net worth and size of estimated net income of borrowers.

**Purpose of Loans**

Of the funds loaned by the PCA's in 1948-49, the principal purposes were for operating expenses, machinery and equipment, and renewals. Each of these purposes accounted for 20 per cent of the funds disbursed. Livestock purchases represented 15 per cent of the total funds and land improvements constituted 10 per cent. Other purposes were for refinancing old debts, living expenses, and miscellaneous expenses.

**Advances and Repayments**

The average number of advances per borrower was 4.5 during 1948, while the number of repayments averaged 4.9 per account. However, there was a great deal of variation in number of advances and repayments, particularly with respect to size of loan. Accounts with maximum loan balance less than $500 averaged 1.7 advances and 2.5 repayments; accounts over $10,000, 9.3 advances, and 6.0 repayments. Livestock farms had the highest number of advances. Dairy farms had the highest number of repayments.

**Time Outstanding**

Three-fourths of the PCA loans were outstanding for approximately one year, but there were some significant variations. Small loans were outstanding for shorter periods than larger loans. Dairy loans were outstanding for longer periods of time than poultry or crop loans. Loans made to tenants were carried, on the average, for a longer period than loans to part owners or full owners.

**Budgeting of Loans**

Three out of every 10 loans were budgeted. Budgeted loans were planned at the time the loan was applied for so that the entire loan was advanced in installments as needed and repaid when the products financed were sold. Large loans were budgeted more closely than small. A higher proportion of tenant loans was budgeted than owner loans. No significant differences in budgeting requirements were found in relation to major type of farm enterprise, size of borrower net worth, or size of borrower net income.

**Security**

Eighty-seven per cent of all PCA loans were secured by chattel mortgage. The proportion of loans secured increased with size of loan. A higher proportion of tenant loans were secured than part owner loans and part owner than full owner loans. As net worth of the borrowers increased, the proportion of loans on which security was required decreased. Security requirements showed very small differences among borrowers grouped by major type of farm enterprise or by various estimated net income groups.

**Repayment of Loans**

One criterion of success in lending operations is the final liquidation of the loan. In this study it was found that small loans were paid off more...
readily than large loans. Poultry and crop loans possessed a higher degree of liquidity than livestock, general, or dairy loans. No significant differences in liquidity were ascribed to accounts or loans in relation to tenure status, size of borrower net worth, or size of borrower estimated net income.

Commercial Bank and PCA Loans

PCA loans were typically three times the size of bank loans. The median PCA loan was $1,574; the bank loans, $550. The pattern of advances and repayments of both agencies was similar in the various type-of-farming regions. However, the average number of advances and repayments of PCA loans tended to exceed those of commercial bank loans. This was attributed to the larger size of PCA loans.

A marked difference existed in the period of time the loans were outstanding. PCA loans were outstanding for a period of about 10.6 months; commercial bank notes for 3.3 months. The short term of the bank notes led to a high proportion of renewals. Approximately one-third of the bank notes were renewals, whereas only one-tenth of the total advances of the PCA's involved a renewal. In spite of frequent renewals, the liquidity of the bank borrowers was high. Approximately only one-fifth of the bank borrowers and two-fifths of the PCA borrowers were continuously indebted to the banks during 1948. Security was required from 54 per cent of the bank borrowers and from 87 per cent of the PCA borrowers.

Methods used by the PCA's and commercial banks in examining their loans differed widely. The commercial banks included in the survey sample collected financial statements from only four out of every ten borrowers.

They made no attempt to formalize an income and expense statement for their borrowers, relying primarily on their knowledge of the borrower for such information. The PCA's obtained financial statements from all their borrowers and prepared income and expense statements for approximately two-thirds of their loans.

Need for Improvement in Net Income Analysis

In many cases, PCA's loaned amounts greater than one year's estimated income. In the final analysis, most of these loans possessed a high degree of liquidity and were completely paid off within one season. The result was that the relationship between estimated net income and final disposition of the loans was highly unrealistic. Many loans made to farmers could not have been justified on the basis of estimated net income figures alone. Although repayment ability is stressed by PCA's, the present method of income analysis needs considerable refinement before this tool can be used effectively in credit analysis.

Improvement in Bank Practices

The short maturity of the notes taken by the commercial banks and the high proportion of renewals of these notes indicate that the banks did not gear the term of their notes closely to farmers' credit needs. The disadvantages to the farmer of frequent renewals are those of cost, of uncertainty regarding renewals, difficulty of long-range farm planning, and the possibility that premature liquidation of assets may be required. It is believed a more thorough pre-examination of loans would lead to sounder financing. This requires detailed knowledge of the purpose of the loan, borrower's financial status, his income prospects, and a record of his financial progress through the years.