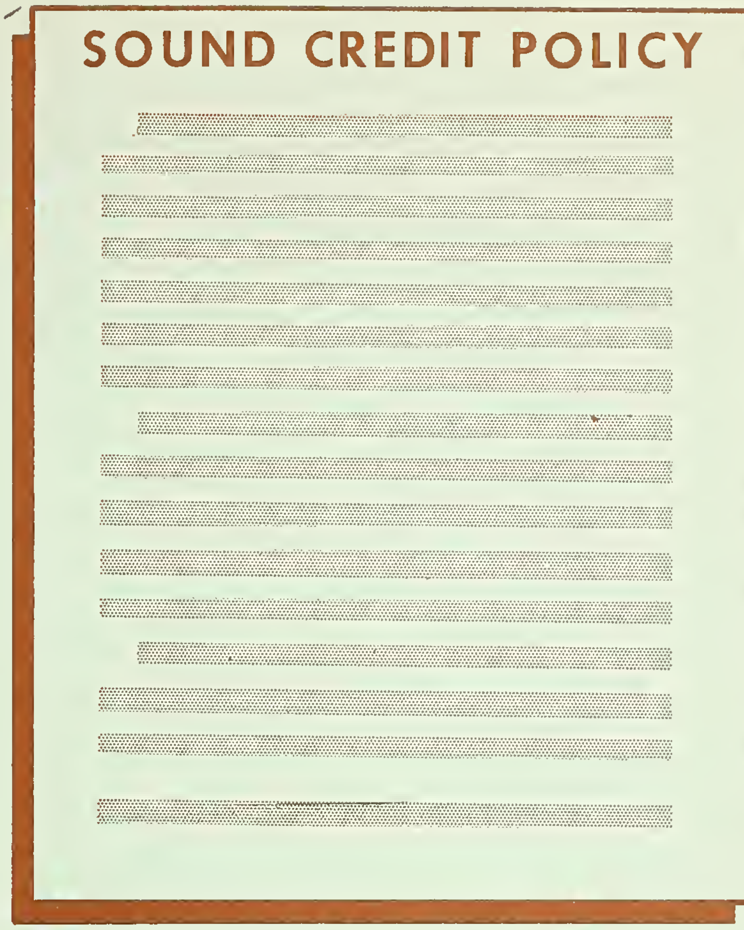

Credit Control in Selected Retail Farm Supply Co-ops

by John M. Bailey

Farmer Cooperative Service
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Contents

Summary and Suggestions

One of the most common problems of farm supply cooperatives is to control charge sales--and then to collect for them. Three things have contributed to the difficulty in controlling these sales in recent years. Most farm supply distributors have increased their credit operations. New production methods on the farm have added to farmers' cash costs. Farm income declines have limited the amount of cash farmers have to pay for their greater production expenses.

Eight carefully selected local retail cooperatives assisted in this initial inquiry into credit operations of farm supply associations. These cooperatives, located in Michigan, Indiana, Ohio, and Pennsylvania, were representative in overall operations and above average in their credit operations. All of these cooperatives considered credit necessary in their operations.

A description of their credit programs and analysis of credit operations should provide practical policies and procedures for successful credit control by farm supply distributors.

Policies and Practices

A review of credit policies and practices showed considerable variation in policies with respect to their establishment, terms, and responsibility for carrying into effect. All the associations followed the same credit policy or practices for member-patrons and non-member-patrons.

** While the associations did not favor adopting a strictly cash policy, there was a strong sentiment against further liberalization of credit terms by their personnel. Yet the desire or necessity for increasing or even maintaining volume often resulted in liberal interpretations of credit regulations and increased credit. These associations made very little effort to help their members better understand the credit situation.

** Three associations had stated cash policies while the terms of the remaining five permitted credit varying from 15 days after the month of purchase up to a maximum of 90 days on farm accounts.

** Practices differed greatly from stated policies. Some associations professing cash policies had permitted exceptions until there was little difference in practice between cash and credit policies.

** Four associations thought a public announcement of policy would encourage the use of credit and would interfere with adapting policy to individual and changing circumstances.

** Five associations require formal credit applications. Because of their specialized functions, some preferred credit bureau ratings while other associations thought a personal credit investigation was most satisfactory in dealing with patron and commodity differences.

** Oral explanation and agreement on terms at time of sale was the accepted goal, but three associations recognized failures in these to be responsible for difficulties in collection. In collecting accounts, all associations sent out monthly statements. They also wrote personal letters or made personal visits. All but one association used notes on various accounts. On delinquent accounts, six associations hired collection agencies. Most of the associations received help from local attorneys.

** Responsibility for extending credit to new customers rested with the general managers, except for three associations in which the office or credit managers were responsible for collection of account.

** These cooperatives did little to allocate the cost of credit although one association gave a 1 percent cash discount and another assessed a 1 percent charge on accounts over 60 days. The practice of using notes to secure overdue accounts was well estabished.

** Three associations extensively used the facilities of rural credit unions in meeting credit needs of farmers. Six associations reported good working relations with production credit associations. Representatives of four supply cooperatives thought that the regulations of established credit agencies were too formal and rigid to adequately meet production credit needs. They also mentioned a more aggressive job of selling and service by credit agencies as a possible approach for alleviating the credit squeeze on supply associations.

Analysis of Credit

** The accounts receivable over a 5-year period increased an average of 62 percent while total sales were up only 12 percent. Days of total supply sales in accounts receivable increased from an average of 11 days 5 years ago to 14 days at the end of the latest fiscal year.

** The proportion of accounts receivable over 30 days in age rose from 43 to 53 percent during the 5-year period. The days of credit sales in accounts receivable at the end of the fiscal year increased from 23 days in 1951-52 to 25 days in 1955-56.

** An appraisal of credit operations based on fiscal year-end accounts receivable does not give an accurate or typical picture of the credit situation. The 12 months' average of accounts receivable in these eight associations was 147 percent of the year-end figures.

** Detailed cost estimates by seven associations showed the cost of $100 of credit sales to average $1.70 with bookkeeping responsible for 34 percent of total costs. Bad debts were only 7 percent of these costs.

** While up to 90 percent of member-patrons used credit sometime during the year, only about 19 percent of the patrons had accounts outstanding at the end of the fiscal year.

** The 10 largest individual accounts in each association represented, on the average, only 1.9 percent of the patrons but accounted for nearly 27 percent of total accounts receivable at the end of the 1955-56 year.

Suggestions for Handling Credit

The wide variation in policies, practices, and operating results of the associations in this study gave no indication of any one best credit policy or practice.

Good credit performance seems related to: (1) Wide acceptance of established goals, (2) favorable attitudes and enthusiasm of those directly concerned with carrying out stated programs, (3) diligence in appraisal efforts and (4) the ability of the personnel to handle credit as well as commodities and other services.

Too many directors and managers have failed to come to grips with the problems of extending and collecting credit. Their practices are determined by expediency and economic conditions rather than by sound policies approved by the membership. As a result practices often determine policies.

While data from the eight associations studied are limited, the following tentative suggestions are offered for improving credit operations:

1. Establish realistic policies by action of the board of directors.

    a. Minimize exceptions.

    b. Reduce manager-patron tensions by enabling manager to carry out policy rather than determine it.

    c. Obtain approval of policies by member-patrons.

2. Adopt specific programs for extending credit.

a. Require a formal application.

b. Discuss policy and terms for mutual understanding

c. Hold manager responsible for administration.

d. Have employees sell credit policy along with products.

e. Use a list of "cash" patrons.

f. Establish regular board review of practices and individual accounts.

3. Establish sound collection procedures and follow through.

   a. Have current knowledge of individual accounts.

   b. Carry out in detail all terms.

      (1) Go after payment on date agreed.

      (2) Let account-holder see the association means business.

   c. Maintain contact with accounts by monthly statements, letters, memos, and the like.

   d. Protect the association by using secured notes when an account first becomes overdue. Use collection agencies and legal procedures as last resort.

4. Recognize and allocate the costs of credit.

   a. Recognize credit as a service and set a price on it.

   b. Allow a cash discount or make a charge for credit.

5. Encourage and assist farmers to use existing credit agencies.

   a. Recognize inefficiencies resulting when both farm supply cooperatives and credit agencies perform credit services.

   b. Establish working relationships with production credit associations, credit unions, local banks, and other credit agencies.

Credit Control In Selected Retail Farm Supply Cooperatives

(Area 1 - Michigan, Indiana, Ohio, Pennsylvania)

by John M. Bailey

Farm Supplies Branch, Purchasing Division

The extent to which many local farm supply cooperatives use credit is disturbing to directors and managers. Patrons often don't fully understand actual credit provisions. Frequently this is true because of the apparent lack of well-defined policies and practices for satisfactory credit extension and control. A further disturbing element in the use of credit arises from a traditional respect and desire for cash-trading by farmer cooperatives. But many have always granted some credit on an accommodation basis--varying from a practice of holding credit sales slips until paid to 30 days' credit.

This has brought about one of the most common problems of supply cooperatives--keeping down charge sales--and then collecting those which are charged.

Controlling credit has become more acute in recent years because:

(1) Distributors of farm supplies have gone more to credit operations.

(2) Production technology has added to farmers' cash costs. Machinery is substituting for labor. More feed is now purchased rather than raised on the farm as grain and roughage. Advances in animal nutrition have made it advantageous for farmers to purchase additional feed in the form of supplements containing antibiotics and growth regulators. Fertilizer, weed, and insect control measures have added considerably to production expenses.

(3) The decline in farm income has restricted the amount of cash available to meet additional production expenses.

The increasing use of credit by farm supply associations and the need for research to help management control it were indicated by the operations of some 80 county-wide cooperatives in a north central State. The number of days' sales they had outstanding in accounts receivable increased from 18 days in 1950 to 30 days in 1955. The proportion of total assets in such accounts increased from 12 to 17 percent during the period. Furthermore, 63 percent of the accounts receivable were over 30 days old in 1955 compared with 55 percent in 1950 (figure 1).

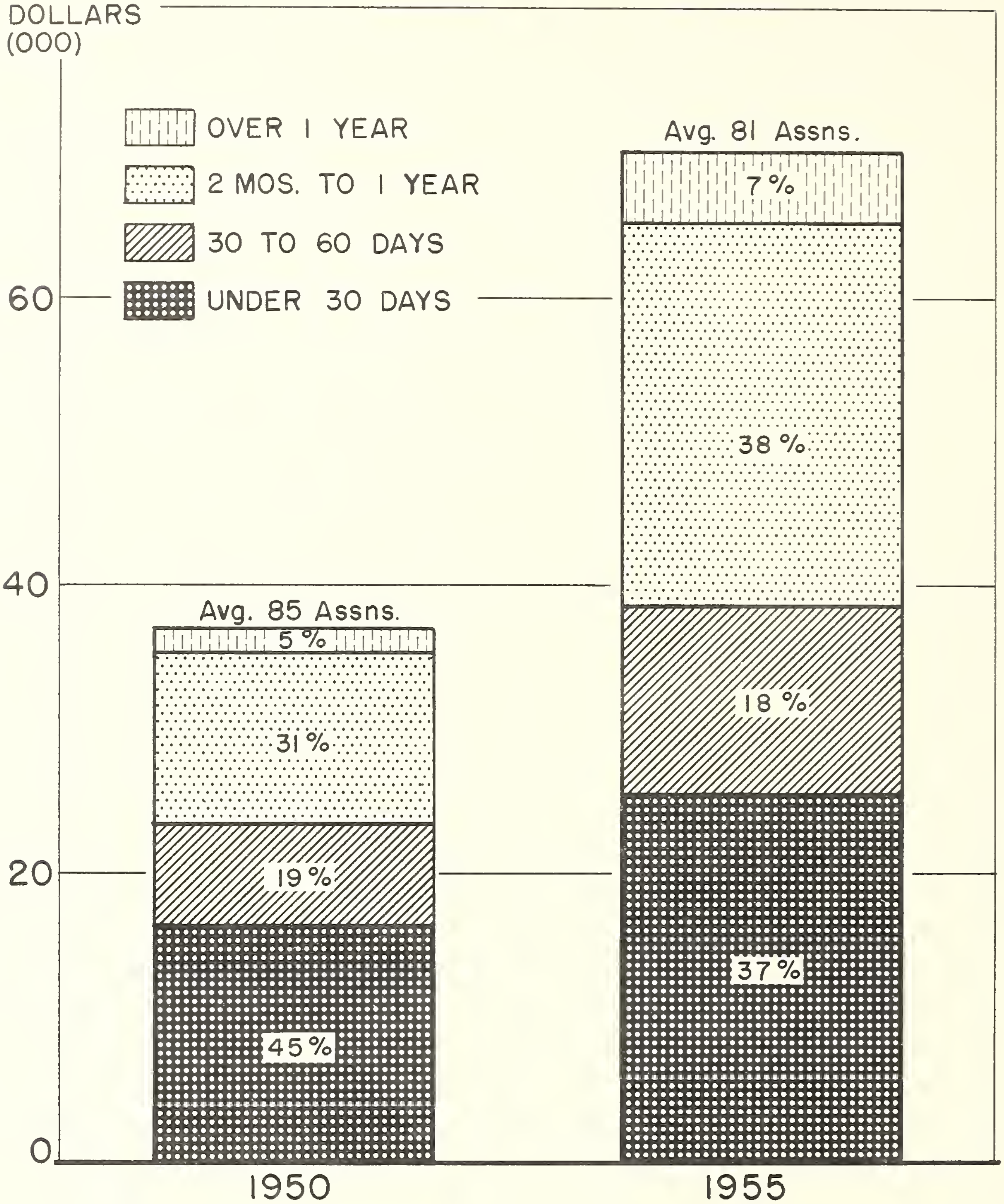
In order to function efficiently, recognize patron equity, and avoid excessive losses, the extension of credit must be controlled by definite policies consistently and effectively administered.

Purpose and Method of Study

This study is the first of a series which will cover general farm supply retail cooperatives operating under different conditions in various geo-

Note: Appreciation is expressed to officials of the farmer cooperatives who provided information on their credit operations, and to J. Warren Mather, Chief, Farm Supplies Branch, Farmer Cooperative Service, for assistance in planning and developing this study.

Expansion of Accounts Receivable for Local Farm Supply Associations



graphic areas of the United States. These studies will attempt to determine (1) the nature of and trends in credit used among local cooperatives handling a diversified line of supplies and equipment, and (2) practical policies and procedures for successfully controlling credit operations among such associations. The individual area reports will be preliminary to a summary publication. Cooperatives which do 90 to 100 percent of their business as cash will be studied at a later date.

This study covered eight local associations in Pennsylvania, Ohio, Indiana and Michigan. They were countywide associations affiliated with Statewide wholesale organizations and carried similar lines of production supplies. Several had one or more branch warehouses.

Their average volume for the latest fiscal year ending in 1956 was about $1 1/3 million. Six commodity groups made up more than 90 percent of total volume. About 30 percent of the supplies handled was feed. Petroleum products were next with 27 percent, and fertilizer followed with 15 percent. These three groups accounted for over 70 percent of total volume. Building materials, farm machinery and seed were next in order with their share of volume 9, 6, and 5 percent, respectively. General farm supplies made up the remaining 8 percent. These associations were believed representative in their area with respect to type of supplies handled.

No attempt was made to obtain a representative sample of all associations using credit. Rather the aim was to select a few associations considered to be using credit most successfully. Their experiences should serve as guides for other associations.

The regional cooperatives in the four States suggested names of local member associations to interview. Farmer Cooperative Service selected two of these from each State on the basis of comparable volume, diversification and type of supplies handled, and superior credit practices and performance. Superior handling of credit was determined in part by the relative proportion of assets in accounts receivable and number of days' sales in accounts receivable at the end of the year as well as by the proportion of accounts that were current.

Associations maintaining good control of their credit situation the year round were considered more successful than those showing low accounts receivables only once or twice a year after making a determined effort to reduce them. To make certain of the associations' ability to cope with credit, those doing more than one-third of their volume on a credit basis were selected for study.

That the associations selected had better than average credit operations is indicated by comparing them with the average of such operations for 81 county-wide associations in one of the States in 1955-56 (figure 2). The proportion of assets in accounts receivable for the eight associations averaged 10 percent compared to 17 percent for the 81 associations analyzed. In the number of days' sales in accounts receivable, those in the study averaged 14 while the average of 81 associations was 30 days. Accounts receivable were more current in the eight associations, as only 53 percent were over 30 days old in contrast to 63 percent for the average of the 81 locals.

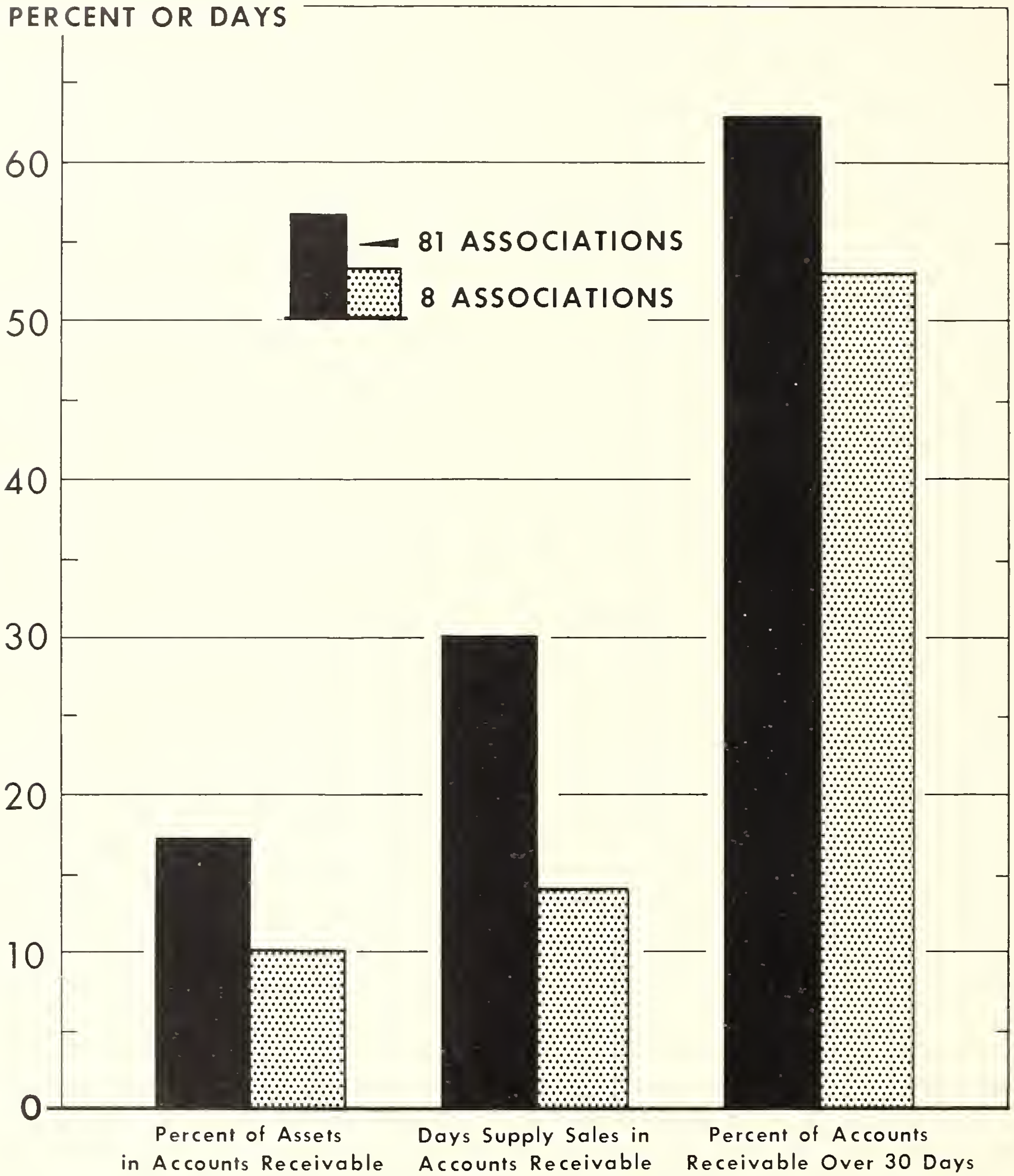
General managers, office managers, or credit managers of the selected associations gave the data through personal interviews. Information covered three phases of credit: Policies and practices, collection procedures, and credit operating data. Analysis of sales and credit operating data for the last 5 years made it possible to establish trends.

Credit Policies

Most cooperatives have some form of credit policy. It can be briefly stated, but to make it practical there must be sufficient leeway for excep-

Figure 2

Credit Performance in 81 Local Farm Supply Cooperatives in One State With 8 Selected Farm Supply Cooperatives in 4 States, 1955-56



tions and then enough restrictions to hold practices in line with policy objectives.

Even after outlining a policy with stated goals and functional details, considerable interpretation and follow-up are necessary for effective operation. Policy formulation is a recognized responsibility of directors. But in many associations credit practices are so far removed from stated policies that a restatement of policies often is necessary to bring them in line with practices. Moreover, exceptions need to be scrutinized carefully and regularly lest they become standardized practices and eventually direct policy.

In some cooperatives credit becomes a problem because of failure to recognize the need for and effective implementation of a policy. Factors which contribute to this incomplete recognition include:

1. Hope of gaining or fear of losing volume.

2. General use of credit in farm supply distribution.

3. General use of credit in purchase of many capital and consumer goods.

4. Patron resistance to borrowing funds from credit agencies.

5. Possibility of board members approving credit on the basis of patrons being good neighbors rather than establishing and enforcing an exacting credit policy.

6. The tendency to "Let Joe do it."

Responsibility for operation of an effective credit program rests upon the board of directors for setting it forth, upon management including the directors for putting it into effect, and upon patrons for understanding, accepting, and closely complying with it.

The stated credit policies of the associations comprising this study follow:

Credit policies	Number of associations
Cash	3
Due 15 days after month of purchase	1
Due 20 days after month of purchase	1
Due 30 days after month of purchase	2
Limit of 90 days on farm accounts	1

While three associations had stipulated cash policies, each modified these by credit exceptions. They aimed to impress the customer with the idea that cash was most desirable and that any departure or exception was for his convenience and a special dispensation by the cooperative. Cash policy was expressed in the hope that credit would be considered as a favor rather than as an expected service. The number of exceptions granted under these stated cash policies, however, made their operation almost comparable, in effect, to those of associations with stated credit policies.

Six associations granted commodity exceptions to their stated policies. Restrictions on petroleum and feed accounts ranged from a delivery-to-delivery basis up to a maximum of 90-day charges. The delivery-to-delivery basis was most applicable to urban petroleum purchasers. One association with a considerable number of urban patrons was using a budget plan. It generally gave special considerations to fertilizer purchases varying from a combination of cash and quantity discounts as high as 11 percent if purchased and paid for in November, and decreasing over a period of time, to a maximum of 6 months' credit. Appliances and machinery were generally handled under separate terms.

Only two associations had provisions about credit in their bylaws. These applied only to employees and directors. Employees were restricted to credit not in excess of one-half of their monthly wages, and directors were limited to three-fourths of the par value of their stock in the associations.

Policy Announcement

Cooperatives used considerable variation in methods to inform patrons about credit policies. Three associations did not publish a policy, and one made it available only to employees. These four associations believed that an open publication of credit policies might induce some patrons now paying cash to request credit. Managers thought it more flexible to adjust to individuals and changing circumstances. Cash was most desirable but if not possible, very limited credit was then granted even if no credit policy was published for general information. Three others had a printed policy available in the offices but not conspicuous to patrons. One association printed its credit policy on the monthly statement form but not on the sales slip.

Changes in Policies

Over the 5-year period, 1952-56, the associations studied made several changes in policies to improve credit handling. In one association, the branch manager now collects the accounts originating at his branch and a credit committee of the county board reviews accounts and passes on credit applications.

Another association tightened its policies for 1957 by making accounts due the 15th of the month following purchase with no further extension of credit while an account was over due. A charge of 1 percent a month was to be levied on the unpaid balance of open accounts until payment or conversion to secured notes.

Still another association in the 5-year period, by board action, had extended the time for payment from 7 to 14 days and later to 30 days from date of purchase.

To encourage collection of petroleum accounts, one cooperative changed the commissions of deliverymen from 1 cent per gallon delivered to 4 cents per dollar of sales turned in. This change was also aimed at promoting the sale of gasoline among farmers and discouraging the sale of fuel oil to urban patrons. In addition, the association made more thorough investigations of credit applicants. Legal action to collect delinquent accounts was formerly delayed until accounts were a year old. During the last year, legal action using the services of an alderman (justice of the peace) was started on accounts before they got beyond 6 months of age.

Credit Extension Practices

Credit personnel agree that an account properly opened is half collected. This implies an understanding of terms and an acceptance of responsibility to pay on the part of the patron. It means an association has a definite policy, one explained fully to patrons seeking credit. It requires that complete information be secured about the patron's past credit record and his ability to pay in the future.

Applications and Investigations

It was customary among these associations for a formal patron credit application and a credit investigation to be required before granting credit. Five associations used formal applications. Items of information on them varied. Statements of assets were required sometimes, especially if notes to be discounted were taken. One association, using both a credit bureau rating and a formal application, considered the ratings it obtained from a credit bureau inadequate. For example, it might show machinery as assets without indicating which machines already were mortgaged. One manager considered personal references very important on a credit application.

Opinion as to be best type of credit investigation was about evenly divided between association and credit bureau services. Those favoring association investigation stressed the variation in information needed as dictated by patron and commodity differences. Those associations preferring credit bureau investigations did so because of the specialized type of service they gave. As urban customers increase, cooperatives expect the use of credit bureau service to become more widespread.

In addition to using credit bureau facilities, two associations joined other fuel dealers in listing each month the names of delinquent customers. Both groups agreed not to service a new customer whose name was listed as owing an account. This list was especially helpful in considering new credit applicants.

All associations relied upon oral statements for explaining credit regulations. One association also used a printed statement and two others had posters in their offices outlining the use of credit. Three associations made sure of customer understanding by requiring a signature on the sales slip, and two of these had sales slips on which was shown the date payment was due.

While five associations claimed to have definite understandings with credit patrons at the time credit was extended, three associations reported very loose and indefinite practices in obtaining an understanding of credit terms and responsibility. In one association, more than 40 employees extended credit while only one employee was supposed to be responsible.

The responsibility for determining if credit was to be granted a <u>new</u> customer rested solely with the county cooperative managers in three associations. But these general managers shared the responsibility with branch managers and warehouse elevator department heads in extending credit to <u>old</u> patrons. In one association where the branch managers were responsible for new accounts, all employees could grant credit to existing customers. Two associations permitted deliverymen to make the decision for existing patrons. Three associations placed the responsibility for granting credit to both new and existing patrons with office or credit managers.

No differences in credit policy or practices were reported between member-patrons and non-member patrons.

Credit Restrictions

Restrictions on the amount of credit per patron varied from a time limit of 30 days on fuel oil to 90 days on other farm supply items. Only one association had a dollar limit--set by the board at $500. This maximum, however, is to be raised in the future as it is believed to have been responsible for the loss of patronage of some large operators. The general practice has been to determine the restrictions on an individual basis, depending on the past payment record. Expressions of "It's not so much the size of the account as who is behind it" and "A $3 account may be worth less than a $3,000 account" indicated the flexibility desired in establishing restrictions on individual credit cases.

All associations estimated the number of credit applications denied to be insignificant. With the exception of the association which had a dollar restriction on credit, no drop in patronage was reported as resulting from imposition of credit restrictions. Association representatives commented that "The customer who gets 'mad' at restrictions would 'beat' you anyway" and "It is not likely that a customer who is not acceptable as a credit risk at a cooperative would be any more acceptable elsewhere."

Allocation of Credit Costs

Farm supply associations did little to allocate credit costs among the patrons. One allowed a 1 percent discount for cash at the time of sale and another charged interest at 6 percent on a few accounts. Some associations provided cash discounts on fertilizer purchases. For purchases of fertilizer in November, combination cash and quantity discounts as high as 11 percent were allowed. The discount decreased monthly until by May no discount was given. The main idea back of this discount practice was to encourage the movement of fertilizer at off-season to minimize the seasonal rush at planting time.

The practice of accepting interest-bearing notes in settlement of accounts could be considered as a partial charge for the use of credit. But where the notes were turned over to a financial institution for collection of interest and principal, the association received nothing for its credit services.

Review of Practices

When asked about credit recommendations by auditors, only two association representatives could recall any having been made within the last 5 years. One was advised its accounts receivables were too high. Auditors pointed out the upward trend and suggested safety goals to the other association.

A list of account holders and the amount of each account was listed in the audits of two associations. The other six associations did not compile formal lists of accounts.

Boards of directors varied in their review of current credit practices. One manager reported a monthly review of practices and accounts by a committee of the board, thus relieving the manager of some responsibility in deciding the amount of credit allowed. Three association boards took a look each month at total accounts but did little in the way of checking or advising on practices.

Board members in two associations made quarterly inspection of accounts but only gave slight attention to practices. In another the board president occasionally looked over the accounts, but seldom did the whole board consider them.

Some managers felt their boards were too liberal and inclined to go along with overdue accounts. One manager recalled a board member's complaint that one of his neighbors had been unduly restricted on credit.

When asked about the number of times credit problems had been discussed at annual meetings in the last 5 years, not one association reported any more than a formal mention of credit in its annual report. Little if any effort had been made to get members as a group to arrive at a better understanding of the credit situation.

Need for Credit

Management personnel replied to a question on what extent they thought it necessary to operate on a credit basis. Without exception, they considered credit a requisite of operation. Some considered it essential because other businesses used it. Others thought it provided a convenient and justified service--fitting well into petroleum deliveries and adapted to the income patterns of different producers. Several managers believed that credit enabled them to maintain or build volume.

When asked about the possibilities of adopting a cash policy, there was general agreement against any such move. The reasons cited were possible loss of volume and resulting increase in costs per unit of sales. These views generally were opinions and not based on actual experience or study.

As to the effect of a more liberalized credit policy, there was general sentiment that it would be undesirable or abused. Personnel of the cooperatives feared that more patrons would use credit, risks would increase, and costs of administering credit would climb. All agreed, however, that credit was essential to maintain volume; yet, with only one exception, none thought that a liberalization of credit terms would further increase volume.

The proportion of sales on credit by individual associations for the latest year ranged from 37 to 88 percent. Yet the associations with the highest and lowest proportion of credit sales were both afraid to cut back or liberalize credit. It seems then that, at any given level, they considered a further increase in the proportion of credit sales undesirable and dangerous. But when, over a period of time and unintended, a higher plateau of credit sales was reached, it became the new credit position from which any retreat or advance was unwise.

The view that credit was an aid or necessity in attaining present volume but not desirable as a means of increasing volume may be only a justification by management of its present credit practice and position.

Credit Collection Practices

A successful credit operation depends on collection of accounts and maintenance of patronage. Collection practices depend considerably on the terms agreed upon and the understanding reached between patrons and association at time of credit extension.

Responsibility for Collection

The responsibility for collection of accounts rested generally on managers and petroleum deliverymen. None of the managers were financially liable for accounts, but in three associations, petroleum deliverymen were financially liable for credit extended. The cooperatives handled this by the use of reserves set up against driver commissions.

Two other associations did not hold the drivers responsible for collection if the accounts were approved by management. But when credit was extended by deliverymen on their own initiative, they were held responsible.

Statements

All account holders received monthly statements. Two associations used a series of collection stickers in connection with the monthly statements. Two managers used form letters at year-end to send to all those with accounts. Two other managers, however, objected to form letters, believing they were received as mere formalities.

All associations used personal letters. Two managers sent personal letters when an account became 60 to 90 days old. One other manager used them as a last resort and sent them special delivery. The practice of sending cards to overdue account holders asking for dates of expected payment not only served as reminders but gained many commitments. Using the same collection forms month after month was considered unwise by most associations. There seemed to be no one best method as various systems and combinations of statements, reminders, and requests were being used.

Personal Visits

All associations used personal visits for collection purposes. Four associations had fieldmen spend some of their time doing collection work. A part-time employee of one cooperative sat in with a credit committee of the board and later worked on collection of accounts.

Another variation was to have the first collection visit made by the employee who extended the credit in the hope that personal commitments might be more readily completed. Credit managers made personal calls as a part of their credit operations, thus relieving general managers of most of this responsibility. Estimated time per month on personal collection efforts varied from 10 to 40 hours per association.

Use of Notes

Accounts receivable were secured by notes as a regular practice in three associations when accounts became overdue. Two managers took notes as a last resort. Another association used notes only on very large accounts, particularly for turkey feed. Another used notes when an account became 90 days of age. Only one association made no use of notes.

The usual maturity dates on notes were 60 to 90 days with interest rates of 6 percent. The cooperatives generally turned notes over to financial institutions. The associations indorsed such notes and converted them to cash at face value.

The commercial institution taking the notes, most often banks, collected interest and principal, but had recourse to the local associations for full payment. The volume of credit handled by discounted notes was not obtained in this study.

The use of notes was reported to be well accepted by the patrons of six associations, with no adverse effects mentioned. However, one manager reported notes would be used considerably more by the patrons if association policy permitted. Two managers considered their experience with notes too limited for them to form valid judgments.

Collection Agencies

Six associations used the services of collection agencies for delinquent accounts. One of them, however, experienced little success with such agencies. Another association occasionally using credit agencies believed that these agencies collected the "cream" leaving the association with the poorer accounts. Those not using the agencies reported they could do as well themselves.

The dollar volume of accounts turned to collection agencies in the latest fiscal year ranged from $500 to $7,000 per association, and the proportion of the accounts collected usually varied from 20 to 50 percent.

Miscellaneous Practices

Local attorneys assisted most of the associations. One association reported local attorneys did not like to handle credit cases because of adverse effects on possible future clients. Only one association used an attorney of a regional cooperative. A justice of the peace worked with four associations in serving papers.

Other techniques included the use of certified letters and giving an employee dinner at the conclusion of a collection drive.

Practices reported helpful in getting better control of credit by branch units of local associations included:

1. Levying an interest charge against branch warehouses or stations carrying excess accounts receivable.
2. Preparing and circulating to all departments a list of suspended credit customers.
3. Placing more collection responsibility on those who extend credit.

Present Use of Credit Agencies

Six of the eight cooperatives had good working relations with the production credit associations supervised by the Farm Credit Administration. They referred patrons desiring credit to production credit associations (PCA's) to obtain funds so that cash could be paid to the cooperatives. In one association, patrons with accounts over 90 days were encouraged to pay up their charge account by borrowing from a PCA.

Another cooperative had a good tie-in with a PCA. The secretary of the local PCA advised the cooperative manager on good and poor credit risks and worked closely to get credit customers to use PCA funds for production expenses. They jointly sponsored an ad emphasizing credit at the PCA and cash at the cooperative. In addition the farm supply association invited a representative of the PCA to participate in its annual meeting.

Three associations used rural credit unions and mentioned their significant contributions to the problem of farm supply credit. Two of them provided office space and some clerical help for their respective credit unions. Even with credit union services available, patrons abused credit privileges at the cooperatives. One patron was reported to have a sizeable investment in a credit union and a considerable account at his cooperative. With his investment earning interest and with no charge for his account at the supply cooperative, he was personally benefiting.

One association looked upon a commercial bank as quite helpful, while another considered commercial bank lending practices to be too conservative. There was a general feeling that neither the banks nor the supply associations had made sufficient joint effort to help meet the credit needs of patrons.

Suggestions for Wider Use

Some association representatives considered prevailing credit sources too restrictive in their choice of customers and too narrow in their services. They recommended more personalized and complete services with greater efforts to inform farmers about their loan programs.

Some managers admitted failure on their part in fully utilizing the services of PCA's and informing patrons desiring credit about local cooperative credit organizations.

Analysis of Credit Data

A comparison of credit data over the last 5 years indicates an expansion of its use and a multiplication of difficulties. Accounts receivable have increased at a faster rate than sales and their liquidity has declined.

Increased Use of Credit

The problems of credit seem to increase as the volume of sales made on credit increase. More capital is required, more people (including poorer risks) are involved, record keeping increases, and more decisions must be made.

Complete information on the extent of credit sales for the last 5 years was not available for two associations. For the remaining six associations, the average proportion of sales on credit increased 13 percent over the last 5 years. During the fiscal year ending in 1951-52, credit sales ranged from 32 to 75 percent of total sales, averaging 52 percent. For the latest fiscal year ending in 1955-56, the proportion of credit sales averaged 65 percent and ranged from 39 to 88 percent of total sales (table 1).

The increase in volume of credit business resulted in an increase in accounts receivable. A measure commonly used to indicate the relationship of outstanding accounts to sales is the number of days' sales represented in the accounts receivable at the end of the fiscal year. This is derived by dividing total sales for the year by the usual number of selling days in a year, and then dividing average sales per day into the dollar volume of accounts receivable. This expresses the number of days of sales for which a business has not been paid. It is "business on the books." For this study, total supply sales were divided by 300 to arrive at the average amount of sales for one working day.

Days' sales in accounts receivable for individual associations in 1955-56 ranged from a low of 7 days to a high

TABLE 1.--Changes in credit usage for eight farm supply cooperatives in Indiana, Ohio, Pennsylvania and Michigan, 1951-52 and 1955-56

Association code number	Proportion of sales made on credit		Days' sales in accounts receivable at end of year		Proportion of accounts receivable over 30 days of age at end of year		Proportion of assets in accounts receivable at end of year	
	1951-52	1955-56	1951-52	1955-56	1951-52	1955-56	1951-52	1955-56
	Percent		*Days*		*Percent*		*Percent*	
1........	([1])	37	([1])	7	33	51	([1])	([1])
2........	([1])	63	19	19	50	50	32	24
3........	66	82	11	14	48	51	5	5
4........	75	75	21	21	49	60	13	11
5........	62	88	9	17	43	33	7	11
6........	32	53	2	7	33	63	2	5
7........	44	54	10	10	45	60	8	8
8........	32	39	8	13	43	59	7	9
Average..	52	[2] 65	11	[3] 14	43	53	10	[3] 10
Median...	53	[2] 65	10	[3] 14	45	56	7	[3] 9

[1] Data not available.
[2] Data for six associations.
[3] Data for seven associations.

of 21 days. For associations on which data were available, average days' sales in accounts receivable increased from 11 days 5 years ago to 14 days for 1955-56. Expressed another way, year-end accounts receivable accounted for 4 percent of supply sales 5 years ago compared to 5 percent in 1955-56.

The amount of accounts receivable increased an average of 62 percent during the 5-year period while average sales increased only 12 percent (table 2). Using medians (typical or mid-point figures not influenced by size or volume), accounts receivable increased 40 percent while sales went up only 8 percent. Thus, using either measure, accounts receivable increased five times more in percentage points than did sales during the period.

Considerable change in volume of farm supply sales from 1951-52 to 1955-56 is shown in table 2. They varied from an 11 percent decrease by one cooperative to a 40 percent increase by another. An increase in accounts receivable over the 5-year period, however, was not always associated with an increase in sales volume. For the association in which sales declined 11 percent, accounts receivable were up 201 percent. Another association with a decrease in total sales of 5 percent showed an increase in accounts receivable of 51 percent. The proportion of sales made on credit increased in both associations but much more in the former one. (See associations 6 and 8, table 1). Thus measured by increases in proportion of credit sales and relative amounts of accounts receivable, credit operations deteriorated.

Measured in terms of the percent of total assets in accounts receivable, the proportion rose from a median of 7 percent for seven associations in 1951-52 to a median of 9 percent in 1955-56, although the average proportion was the same for both years, (table 1).

TABLE 2.--Comparative credit data for eight farm supply cooperatives in Indiana, Ohio, Pennsylvania and Michigan, 1951-52 and 1955-56[1]

Association code number	Change in total farm supply sales, 1951-52 to 1955-56	Change in accounts receivable, 1951-52 to 1955-56	Monthly average accounts receivable as a percent of accounts at end of 1955-56 fiscal year	Monthly average accounts receivable as a percent of total assets at end of 1955-56 fiscal year
	Percent	*Percent*	*Percent*	*Percent*
1.............	(2)	21	145	(2)
2.............	31	29	145	35
3.............	40	74	183	10
4.............	8	6	143	16
5.............	15	105	156	17
6.............	-11	201	208	10
7.............	6	10	95	7
8.............	-5	51	101	9
Average.......	[3] 12	62	147	[3] 15
Median........	8	40	145	10

[1] All figures are increases except those with (-) which are decreases.
[2] Data not available.
[3] Average of seven associations.

For five associations, notes receivable averaged 30 percent of accounts receivable 5 years ago compared with 73 percent for the most recent year. For these same five associations the amount of notes had risen about 200 percent in 5 years compared with an average increase of 63 percent in accounts receivable.

Year-End Versus Monthly Average Accounts

General considerations and measures of the size of accounts receivable usually are based on year-end audit figures. Such figures present, in many instances, the lowest dollar volume of accounts receivable for the entire year. For some associations in this study the fiscal year-end was at a time when sales were relatively low. This reduced accounts receivable. But the primary reason for accounts receivable being lower at fiscal year-end was the general practice of concentrating efforts on reducing the accounts.

Two main purposes are served by this increased effort. First, it is an appropriate time to establish an annual collection drive and make it a regular event in the minds of patrons. Second, it affords management an opportunity of improving the balance sheet picture by minimizing accounts, thus either enhancing the cash position or reducing accounts and notes payable.

The effects of fiscal year-end closings on accounts receivable is shown in table 3. The 12 months' or annual average of accounts receivable for each association is given a weight of 100 and the relative size of accounts receivable by months is expressed as a percent of this average. The closing month of the fiscal year for each association is underlined.

The accounts receivable for all eight associations in February was 83 percent of the yearly average compared with 77 percent for January. Association number 2 which closed its

TABLE 3.--Monthly variation in accounts receivable shown as a percentage of 12-months' average, eight local farm supply associations, 1955-56[1]

(12 months' average for each association = 100 percent)

Association code number	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Range	
													Low	High
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
1..................	57	57	73	153	160	147	119	69	125	103	80	53	53	160
2..................	98	69	90	105	109	113	102	104	124	112	107	100	69	124
3..................	68	84	134	156	151	53	79	86	113	118	105	53	53	156
4..................	93	101	103	108	129	115	109	110	69	91	86	86	69	129
5..................	73	90	99	119	124	112	109	100	104	111	101	57	57	124
6..................	59	89	117	111	130	125	104	100	105	116	97	48	48	130
7..................	86	84	98	108	103	119	109	109	113	108	85	79	79	119
8..................	87	89	98	105	114	108	101	97	107	101	95	99	87	114
Average............	77	83	101	121	127	111	104	88	107	118	94	72	72	127

[1] Month underlined denotes end of fiscal year for each association.

year in February, however, showed accounts receivable of only 69 percent of the yearly average compared with 98 percent for January.

Similarly, the average volume of accounts receivable in June was 111 percent of the yearly average compared to an index of 127 for May, a decrease of 16 points. For association number 3, which closed its year in June, accounts receivable in June were 53 percent of its yearly average compared to its index of 151 for the previous month, a decrease of 98 points.

Finally for these eight associations, the 12 months' average of accounts receivable was 147 percent of the fiscal year-end figure on which so many calculations and decisions might be made (table 2). The monthly average accounts receivable varied from 95 to 208 percent of year-end accounts. This comparison of fiscal year-end accounts receivable with the 12-month average points out the shortcomings of considering the credit problem in terms of fiscal year-end figures.

This pattern of relatively low accounts receivable at fiscal year-end is also observable with respect to credit sales, although not to the same degree (table 4).

For instance, the June average of eight associations was 102 percent of the yearly average of credit sales, compared to a May index of 134, or down 32 points. In contrast, association number 3 with its year ending in June had credit sales of only 87 percent of its yearly average, compared to its May index of 154, or down 67 points.

Another measure of the relative importance of accounts receivables is the proportion of total assets they represent. For the latest year, based on fiscal year-end figures, accounts receivable averaged 10 percent of total assets (table 1). Accounts receivable for the latest year for seven associations, based on the average of 12 months, were about 15 percent of total assets. The proportion varied from a low of 7 to a high of 35 percent (table 2). This made a heavy capital requirement for carrying credit--for every $100 of total assets, an average of $15 was tied up in accounts receivable.

Age of Accounts

Not only did accounts receivable increase in volume, but their liquidity declined during the 5-year period. For the most recent year, as shown in table 1, accounts over 30 days represented 53 percent of the total. Five years ago 43 percent was in that category.

The proportion of accounts between 30 and 60 days of age increased about 2 percent during the period. Accounts from 2 months to 1 year of age in six associations increased from 24 percent of total accounts to 31 percent for the latest fiscal year.

Accounts over 1 year of age remained about the same percent of total accounts--between 1 and 2 percent. One reason they changed very little was the practice of writing-off old accounts when they were considered uncollectible. Another factor was the increasing use of notes receivable.

The measure of days of credit sales in accounts receivable is often used as an indication of the average age of total accounts receivable. Days' total sales in accounts receivable, referred to previously, is a measure of magnitude but days of credit sales is a measure of the collection rate. It is sometimes referred to as a collection ratio.

Inasmuch as credit terms are generally stated in calendar days rather than business days and for convenience of comparison, the days of credit sales measure often is based on a year of 360 days--12 months of 30 days each.

Thus an association with a 30-day credit policy should not have more

TABLE 4.--Monthly variation in credit sales shown as a percentage of 12-months' average, eight farm supply associations, 1955-56[1]

(12 months' average for each association = 100 percent)

Association code number	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Range	
													Low	High
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
1..................	87	61	79	214	133	151	65	<u>71</u>	143	79	52	63	52	214
2..................	117	<u>101</u>	102	105	103	94	60	83	112	102	103	119	60	119
3..................	74	76	163	193	154	<u>87</u>	66	63	93	92	66	73	63	193
4..................	91	100	116	122	148	93	87	92	<u>96</u>	83	78	94	78	148
5..................	85	98	106	147	128	88	81	93	85	104	89	<u>96</u>	81	147
6..................	69	70	111	154	172	109	69	105	98	123	67	<u>52</u>	52	172
7..................	100	91	105	107	104	99	110	81	89	100	<u>105</u>	111	81	111
8..................	100	88	126	126	134	96	70	82	112	88	87	<u>92</u>	70	134
Average............	90	86	114	146	134	102	76	84	104	96	81	88	76	146

[1] Month underlined denotes end of fiscal year.

than 30 days of credit sales in outstanding accounts receivable if its collection practices are in line with its credit policy. More than 30 days would indicate a slow collection rate. Less than 30 days would indicate a favorable collection program and, for the average of all accounts, practices conforming with policy.

Changes over the last 5-year period in the number of days of credit sales in accounts receivable for seven associations are shown below:

Association code number	Credit sales in accounts 1951-52 Days	1955-56 Days
1	21	24
3	20	20
4	34	33
5	18	22
6	7	15
7	27	22
8	31	41
Average	22.6	25.3

Three of the seven associations improved or maintained their collection ratios but declines occurred in the ratios of the other four. The average days of credit sales in accounts receivable of the seven cooperatives rose from 23 to 25 days over the period. The range 5 years ago was from seven to 34 days compared to a range of 15 to 41 days for the most recent year.

Monthly Trends

The supply requirements of agriculture generally have a double seasonal fluctuation with the volume peaks in the spring and fall. Monthly variations in credit sales and accounts receivable reflect the seasonal pattern of total farm supply sales.

With the average monthly credit sales for the year given an index value of 100, table 4 indicates the fluctuation by months for each association. Credit sales for the spring were highest in April with an index of 146. They were highest in the fall season in September which had an index of 104. Following the spring peak they were lowest in July with an index of 76. In the fall, a low of 81 was reached in November.

Table 3 shows the relative monthly volume of accounts receivable for each association. Spring and fall seasonal highs occurred in May and October with indexes 127 and 118, respectively. Likewise the seasonal low for summer was 88 in August and for winter it was 72 in December.

By plotting average monthly indexes for credit sales and accounts receivables, the seasonal fluctuations and movements together are apparent (figure 3). The credit sales' index went from a level of 86 in February to 146 in April, an increase of 60 points, while accounts receivable rose from 83 to 127, an increase of only 44 points.

The index of credit sales rose from 76 in July to 104 in September, an increase of 28 points. Accounts receivable rose from 88 in August to 118 in October or 30 points. Thus, accounts receivable in relation to credit sales did not improve from May until after November. Collections during the late summer and fall season held their own in relation to credit sales.

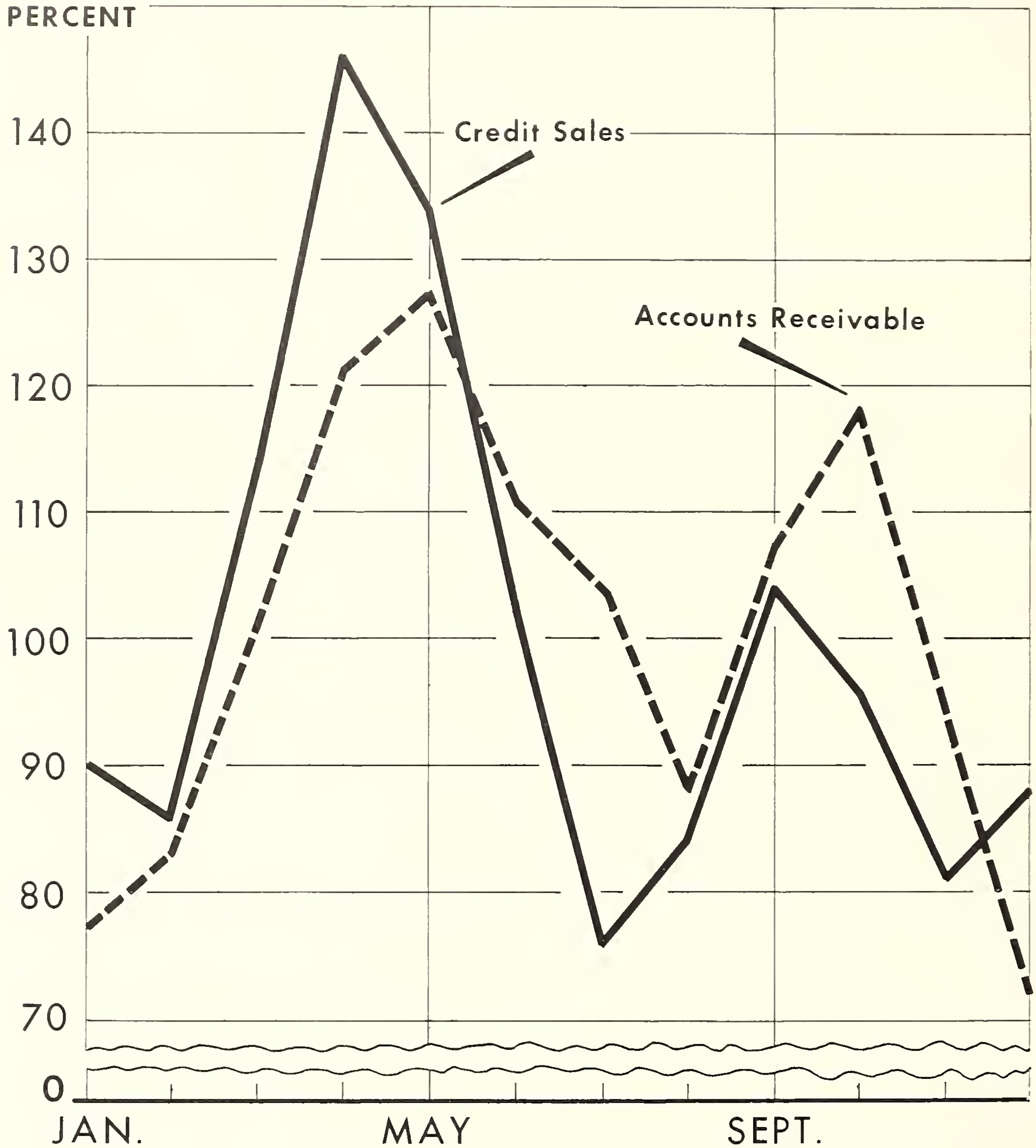
A look at the seasonal trends in credit sales and accounts receivable shows that some of the credit let out in March and April was not collected at least until after August, and probably not until after November. This should serve as a word of caution about the extension of credit at planting time. Some of it might, on the basis of the records of these cooperatives, stay on the books for from 3 to 6 months.

Cost of Credit

While no attempt was made to obtain detailed costs of doing a credit business, representatives of seven associations prepared estimates of credit costs for their individual associations

Figure 3

Average Monthly Variation in Credit Sales and Accounts Receivable as a Percentage of a 12-month Average for 8 Farm Supply Associations in 4 States, 1955-56



in 1955-56. A description of the items considered as credit costs follows:

Interest was charged at the same rate as interest paid on borrowed money, or 5 percent if none was borrowed. Capital tied up in accounts receivable was based on the 12 months' average of accounts receivable.

Extending costs included charges for time needed to establish policies and practices, for explanation to patrons, investigation of applications, and opening of the accounts.

Bookkeeping and collection costs included time of manager and clerical employees, supplies, travel, legal expense, and related items.

Bad debts were the accounts written off as uncollectible, less any recovered amounts.

Total credit costs ranged from 70 cents to $2.40 for each $100 of credit sales among the seven associations (table 5 and figure 4).

Figure 4 presents the cost estimates by type of expense. Bookkeeping was the largest single item, representing 34 percent of total costs. In-

Figure 4

Credit Costs in 7 Farm Supply Cooperatives, 1955-56

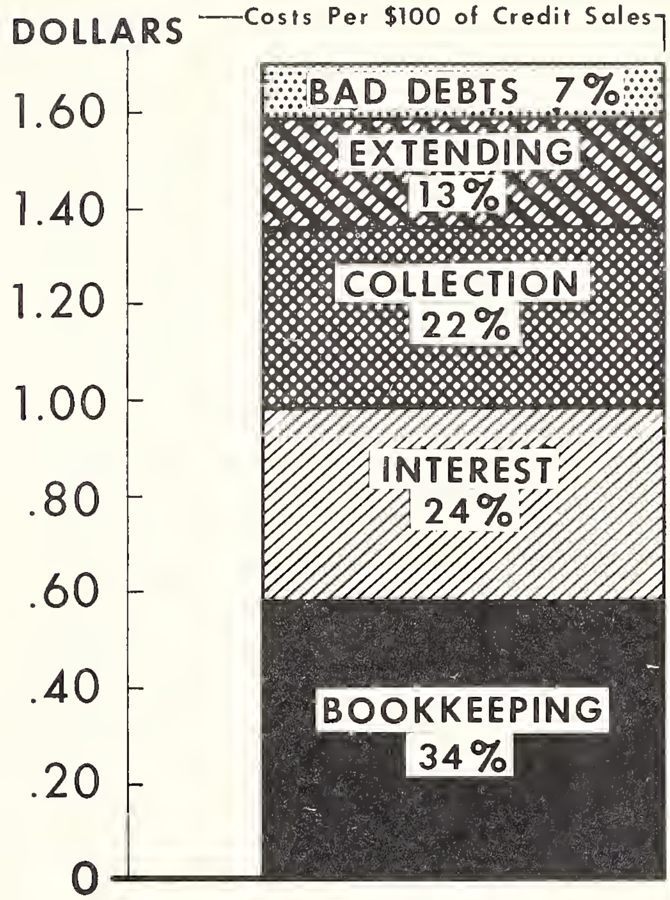


TABLE 5.--Costs of doing a credit business for seven local farm supply associations, 1955-56

Association code number[1]	Accounts receivable yearly average	Costs						Cost per $100 of credit sales
		Extending	Interest	Bookkeeping	Collection	Bad debts	Total cost	
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
1...........	18,078	170	903	1,580	1,020	430	4,103	2.20
3...........	163,886	6,925	4,917	7,975	4,877	653	25,347	1.60
4...........	224,466	1,482	7,631	8,630	9,737	2,162	29,642	1.70
5...........	110,113	1,900	3,505	10,100	4,436	489	20,430	1.80
6...........	60,264	900	2,411	3,021	2,128	1,033	9,493	1.40
7...........	56,000	670	2,520	1,308	1,109	636	6,243	.70
8...........	55,756	2,824	1,951	4,480	1,770	600	11,625	2.40

[1] Data not available for association number 2.

terest and collection costs were 24 and 22 percent, respectively. Bad debt costs were low, only 7 percent of total costs. However, with the shift to lower liquidity of accounts receivable over the past 5 years, the dollar volume of accounts not collectible could easily increase.

With each $100 of credit sales costing $1.70 it is essential that this cost be recognized and properly allocated. Proper charges to patrons could be made by allowing a cash discount or by assessing a credit charge. The method used would depend somewhat upon how widely credit was used by the patrons.

If only a small proportion of sales were made on credit, a cash discount would in effect amount to a lowered selling price for most of the total volume. In such an instance, a charge for credit would be more practical.

Patrons Using Credit

Estimates were obtained on the proportion of patrons who used credit one or more times during the year and the number of accounts at the fiscal year-end.

Five association representatives estimated about nine out of 10 member patrons used credit sometime during the year. In the other three associations, representatives estimated that approximately half the patrons used credit. For non-member patrons, the estimated proportion using credit was lower, varying from 10 to 75 percent.

Nineteen percent of the patrons in the eight associations had accounts outstanding at the end of the year. The proportion among individual associations varied from a low of 4 to a high of 62 percent, with the median 12 percent (table 6).

The 10 largest accounts in each of the eight associations represented only 1.9 percent of the patrons, but they were responsible for 27 percent of the fiscal year-end accounts receivable. While 46 percent of the volume of all accounts was under 30 days of age, only 26 percent of the 10 largest accounts was under 30 days. Hence, this very small proportion of patrons with the largest accounts was also less current than the average in paying their accounts.

It could well be asked, "Does the volume contribution of the 10 patrons with the largest accounts in each association (less than 2 percent of all patrons with accounts) offset the credit costs associated with the 27 percent of accounts receivable owed by them?"

Credit Operations of Individual Associations

Some background information on type and scope of operations, the relative proportion of volume by principal commodity groups, and the basic features of individual credit programs may be useful in comparing particular operating results with reported policies and practices. A brief write-up of each association follows.

Association 1

Total supply volume by this association in 1956 was a little more than half a million dollars with 43 percent of the volume feed. Fertilizer made up 26 percent, seed 10 percent, building supplies 6 percent, and general supplies the remaining 15 percent. Highlights of its credit operations for recent years are shown in table 7.

This association generally followed the retail credit policy of the State organization. It originally provided credit for a period of 30 days or to the 10th of the month after purchase. This policy has been modified, extending the time of payment to the 20th.

The new credit policy was not publicized for fear patrons would misinterpret it or increase their demands for credit. Patrons made a formal application and signed sales slips on which proposed date of payment was shown.

TABLE 6.--Patrons using credit in eight local farm supply cooperatives in Michigan, Indiana, Ohio, and Pennsylvania, 1955-56

Association code number	Patrons at end of fiscal year	Accounts receivable at end of fiscal year	Proportion of patrons with accounts receivable	Proportion of total amount of accounts receivable in 10 largest accounts	Proportion of total number of accounts represented by 10 largest accounts	Proportion of accounts receivable under 30 days of age	
						10 largest accounts	All accounts
	Number	Number	Percent	Percent	Percent	Percent	Percent
1...........	4,200	159	4	46	6.0	33	49
2...........	800	495	62	12	2.0	([1])	50
3...........	6,800	679	10	41	1.5	32	49
4...........	10,000	1,680	17	21	0.6	31	40
5...........	2,700	750	28	30	1.3	14	66
6...........	6,802	650	10	27	1.5	5	37
7...........	7,000	870	12	17	1.1	30	40
8...........	7,000	821	12	23	1.2	35	41
Average.....	5,663	763	19	27	1.9	[2] 26	[2] 46
Median......	---	---	12	25	1.4	31	41

[1] Data not available.
[2] Average of seven associations.

The manager had responsibility for extending new credit while department heads could extend it to patrons with an approved credit rating. Each month accounts were reviewed by those employees concerned with credit. In addition to this local review, the State association made a monthly review.

Association 2

Although this is an independent local cooperative, the management was under a management contract with the State organization. Supply volume exceeded a third of a million dollars, all in petroleum products. Credit operating data for the last 5 years is shown in Table 8.

TABLE 7.--Comparative volume and credit data for Association 1, 1951-52 to 1955-56

Year	Total farm supply sales	Sales on credit as percentage of total supply sales	Fiscal year-end accounts	Total supply sales in accounts
		Percent		*Days*
1955-56.................	$509,891	37	$12,527	7
1954-55.................	566,932	30	14,645	8
1953-54.................	550,443	38	11,414	6

Year	Credit sales in accounts	Age of accounts as percentage of total			
		Under 30 days	30 to 60 days	2 to 12 months	Over 1 year
	Days	*Percent*	*Percent*	*Percent*	*Percent*
1955-56.............	24	49.1	38.2	12.7	---
1954-55.............	31	53.6	18.7	26.9	0.8
1953-54.............	20	45.4	19.2	35.4	---
1952-53.............	22	52.9	22.4	24.0	0.7
1951-52.............	21	66.6	11.1	22.3	---

Collection of accounts was considered the final phase of selling so all employees were collection conscious. None, however, had any financial responsibility. Form letters were not used, but personal letters were sent after an account became 90 days old. Fieldmen did collecting on their routes, but took special care to avoid overlapping of visits.

A big credit assist for this association came from the county farm bureau credit union. Holders of overdue accounts and patrons requiring terms longer than provided by the supply cooperative were referred to the credit union for their credit needs.

Before 1955 there was no formal credit policy. In that year the board established a limit on farm accounts of 90 days. Fuel oil credit was restricted to one delivery with the manager responsible for new credit. Formal application, including credit references, was required of all new accounts.

The manager reported much better control of credit since the board formally established a policy. Deliverymen carried a copy of the policy and it was also posted in the business office. The policy was explained to patrons orally and by printed state-

TABLE 8.--Comparative volume and credit data for Association 2, 1951-52 to 1955-56

Year	Total farm supply sales	Sales on credit as percentage of total supply sales	Fiscal year-end accounts	Accounts as percentage of total assets	Total supply sales in accounts
		Percent		*Percent*	*Days*
1955-56	$348,313	63	$21,807	24	19
1954-55	311,180	([1])	24,592	30	24
1953-54	289,563	([1])	21,328	32	22
1952-53	279,104	([1])	20,286	33	22
1951-52	266,147	([1])	16,937	32	19

Year	Credit sales in accounts	Age of accounts as percentage of total			
		Under 30 days	30 to 60 days	2 to 12 months	Over 1 year
	Days	*Percent*	*Percent*	*Percent*	*Percent*
1955-56	36	50.0	16.7	33.0	0.3
1954-55	([1])	49.5	23.9	26.1	0.5
1953-54	([1])	47.3	22.9	29.5	0.3
1952-53	([1])	47.1	18.7	33.8	0.4
1951-52	([1])	49.8	21.5	28.1	0.6

[1] Data not available.

ments. Patrons signed sales slips which also contained the credit terms.

Exchange of information with area fuel dealers was considered helpful. A credit bureau rating was required of new credit applicants.

The manager reported monthly to the board but the directors reviewed individual accounts only as suggested by the manager.

Petroleum deliverymen were financially responsible for collection of accounts on the basis of 10 percent reserve on net commissions. At the end of the year all charge-offs were deducted from the reserve as well as 50 percent of the dollar value of accounts from 9 to 12 months of age and 25 percent on accounts 6 to 9 months old. Balance of the reserves after the above reductions were returned to the drivers. Any collections made on accounts written-off were added to the reserve.

Collection agencies were used very little for the manager figured that whatever they could collect, he could collect too.

Services of a credit union or PCA were available but neither were used extensively to minimize credit extension at cooperative.

Association 3

This county organization had four branches. Total volume in 1956 was about $5 3/4 million with supplies accounting for about $2 million. The proportion of supplies by major commodity lines in 1956 was: Feed 9 percent, petroleum 22, fertilizer 35, building materials 22, farm machinery 3 percent and general supplies 14 percent. Data on credit operations over a 5-year period are shown in Table 9.

TABLE 9.--Comparative volume and credit data for Association 3, 1951-52 to 1955-56

Year	Total farm supply sales	Sales on credit as percentage of total supply sales	Fiscal year-end accounts	Accounts as percentage of total assets	Total supply sales in accounts
		Percent		*Percent*	*Days*
1955-56............	$1,931,509	82	$89,579	5	14
1954-55............	2,127,845	77	95,226	6	13
1953-54............	1,896,691	78	85,253	6	13
1952-53............	1,626,428	62	65,443	5	12
1951-52............	1,376,644	66	51,479	5	11

Year	Credit sales in accounts	Age of accounts as percentage of total			
		Under 30 days	30 to 60 days	2 to 12 months	Over 1 year
	Days	*Percent*	*Percent*	*Percent*	*Percent*
1955-56............	20	49.0	21.2	29.5	0.3
1954-55............	21	50.6	16.4	32.8	0.2
1953-54............	21	56.1	17.5	23.5	2.9
1952-53............	23	48.7	19.4	29.5	2.4
1951-52............	20	51.9	21.6	25.1	1.4

A board-established credit policy of payment within 30 days after the end of the month of purchase has been in effect since 1949. No credit is extended beyond the 30 days until arranged with the manager or board. In petroleum, however, open accounts up to 60-90 days have been allowed and after that such accounts were converted to notes. The manager believed feed volume had been restricted by the credit terms, and there was difficulty in adapting terms to building supplies. The association in practice, however, frequently considered individual cases rather than following strictly the defined overall credit policy.

The association published credit policies but only for use of employees. It feared a general publication of policies as an invitation for greater credit use by the patrons.

A credit rating from a bank or credit bureau was sought for each new applicant. Once a rating was established, branch managers and petroleum deliverymen could extend credit; for new patrons, clearance came from the county manager. Time and money restrictions were flexible and adapted to individual circumstances.

Cash discounts on fertilizer of 10 percent in bags and 5 percent in bulk were allowed if paid within 30 days of purchase.

Petroleum deliverymen helped collect accounts, but other employees did not have this duty. No employee was financially responsible for credit extended, although those who extended credit were expected to make the first personal collection visit. The placing of greater collection responsibility on those who extend credit was considered to have merit. Collection drives took place every 6 months.

Association personnel made contacts with credit agencies for individual patrons. A board member was also a director of the local production credit association. This provided a close working relationship. No rural credit union was available but local banks had given good cooperation. The cooperative considered most credit agencies too cautious under adverse conditions like droughts.

In an effort to improve efficiency of branch operations in controlling credit and inventories, an interest charge was made against the county cooperative on excess capital in accounts receivable or inventories.

Association 4

With three branches, total volume for this association in 1955 was over $3.5 million, with about $2.3 million in supplies. The proportion of supplies by major commodities was: Feed, 22 percent, petroleum 15, fertilizer 16, building materials 21, and farm machinery 9, and general supplies, 17 percent. Data on supply and credit operations for 5 years are shown in table 10.

The credit policy called for payment the 15th day of the month following purchase except for petroleum which was due after 90 days. Deviations from this policy were most frequent in the sale of building supply items. The present policy has been in operation since 1951.

A local credit bureau made investigations on new applicants. Branch managers determined if credit was to be granted new patrons but any employee could extend credit to existing account holders or others with approved credit ratings. A list of patrons who must pay cash was circulated to each department.

A cash discount on fertilizer of 10 percent in bags and 5 percent on bulk was given if payment was made within

TABLE 10.--Comparative volume and credit data for Association 4, 1951-52 to 1955-56

Year	Total farm supply sales	Sales on credit as percentage of total supply sales	Fiscal year-end accounts	Accounts as percentage of total assets	Total supply sales in accounts
		Percent		*Percent*	*Days*
1955-56..............	$2,259,256	75	$156,893	11	21
1954-55..............	2,165,024	71	181,760	14	25
1953-54..............	1,893,414	79	139,687	12	22
1952-53..............	1,954,769	89	161,974	14	25
1951-52..............	2,093,862	75	148,554	13	21

Year	Credit sales in accounts	Age of accounts as percentage of total			
		Under 30 days	30 to 60 days	2 to 12 months	Over 1 year
	Days	*Percent*	*Percent*	*Percent*	*Percent*
1955-56..............	33	39.6	15.0	39.9	5.5
1954-55..............	42	47.6	15.2	28.8	8.4
1953-54..............	34	42.4	15.1	33.8	8.7
1952-53..............	33	54.2	12.6	24.4	8.8
1951-52..............	34	50.9	12.8	31.2	5.1

30 days. A cash discount of 1 percent on all cash purchases was tried, but it didn't achieve the desired results.

Within the last year, the credit committee of the board of directors began a monthly review of accounts and current credit practices, thus relieving the manager of much responsibility. Petroleum servicemen were financially responsible for their accounts over 60 days old. Branch managers worked their own accounts, but were not financially responsible. A part-time employee met with the board's credit committee and also worked on collections.

This association relied considerably on a local credit union for serving its patrons' credit needs. Conditional sales contracts were not handled by the association; the patrons used the credit union. However, some patrons ran a charge account while having a considerable investment in the credit union.

Association 5

This association with four branches had a total volume of $1.8 million in 1955--about $1.3 million of this in farm supplies. Distribution of supplies by principal commodity groups was: Feed 51 percent, petroleum 25, fertilizer 7, seed 4, farm machinery 6, building supplies 4, and general supplies 3 percent. Data on credit operations for 5 years are shown in table 11.

A credit policy poster listed four items: cash, 30-day charge with credit investigation and references required by credit manager, fuel oil budget plan, and terms on appliances. These

TABLE 11.--Comparative volume and credit data for Association 5, 1951-52 to 1955-56

Year	Total farm supply sales	Sales on credit as percentage of total supply sales	Fiscal year-end accounts	Accounts as percentage of total assets	Total supply sales in accounts
		Percent		*Percent*	*Days*
1955-56.............	$1,278,441	88	$70,392	11	17
1954-55.............	1,303,610	88	58,282	10	13
1953-54.............	1,171,270	87	64,395	11	16
1952-53.............	1,196,745	70	42,064	8	11
1951-52.............	1,110,354	62	34,418	7	9

Year	Credit sales in accounts	Age of accounts as percentage of total			
		Under 30 days	30 to 60 days	2 to 12 months	Over 1 year
	Days	*Percent*	*Percent*	*Percent*	*Percent*
1955-56.............	22	66.1	15.2	18.5	0.2
1954-55.............	18	68.9	17.4	13.7	([1])
1953-54.............	23	65.9	20.4	13.7	---
1952-53.............	18	64.9	18.0	17.1	---
1951-52.............	18	56.6	21.3	22.1	---

[1] Less than 0.05 percent.

policies have been considered generally satisfactory although petroleum charges conformed to competitive practices.

The county credit manager was responsible for granting credit to new applicants. After that any employee could extend credit. The credit manager believed a better understanding of terms by the customer and a printing of terms on the sales tickets would be beneficial. No employee was financially responsible for credit collection.

The association took notes regularly on overdue accounts. Terms were 6 percent interest and 90 days. A bank took the notes at face value and collected interest and principal. The cooperative had taken little action to utilize existing credit agencies more fully.

The manager reported much better control of credit since the board formally established a policy. Deliverymen carried a copy of the policy and it was also posted in the business office. The policy was explained to patrons orally and by printed statements. Patrons signed sales slips which also contained the credit terms.

The association considered exchange of information with area fuel dealers helpful. It required a credit bureau rating of new credit applicants.

The manager reported the credit situation monthly to the board, but it reviewed only those individual accounts suggested by the manager.

Petroleum deliverymen were financially responsible for collection of accounts on the basis of 10 percent reserve on net commissions. At the end of the year, all charge-offs were deducted from the reserve as well as 50 percent of the dollar value of accounts from 9 to 12 months of age and 25 percent of the accounts 6 to 9 months old. Balance of the reserves, after the above deductions, were returned to the drivers. Any collections made on accounts written off were added to the reserve.

Collection agencies were used very little because the manager figured that whatever they could collect, he could collect too.

Services of a credit union and of a production credit association were available, but neither were used sufficiently to minimize credit extension by the cooperative.

Association 6

This organization with five branches had a total volume of $1.7 million with supplies representing about $1.3 million. The proportion of supply volume by major commodity groups was: Feed 40 percent, petroleum 17, fertilizer 10, seed 6, building materials 4, farm machinery 11, and general supplies, 12 percent. Operating data pertaining to credit for the last 5 years are shown in table 12.

A broad established policy called for cash except for special landlord-tenant operations, and governmental and commercial businesses. Also, petroleum was permitted credit on a delivery to delivery basis and fertilizer purchases were allowed up to 6 months. Notes were taken after accounts got older than 60 days. Credit on commodity purchases was limited to $500.

A credit manager was responsible for credit extension although in practice about 45 employees extended credit. A formal application for credit was required. A credit bureau rating was not considered detailed nor exact enough. The board reviewed credit practices monthly.

Branch managers assisted in collection of accounts but had no financial responsibility. Ninety-day notes bearing $6\frac{1}{2}$ percent interest were used considerably. Chattel mortgages on livestock and machinery were taken as note securities.

The association encouraged patrons to use credit agencies, but thought established credit agencies too con-

TABLE 12.--Comparative volume and credit data for Association 6, 1951-52 to 1955-56

Year	Total farm supply sales	Sales on credit as percentage of total supply sales	Fiscal year-end accounts	Accounts as percentage of total assets	Total supply sales in accounts
		Percent		*Percent*	*Days*
1955-56.............	$1,318,520	53	$28,935	5	7
1954-55.............	1,424,511	48	21,900	4	5
1953-54.............	1,336,797	48	18,627	3	4
1952-53.............	1,476,189	28	11,909	2	2
1951-52.............	1,482,697	32	9,625	2	2

Year	Credit sales in accounts	Age of accounts as percentage of total			
		Under 30 days	30 to 60 days	2 to 12 months	Over 1 year
	Days	*Percent*	*Percent*	*Percent*	*Percent*
1955-56.............	15	36.9	12.3	49.6	1.2
1954-55.............	12	45.5	14.0	39.7	0.8
1953-54.............	10	50.9	19.0	29.2	0.9
1952-53.............	10	65.7	10.0	24.1	0.2
1951-52.............	7	67.3	13.5	19.2	---

servative or that their services were not broad enough.

Because of unsatisfactory results with the described policy a new one has been designated for 1957. Under it, accounts are due the 15th of the month following purchase and a charge of 1 percent per month is made for amounts overdue. No further credit will be allowed after the account is overdue. Also, the $500 limit on accounts has been removed.

Association 7

This cooperative with two branches had a supply volume of $1.7 million in 1955 and very little marketing sales. Two-thirds of the supplies were about evenly divided between feed and petroleum. Another 8 percent consisting of fertilizer and seed made up 7 percent, building supplies 5, farm machinery 6, and general supplies the remaining 8 percent. Credit data for 5 years are shown in table 13.

The association told patrons, "It's a cash policy but credit is available as a convenience." It allowed petroleum and feed purchasers credit on a delivery to delivery basis. It usually took notes on accounts over 60 days in age. Fertilizer cash purchases carried discounts up to 11 percent, decreasing over a period of time and due in 6 months. No credit policy was published for fear of encouraging patrons to go the limit in requesting credit. Regular patrons made personal arrangements for credit and new patrons were required to file a formal credit application.

Information required was quite detailed, especially if notes were to be discounted. References were considered worthwhile in helping to decide on credit. The office manager was responsible for granting initial credit.

The board reviewed accounts quarterly.

Petroleum deliverymen were responsible for accounts not approved by the office manager, and for any excess they granted above approved amounts. A list of "no credit" customers served as a black list for each branch and violations of it were held against the employee concerned. Patrons were encouraged to use PCA's, but some patrons considered the qualifications for loans too strict.

percent of total sales. Volume and credit data for last 5 years are shown in table 14.

Since 1951 a policy of 30 days' credit or no more than two deliveries of petroleum has been in operation. A 6 percent penalty on overdue accounts was provided at the option of the manager. In actual practice, accounts were given individual consideration.

TABLE 13.--Comparative volume and credit data for Association 7, 1951-52 to 1955-56

Year	Total farm supply sales	Sales on credit as percentage of total supply sales	Fiscal year-end accounts	Accounts as percentage of total assets	Total supply sales in accounts
		Percent		*Percent*	*Days*
1955-56	$1,718,545	54	$57,751	8	10
1954-55	1,790,881	52	51,911	7	9
1953-54	1,787,087	55	43,345	6	7
1952-53	1,730,253	43	48,331	7	8
1951-52	1,627,529	44	52,390	8	10

Year	Credit sales in accounts	Age of accounts as percentage of total		
		Under 30 days	30 to 60 days	Over 60 days
	Days	*Percent*	*Percent*	*Percent*
1955-56	22	39.7	14.1	46.2
1954-55	20	43.8	16.4	39.8
1953-54	16	40.1	10.7	49.2
1952-53	23	44.2	10.5	45.3
1951-52	27	55.2	12.0	32.8

Association 8

This cooperative handled supplies in 1955 totaling about $1.3 million and no marketing volume. By principal commodity groups, feed accounted for 28 percent, petroleum 40, fertilizer 12, seed 5, building supplies 2, farm machinery 4, and general supplies 9

The county manager was responsible for granting credit but branch managers gave close cooperation. The local credit bureau assessed credit applications with satisfactory results for the association.

Petroleum deliverymen were interested in making cash sales and collecting accounts because of the nature of their compensation plan. The plan provides for a commission payment of 4 cents per dollar of cash turned in instead of so much per gallon of

TABLE 14.--Comparative volume and credit data for Association 8, 1951-52 to 1955-56

Year	Total farm supply sales	Sales on credit as percentage of total supply sales	Fiscal year-end accounts	Accounts as percentage of total assets	Total supply sales in accounts
		Percent		*Percent*	*Days*
1955-56	$1,264,249	39	$55,243	9	13
1954-55	1,290,406	37	47,234	8	11
1953-54	1,321,289	36	41,543	7	9
1952-53	1,342,138	34	35,244	6	8
1951-52	1,330,000	32	36,605	7	8

Year	Credit sales in accounts	Age of accounts as percentage of total		
		Under 30 days	30 to 60 days	Over 60 days
	Days	*Percent*	*Percent*	*Percent*
1955-56	41	41.1	10.4	48.5
1954-55	35	44.0	14.0	42.0
1953-54	32	55.2	13.1	31.7
1952-53	28	54.0	11.6	34.4
1951-52	31	56.9	13.5	29.6

petroleum delivered. This system also encouraged the sale of gasoline instead of fuel oil because of its higher unit value.

Form letters with a credit bureau address or letterhead were used in collections. In addition, the services of a local alderman or justice of the peace were used considerably on slow accounts.

A production credit association worked closely with the supply association. Its secretary checked patron accounts at the cooperative, thus getting contacts and advising about doubtful accounts.

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