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MINNESOTA
farm business NOTES

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CREDIT PROBLEMS IN FARM SUPPLY COOPERATIVES

Victor F. Amann and E. Fred Koller

The credit needs of farmers have increased greatly in the past 10 years. Farm supply cooperatives have helped farmers meet these needs by providing more open-account credit.

Several factors have contributed to the large increases in credit business. For example, drought and poor crops in some areas have caused farmers to use more credit.

The introduction of new technology and the changes in farming operations have also added to farmers' production costs. Farms have been increasing in size and farmers are making more off-farm purchases. During this period agricultural income has been declining and the farmers' cash position has been squeezed.

Although credit is available to most farmers through production credit associations, local banks, and other lending institutions, the amount of open-account credit has been rising. Farmers prefer open-account credit because it is more convenient and because they consider it as credit without an interest charge.

A 1959-60 survey of the credit practices of 52 Minnesota farm supply cooperatives has revealed a rising volume of accounts receivable. Credit sales have increased from 52 to 68 percent of total sales since 1950. Total sales in these associations increased from $16,670,000 in 1950 to $24,100,000 in 1959, an increase of 45 percent. During this period, accounts receivable increased from $721,135 to $2,489,094 or 245 percent.

Table 1. Percentage change in total sales and accounts receivable in 47 Minnesota farm supply cooperatives, 1950-1959

Annual volume	No. of associations	Change in sales	Change in accounts receivable
thousands dollars		percent	percent
Under 150	5	— 0.3	+297.6
150-299	15	+ 3.2	+205.8
300-449	8	+84.3	+312.7
450-599	8	+60.0	+326.6
600 and more	11	+54.0	+220.2
All groups	47	+45.0	+245.2

Table 2. Monthly sales, credit sales, and accounts receivable of 38 Minnesota farm supply cooperatives, 1959

Month	Total sales		Credit sales		Accounts receivable	
	thousands dollars	index*	thousands dollars	index*	thousands dollars	index*
Jan.	1,369	89	846	87	1,862	77
Feb.	1,250	81	783	81	1,970	81
Mar.	1,417	92	892	92	2,126	88
Apr.	1,781	116	1,204	124	2,385	98
May	1,840	120	1,259	130	2,703	111
June	1,685	110	1,100	113	2,655	109
July	1,494	97	940	96	2,608	107
Aug.	1,342	87	820	84	2,587	106
Sept.	1,636	106	1,041	107	2,738	113
Oct.	1,696	110	1,035	107	2,770	114
Nov.	1,595	104	979	101	2,730	112
Dec.	1,340	87	768	79	2,039	84

* Index of seasonal variation; 12-month average equals 100 percent.

The growth in business volume and accounts receivable varied by size of association (table 1). Those associations in the category having the smallest sales volume experienced a decline in total sales during the past decade; all others had an increase.

The associations with the smallest sales volume had a larger percentage increase in receivables than the average of all associations. The largest associations had a less than average increase in receivables. Those with the largest percentage increase in sales also had the largest percent increase in receivables. This indicates that they increased sales by granting easier credit.

During the past 10 years the proportion of total assets in receivables increased from 10.8 to 18.1 percent. The smallest associations had 23 percent of their total assets in receivables in 1959, while the largest ones had 16.3 percent tied up.

Seasonal Variation in Credit

There is a wide variation in the use of credit from season to season. As shown in the third column of table 2, the monthly accounts receivable reach their peak in October, when they are 14 percent above the monthly average. Receivables were lowest in January when they were 77 percent of the monthly average.

Credit sales had a greater variation than accounts receivable. Credit sales were 30 percent above the monthly average in May and were 79 percent of the monthly average in December.

The decline in total sales and credit sales during part of the production period is not reflected in the level of accounts receivable. This is evidence that a large part of the supplies which are charged are not paid for until after harvest.

Days' Sales in Receivables

One measure of the effectiveness of credit policies is days' sales in receivables. This is calculated by dividing accounts receivable by average daily sales. It was found that this ratio increased from 15.2 days in 1950 to 31.2 days in 1959. Financial analysts suggest a desirable goal of 15 days.

The smaller associations had the longest period for this measure. This may be due to the fact that larger cooperatives can attract better management. They may also have better ac-

(Continued on page 2)

counting systems and thus are able to have better receivable control.

Aging of Accounts Receivable

Supply cooperatives are now carrying a greater proportion of their credit for longer periods.

In table 3, the accounts receivable of 17 associations are aged for the years 1950 and 1959.

In 1950 the proportion of total accounts which were outstanding over one year was 5.2 percent. This proportion nearly doubled by 1960 when it was 10 percent.

Past studies indicate that the longer an account is outstanding, the greater is the probability of loss. This is especially true for products, such as petroleum, which are consumed while they are on account.

Credit Extension and Collection

The credit policies are generally determined by the board of directors. The responsibility for extending credit and enforcing policies fell on the manager in most cases. Truck driver salesmen were authorized to extend credit within specified limits in most associations.

In determining to whom credit should be extended, the patron's past credit record and his present ability to pay were the chief considerations. The manager interviewed new customers before granting credit in most cases. Many of the managers called on local bankers and merchants for credit information. Some used local credit bureaus and a few contacted the patron's former petroleum supplier to verify credit information.

Financial responsibility for credit losses was placed on the manager in 15 cases and on the truck driver in 6 cases. This was conmmonly done by withholding a percentage of their monthly commissions as a reserve for losses. At the end of the year the doubtful accounts were written off against the reserve and turned over to the employee and became his property.

Prompt payment of bills was encouraged by several methods: (1) In 29 associations a cash discount was allowed on bills paid within 30 days. (2) In 6 associations, 2-percent interest was paid on money deposited with the association to prepay bills. (3) In 21 associations an 8-percent interest charge was made against accounts outstanding more than 30 or 90 days.

Statements of account were sent out by all associations to aid in collection. The interval varied from 30 days to once a year. Collection agencies or local attorneys were used by 32 associations to aid in collecting difficult accounts.

Personal collection calls by the manager or credit manager were made in all but one case. Most managers stated this as the most effective collection method.

Farm supply cooperatives have had relatively little success in inducing farmers to shift to financial institutions to secure their credit needs. There has been some increase in the use of PCA financing for petroleum purchases. Many managers stated that a good credit risk for the bank or PCA is also a good risk for the supply cooperatives. However, managers, and patrons as well, should remember that supply cooperatives are not financial institutions and that money tied up in receivables might be invested more profitably elsewhere.

It is not implied that all credit sales are bad sales. Some organizations can handle large amounts of credit successfully.

This study shows that the credit problem is becoming more acute. Management must understand that a loose credit policy is a costly and inefficient method of doing business. Patrons should be encouraged to obtain their credit needs from specialized credit agencies. Better collection methods should be set up so the stated credit policy can be enforced.

Table 3. Comparisons of aging of accounts of 17 farm supply cooperatives, 1950-1959*

Year	Under 30 days	30 days to 6 mos.	6 mos. to 1 yr.	Over 1 yr.
		percent of total		
1950	47.3	41.8	5.7	5.2
1959	32.8	46.8	10.4	10.0

* Comparable data were available for only 17 of the 52 associations 1950-1959.

Analyzing Sidelines in Country Elevators

W. E. Mitton and R. P. Dahl

Grain merchandising, the main business of most country elevators, is a seasonal activity. Peak volume occurs during the late summer and fall of the year when farmers sell the largest share of their grain crops.

Elevator management discovered long ago that it could increase business volume and make better utilization of its plant and labor by adding sidelines. Most modern country elevators today sell such items as feed, seed, fertilizer, and chemicals. In addition they perform many related services for their customers such as grinding and mixing feed, cleaning and treating, and drying. Another service which elevators sell to patrons as well as to the government is grain storage.

The market for these goods and services has increased because farmers buy more production supplies today than in years gone by. Sideline sales enable an elevator to better serve the needs of its customers. In addition, sidelines often provide additional revenue for an elevator with a relatively small additional cost. Hence, they increase profits.

How much revenue do sidelines provide in Minnesota country elevators? How important are they relative to grain merchandising? A recent study[1] gives some answers to these questions and suggests proper accounting techniques for analyzing sidelines.

Sidelines Vary in Importance Between Areas

Income and expense data were obtained from ten southwest and from five northwest Minnesota cooperative elevators for the 3 years 1955, 1956, and 1957. These data are shown in table 1.

[1] A complete description of the study is contained in Mr. Mitton's M. S. thesis.

In the southwest, sales of sidelines were almost one-half as large as the sales of grain. However, in the northwest, sales of sidelines were less than one-tenth the sales of grain.

Sales of feed and the related grinding and mixing totalled $157,000 in the southwest or almost one-half of the total sales from all sidelines. There was virtually no revenue from these sidelines in the northwest. Sales of other merchandise such as lumber, coal, machinery, and petroleum products averaged $96,000 in southwest elevators and only $7,000 in the northwest. Returns from storage operations were about the same in both areas.

It is important for elevator management to know how much each sideline is contributing to profits. This involves a record of the sales, cost of sales, and the direct costs of each sideline. Gross profit is the amount by which the sales exceed the cost of the goods sold. Sub-

tracting direct expenses from the gross profit gives the adjusted gross profit of each sideline. Direct expenses are those which are incurred specifically for that sideline, such as the extra labor and necessary special equipment.

Adjusted gross profit is a good measure of the profitability of a sideline. If a sideline is expanded, it will show how much profits are increased.

Although the sales from sidelines were six times larger in the southwest, the adjusted gross profit was only slightly over twice as large as in the northwest elevators. This is because cost of sales and direct expenses are sizeable items in sidelines such as feed and sales of other merchandise. The adjusted gross profit from sidelines in the southwest elevators was $25,000 compared with $11,000 in the northwest.

In contrast to direct expenses, overhead expenses apply to the entire business. They do not change materially as the volume of grain or sideline sales change. Overhead expenses include such items as managerial salaries, office expense, etc.

They are subtracted in total from the adjusted gross margin from sidelines and grain to obtain the operating profit. The operating profit of the southwest elevators averaged $37,000 compared with $24,000 in the northwest.

The Changing Importance of Sidelines

Operating data for 1948-49 were available on four of the elevators in southwestern Minnesota. Data for this period were averaged and are compared with the 1955-56-57 data for the same four elevators in table 2.

Sideline sales increased from $376,000 to $613,000, an increase of 60 percent, during this 9-year period. On the other hand, the average volume of grain sales declined by $18,000 or 1 percent over the same period.

All sidelines showed an increase in sales except seed which declined from $59,000 in 1948-49 to $39,000 in 1955-56-57. The sideline which showed the largest increase in sales volume was feed which went from $120,000 in the earlier period to $260,000 in the latter period. The related custom grinding and mixing sideline also showed a large increase. Sales volume in fertilizer and chemicals also increased.

Revenue from grain storage during this 9-year period rose from $1,000 to $24,000. This is due primarily to revenue obtained from the Commodity Credit Corporation for storing surplus grain.

The total adjusted gross profit from sidelines and grain, that is, the profit before overhead expenses are deducted, rose from $65,000 in the earlier period to $87,000 in the latter. Sidelines contributed $14,000 of the increase while grain contributed $8,000. The adjusted gross profit from grain merchandising rose despite the decline in grain sales that was pointed out earlier.

Subtracting the overhead expense from the total adjusted gross profit from sidelines and grain in the two periods shows that the operating profits rose from $51,000 in 1948-49 to $67,000 in 1955-56-57. This is an increase in operating profits of about 30 percent.

Table 1. Average annual income from sidelines and grain merchandising, elevators in northwest and southwest Minnesota, 1955, 1956, and 1957

	Sales	Gross profit	Direct expense	Adjusted gross profit
	average of five northwest elevators			
	thousands dollars			
Feed	*	*	*	0
Seed	6	1	*	1
Fert. and chem.	20	1	1	*
Other merchandise	7	1	*	1
Storage	16	16	8	8
Grinding and mixing	*	*	*	*
Other service	1	1	*	1
Total sideline	50	20	9	11
Grain	551	29	8	21
Total	601	49	17	32
Overhead expense				8
Operating profit				24
	average of ten southwest elevators			
Feed	147	20	16	4
Seed	24	2	1	1
Fert. and chem.	31	2	*	2
Other merchandise	96	19	11	8
Storage	16	16	9	7
Grinding and mixing	10	10	8	2
Other service	5	4	3	1
Total sideline	329	73	48	25
Grain	794	34	10	24
Total	1,123	107	58	49
Overhead expense				12
Operating profit				37

* Less than $500.

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farm business

NOTES

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Country elevator management is often confronted with the problem of an inadequate volume when grain merchandising alone is relied upon. As transportation has improved, competition for grain at country points has increased. Furthermore, the government loan program has diverted sizeable quantities of grain from regular commercial marketing channels of which country elevators are a part. This has been partially offset by earnings derived from storing and handling government grain. Nevertheless, it has become more difficult for country elevators to expand grain-merchandising volume.

On the other hand, the market for farm production supplies has increased. From 1940 to 1958, for example, the quantity of fertilizer and lime used by farmers increased by 250 percent. Inputs of mechanical power and machinery, and non-farm inputs associated with farmers' purchases of feed, seed, etc., more than doubled during the same period.

Country elevator management should take these changes into account when adjusting operations to meet changing economic conditions.

Table 2. Average annual income from sidelines and grain merchandising, average of four southwest Minnesota elevators, 1948-49 and 1955-56-57

	Sales	Gross profit	Direct expense	Adjusted gross profit
	1948-49			
	thousands dollars			
Feed	120	9	8	1
Seed	59	6	2	4
Fert. and chem.	15	1	*	1
Other merchandise	171	33	12	21
Storage	1	1	1	0
Grinding and mixing	3	3	3	*
Other service	7	7	5	2
Total sideline	376	60	31	29
Grain	1,389	45	9	36
Total	1,765	105	40	65
Overhead expense				14
Operating profit				51
	1955-56-57			
Feed	260	36	31	5
Seed	39	4	1	3
Fert. and chem.	57	4	1	3
Other merchandise	205	42	24	18
Storage	24	24	15	9
Grinding and mixing	18	18	15	3
Other service	10	10	8	2
Total sideline	613	138	95	43
Grain	1,371	60	16	44
Total	1,984	198	111	87
Overhead expense				20
Operating profit				67

* Less than $500.

THE OUTLOOK CORNER

The Feed Picture

Generally favorable prospects for the 1960 feed grain crops through September assure another record supply of feed grains for the year ahead.

The total amount of feed concentrates available for the new feeding year (which started on October 1) is reported as 269 million tons—30 percent more than the 1954-58 average (see table 1). About 187 million tons, or 70 percent of the feed concentrates available, is expected to be used in the year ahead. This allows for a slightly heavier rate of feeding than for any recent year. The rate of feeding per animal unit has been going up consistently.

The present supply of feed concentrates of 1.62 tons per animal unit is another record. The slight reduction in the number of animal units plus a larger carryover makes this situation possible.

Other uses, including exports, are expected to remain the same as for last year. The level of feed grain exports is relatively high due to (1) reduced transportation costs in the area served by the St. Lawrence Seaway enabling surplus feed grains to become more competitive in foreign markets, and (2) the special P. L. 480 incentives.

What Can Minnesota Farmers Expect?

Due to the large feed reserves, the prices you probably will pay for feeds this feeding year may be slightly lower. The present outlook could change somewhat, however, since most of the corn may qualify for the price support loan program.

It is best to keep adequate feed supplies on your farm even though feed reserves are high. Should a large share of this year's crop be placed under loan, "free" grains (those not under the price support program) may be limited and temporary local shortages are always possible.

Feed costs per unit of livestock and poultry production are expected to continue at about the same level as this past year. But since both more pork and beef is expected, slightly lower prices for both can be expected. Weaker feeder stock prices this fall, however, will help offset expected lower prices at marketing time.

How About the Longer Outlook?

The record supply of feed grains follows three decades of rising yields and a number of years of increasing stocks. All this is due largely to improved varieties and cultural methods. This trend is expected to continue unless unusual efforts are made to curtail it. Congress may enact legislation which when put into effect would change the present outlook. Farmers will want to watch for such developments and be prepared to adjust their operations accordingly.

The outlook for high protein feed supplies is quite different from that for the feed grains. An adequate supply of high protein feeds is in prospect, but so is a strong rising demand. This expected strong demand is worldwide.

Natural forces can change the feed outlook situation also. Less than 15 years ago, the annual production of feed grains was well below the 100 million-ton level compared with over 163 million tons this past year.

Increased demand for food may be expected also. Increased population, if accompanied with high levels of employment, will create a market for more livestock and livestock products. This in turn will require more feed. It seems likely, however, that supplies will expand more rapidly than demand and, hence, depress feed prices for years to come.

To plan ahead, this means:

A constant search should be made to take advantage of opportunities to cut costs. Farm plans should be kept sufficiently flexible to take advantage of changes.

With narrower margins but larger volume, it becomes increasingly more important to watch economic developments, weather conditions, and marketing opportunities closely. This will help you to be in the best possible situation to make minor adjustments when desirable.

Table 1. Production and use of feed grains, U. S.

Item	Average 1954-58	1959*	1960†
	million tons		
Production and carryover			
Corn	95	122	117
Oats, barley, sorghum grains	42	44	45
By-product feeds	25	27	27
Other feeds fed	3	3	3
Carryover feeds‡	44	68	77
Total	209	264	269
Uses			
For livestock	136	160	162
Other uses	22	25	25
Total	158	185	187
Animal units of grain consuming livestock	164	168	166
		tons	
Supply per animal unit§	1.27	1.56	1.62
Grain fed per animal unit	0.83	0.95	0.97

* Preliminary.
† Preliminary estimates based on indications in September, 1960.
‡ Stocks of corn and sorghum grains in all positions on October 1; oats and barley, July 1.
§ Livestock that will eat as much as one dairy cow, 1 feeder steer, five pigs, seven sheep, or fifty hens.

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