

AN ABSTRACT OF THE THESIS OF

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Title THE ROLE OF BORROWED FUNDS IN OREGON  
COOPERATIVES

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In Oregon, agricultural cooperatives perform an important part of the marketing of agricultural products and the distributing of farm supplies. The performance of these associations directly affects the financial returns of the many farmers who belong to these cooperatives. The purpose of this study is to examine capital structures of cooperatives with particular reference to the current role of borrowed funds and their importance in future growth.

A personal interview was held with the manager or chief financial officer of 66 local cooperatives and information for the year 1963 was obtained. The cooperatives included in this survey represented over 90 percent of the total volume of Oregon local cooperatives. Four regional cooperatives were also included in the study.

The marketing of farm products represented over three-fourths of the total volume of \$181,727,644 of the local cooperatives. The sale of farm supplies accounted for the remainder. The local

cooperatives had \$101,539,370 of assets. The regionals cooperatives had a volume of \$94,112,365 and assets of \$30,362,163.

The proportion of equity capital varied among the different groups of cooperatives. But when the amount of certificates of indebtedness and marketing pool accounts due to the members were included with member equity, all commodity groups of local cooperatives had about comparable financial support from their members.

Local cooperatives relied heavily on retained earnings and marketing retains for equity capital. Only five percent of members' equity was obtained from cash investment. The local cooperatives paid dividends on less than one-fifth of their equity capital. Associations are gradually dropping the practice of paying dividends on their revolving funds.

Short-term borrowed funds were important to Oregon cooperatives. Large seasonal marketing inventories were the principal use of short-term credit. The Bank for Cooperatives supplied over 90 percent of these short-term loans. The average interest rate of the Bank for Cooperatives was 4.78 plus a required stock purchase. The average interest rate on commercial bank short-term loans to local cooperatives was 5.60.

The total long-term loans of the local cooperatives was 11.9 percent of total equities and liabilities. When an allowance was

made for the required stock purchase of the Bank for Cooperatives and the current rate of currently issued certificates of indebtedness was considered, there appeared to be no important differences between the interest rates of the various sources of long-term credit.

The farm supply cooperatives' principal source of short and long-term credit was their suppliers. The Bank for Cooperatives supplied most of long and short-term loans of the grain and seed marketing firms and of the fruit, vegetable, and nut marketing firms. The dairy cooperatives and the regional cooperatives used both the Bank for Cooperatives and commercial banks for the majority of their loans.

Current federal regulations which require 20 percent of current earnings to be returned to the patrons and the highly competitive situation facing many associations may limit the amount of internally generated funds in Oregon in the future.

It is estimated that short-term borrowing may increase due mainly to the increased marketing of the fruit, vegetable, and nut marketing cooperatives. The need for long-term borrowed funds will depend to some extent on the amount of adjustment Oregon cooperatives make in the products and services offered their members. Rapid adjustment will require additional long-term borrowed funds.

Some cooperatives have made liberal use of borrowed funds in the past; others have resisted using any long-term loans in their capital structure. Increased use of borrowed capital may better enable Oregon cooperatives to meet the challenges and opportunities of the future.

THE ROLE OF BORROWED FUNDS  
IN OREGON COOPERATIVES

by

ROGER ALLEN WISSMAN

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# THE ROLE OF BORROWED FUNDS IN OREGON COOPERATIVES

## CHAPTER I

### INTRODUCTION

#### Nature of the Problem

Many agricultural cooperatives are active in Oregon, and they play an important part in the marketing of agricultural products and in the providing of farm supplies. Efficient and well managed cooperatives can help increase the efficiency of the movement of supplies and products to and from the farm, and they can be a force for economic growth and improve the level of financial returns to agricultural resources. Inefficient cooperatives can conversely act as a drag on the growth of the economy and as a sponge of the returns to agriculture.

The operation of a cooperative enterprise, like any other enterprise, encounters the problems of finding productive opportunities, of securing efficient human resources, and of obtaining adequate capital resources. A successful enterprise must find personnel who have the technical and managerial ability to organize and operate the business venture. Also an actual opportunity to supply a productive good or service must be available. Finally, most enterprises need a supply of capital to purchase buildings

and other needed assets.

The efficiency of the personnel and the available opportunities are closely interrelated with the need for capital. The efficiency of the organization affects the number of opportunities, and these together control the amount of capital that may be required.

The future of Oregon cooperatives depends on how they solve the above three problems. They must continue to hire competent and imaginative employees who are able to execute the technical procedures and managerial policies of the business operation with a high degree of efficiency. The cooperatives of the future must actively search for the opportunities which will supply the goods and services most needed by their present and future members. These additions and improvements will often require more buildings, equipment, and working capital. To support this expansion the cooperatives must have financial arrangements which will make the acquisition of the needed assets possible. The financing, the supplying of the capital resources, of cooperatives will be the general topic of this study. The use and importance of borrowed funds will be the particular problem which will be considered.

An enterprise can obtain funds from its owners; it can generate funds from its operations; and it can borrow funds from others. The role of borrowed funds cannot be isolated from the other two sources of funds. The need for borrowed funds must be considered

in a framework that considers the total financing process.

### Objectives of the Study

The principal objectives of this study are:

- (1) To describe the current financing methods and the use of borrowed funds in Oregon cooperatives.
- (2) To analyze the performance of these methods in the past and their applicability to the future.
- (3) To estimate the importance of borrowed funds in the future plans of Oregon cooperatives, and test the hypothesis that borrowed funds will play a more important role in the future financing of cooperatives.

This study was designed to be of value to the credit institutions which serve agricultural cooperatives, to the managers and boards of directors who supervise the cooperatives, and to the Oregon farmers who patronize and own these cooperatives.

### Procedures

A complete survey of Oregon cooperatives was attempted in this study. Small marketing pools, cooperatives which carried on only seasonal operations, and other small cooperatives with very limited real assets were, however, excluded from this study. A personal interview was held with the manager or chief financial

officer of each cooperative, and information was obtained for the last year on which complete records were available. Whenever possible the information was copied directly from the cooperative's audit report.

Not all of the contacted cooperatives were able to assist in this study. The information could not be obtained from some because of transition in management, policies of the local cooperative, or unavailability of complete records. The 76 cooperatives from which complete records were obtained accounted for over 90 percent of the total cooperative business carried on by local cooperatives in the state of Oregon. Also, four regional cooperatives which had their main offices in Oregon were included in the survey. A copy of the questionnaire which was used in the survey is shown in Appendix A.

In this study the cooperatives were divided into six groups: (1) farm supply; (2) grain and seed marketing; (3) fruit, vegetable, and nut marketing; (4) dairy marketing; (5) other cooperatives; and (6) regional cooperatives. It is believed that the cooperatives within each of these categories have similarities in their operation which allow generalizations to be made.

The cooperatives were placed in the group which represented the largest portion of their total dollar volume. Most cooperatives were easily placed into one of the groups. However, a gradation of

firms existed in the farm supply group and in the grain and seed group.

These firms had varying percentages of their total volume consisting of farm supply sales and grain and seed marketing. The fruit, vegetable, and nut group and the dairy products group were more distinct and homogeneous groups which usually carried on only one type of business activity.

The cooperatives placed in the "other" group were all engaged in the marketing of agricultural products, but each handled a different product and performed a different amount of processing on the product. Because each cooperative was distinctively different, no generalizations were made concerning this group. Each of the regional cooperatives was also engaged in dissimilar operations. This analysis of this study will not be directly concerned with the regional cooperatives.

In this study all references to interest rates will always designate interest rates per year. Average interest rates were calculated by dividing the total dollar interest by the total amount of borrowed funds being considered. The average repayment periods were similarly calculated by comparing the total yearly repayments to the total amount of the loans. This method gives more weight to the larger loans. Long-term loans were defined as any loan which was not due in less than one year; conversely, short-term loans were

loans of less than one year. In the calculations of average short-term interest, the midpoint between the peak and low point was used to weight each loan.

## CHAPTER II

### GENERAL DISCUSSION

At various times farmers have extended their enterprises beyond the production of agricultural products. Simple roadside vegetable stands are examples of an individual's belief that as high or higher rewards can be obtained by extending his enterprise into an area beyond production. Farm cooperatives can also be described as an extension of the farm business. A group of individual farm firms can combine together and take a more active part in the marketing of their products or in the supplying of their production resources. Koller observes that:

A farm which has membership in a cooperative is part of a vertically integrated unit. The farm is the production level from which integration is initiated forward toward the market in the case of membership in marketing cooperatives, and backward toward raw material for farm supplies in the case of purchasing cooperatives (14, p. 1049-1050).

Like other aspects of the farm business, the cooperative requires some degree of financial support, and the members of a cooperative share in varying degrees the risks and the earnings of the association. The investment which a member has in his cooperative has been stressed in the past as an important part of membership. It has been reasoned that the greater the member's investment,

the greater his loyalty to the cooperative. Bakken and Schaars state:

All members should have a financial investment in their company. It is one of the ties that bind members to their organization. It is evidence of the faith that members have in their company and has a stabilizing influence (3, p. 199).

Managers and boards of directors have placed great importance on membership investment. Some borrowed funds may have been considered as necessary when starting the cooperative, but the ultimate goal was to reduce the amount of borrowed funds and have the cooperative members supply the major share of the needed capital.

Since 1954, farm cooperatives in the United States have increased their marketing volume faster than total farmer marketing has increased and have increased their sale of farm supplies faster than total farm expenditures have grown (7, p. V). This indicates that cooperatives are more than just keeping pace with agricultural growth; they are obtaining a larger share of the total market. With this larger volume comes the increased need for capital to expand the capacity of the cooperatives. Farmers' investment in cooperatives has also grown rapidly. In 1954 the total investment by farmers in all types of cooperatives was 2.9 billion dollars, and on January 1, 1965, this investment in cooperatives had increased to 5.1 billion dollars (21, p. 23-24).

Besides increasing in volume, cooperatives have also been changing the types of services which they perform for their patrons.

Voorhis has listed increased modernization and expansion of services as one of the outstanding needs of farm supply cooperatives (20, p. 86). Marketing cooperatives are also interested in expanding their operations into new areas and offering new services to their patrons.

Cooperatives have been growing in volume and in services offered, but it has been suggested that some cooperatives are limiting their growth possibilities by their resistance to the use of borrowed funds (11, p. v). Relying on the funds generated by the association or cash investments of members may not in the future provide sufficient funds to meet the increased capital needs. Since the postwar years, the earning margins of all firms have tended to decrease (17, p. 231). Besides the downward pressure on earning margins, current federal regulations require cooperatives to return 20 percent of current earnings to their members in cash. This will further tend to reduce the amount of capital funds which can be generated internally by the cooperatives.

Farmers also are faced with larger capital requirements due to increases in the size of farms, larger equipment, and higher costs for farm supplies. This increase in on-farm capital needs may ration the amount of capital that the farmer is willing or able to set aside for cooperative membership. Oregon cooperatives have in the past relied heavily on the revolving fund method of financing. When increased capital is needed, the length of the

revolving fund was increased. However, increasing the length of the revolving fund to meet the increased capital needs may severely damage member relations. Indefinite withholding of refunds can cause members to lose confidence in their cooperative and question the value of cooperative membership (12, p. 3).

A possible conflict exists between the preference for member financing and the increased capital needs of both the cooperative and its members. The question arises as to whether both goals, member financing and growth of cooperatives, can be achieved or whether cooperatives must relax one of these goals in order to more fully achieve the other. De Loach observes that:

In the changing competitive environment in which cooperatives now operate, it would appear that customary methods of financing might prove a limiting factor in their pattern of growth, especially with the rising investment requirements of a machine technology. In view of the present competitive environment and the higher total capital requirements now needed to operate a cooperative, and equally higher capital requirements to operate an economical farming business, farmers and economists should be giving considerable attention to the feasible limits of the investments of farmers in off-the-farm processing and distribution activities (6, p. 495).

The capital for any firm can be obtained directly from the owners, retained from the operations of the firm, or received from external sources. The nature of a cooperative usually limits the sale of ownership capital to only cooperative members. Owners' investment must, therefore, come almost entirely from the patrons of the

cooperative. Currently in most types of firms a large portion of new investment is generated from the firm's operations. Retained earnings are reinvested; and therefore, new investment occurs without the use of external funds. These retained funds increase the productive capacity of the firm; and therefore, the value of the firm is increased. This increase in value of a non-cooperative corporation is capitalized into the market value of the corporation's stock. This stock can be sold, and the owner of the stock can realize the benefits of the corporation's earnings without any funds being removed from the company.

A cooperative's ownership credits are not set up to appreciate in value. The funds which a cooperative retains from a year's operation for capital growth are allocated to the members based on the amount of patronage carried on with the cooperative during the year.<sup>1</sup> Part of the net return may be returned to the members as patronage dividends in the current year or these funds may be held in the cooperative for repayment at some later date. In any case the cooperative must sooner or later return the retained funds to its members. The only way members can benefit from the retained funds of a particular year is to at some time receive their allocated share. Studies

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<sup>1</sup> Often cooperatives do not allocate all the retained funds. Earnings from non-member business, and other special accounts may not be allocated to the individual member's accounts.

have shown that members join cooperatives for economic benefits (4, p. 197). Therefore, the cooperative must either offer some economic benefits in the current year, such as lower prices, better service, and patronage dividends, or promise other benefits at some time in the future.

External sources are another possibility for obtaining funds. These funds are attracted into a firm by the payment of a rate of interest. The decision to borrow from external sources will depend upon how the firm's management evaluates the costs of the borrowed funds as compared to the benefits resulting from the use of these funds and the possibility of obtaining funds in other ways.

Managers and directors of cooperatives and other firms are faced with the problem of planning the future capital needs of their firms.<sup>2</sup> They must also decide upon a method to obtain this capital. The ability of the members and the capacity of the cooperative to furnish the necessary funds and the role of borrowed funds in the future growth and development of the cooperative are issues that require the continuing attention of management.

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<sup>2</sup> Gray has developed a framework for long term capital planning using projected models of various types of cooperatives (8).

## CHAPTER III

## RESULTS OF THE SURVEY

Volume

The 76 local cooperatives included in this study reported a total volume of \$181,727,644 for the year of 1963.<sup>3</sup> This volume emphasizes the importance of local cooperatives to agriculture and to the state in general. These cooperatives are located in all parts of the state of Oregon and operate a variety of types of business. The four regional cooperatives did a combined business of \$94,112,365 in 1963. Of this total about 30 percent was in Oregon and the remaining portion was in neighboring states. The regional cooperatives supply many of the products sold by the local cooperatives and the regionals' marketing volume is received from the locals. Therefore, the two volumes must be considered separately. If the totals were added together, a duplication of cooperatives' volume would occur. Table 1 lists the amount of farm supply sales, marketing volume and total volume of each group. From this table it can be

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<sup>3</sup>The interviewed cooperatives did not all have the same accounting period. The records included in this study represent the periods ending with the calendar year on December 31, 1963 and fiscal years ending in 1964. A few records were for the calendar year ending on December 31, 1962.

Table 1. Total volume, farm supply sales, the amount of farm supply sales and marketing of each group, Oregon, 1963<sup>1/</sup>.

Type of Cooperative	Number of Cooperatives	Average Volume	Farm supply Volume	Marketing Volume	Total Volume
Farm supply	28	718, 947	18, 026, 805	2, 103, 734	20, 130, 539
Grain and grass seed	16	3, 128, 787	12, 814, 736	37, 245, 856	50, 060, 592
Fruit, vegetable and nut	13	4, 168, 038	2, 014, 895	52, 169, 604	54, 184, 499
Dairy	16	2, 934, 206	6, 033, 717	40, 913, 577	46, 947, 294
Other	3	3, 468, 240	3, 731, 309	6, 673, 411	10, 404, 720
Total of locals	76	2, 360, 099	42, 621, 462	139, 106, 182	181, 727, 644
Regionals	4	23, 528, 091	34, 168, 678	59, 943, 687	94, 112, 365

<sup>1/</sup>The interviewed cooperatives did not all have the same accounting period. The records included in this study represent the periods ending with the calendar year on December 31, 1963 and fiscal year ending in 1964. A few records were for the calendar year ending on December 31, 1962.

seen that of the local groups the fruit, vegetable, and nut cooperatives had the largest volume. However, the grain and seed group and the dairy products group followed closely behind. The fruit, vegetable, and nut group also had the highest average volume per individual cooperative, which was over \$4,000,000. The farm supply group had the lowest average volume, slightly over \$700,000.

The 16 grain and seed cooperatives were widely distributed over the state. In the northeastern part of the state were cooperatives which marketed large amounts of grain, and in the Willamette Valley there were cooperatives which marketed both grain and grass seed. As is shown in Table 1, these cooperatives had a total volume of \$50,060,592. A considerable portion of this volume, over 25 percent, is from the sale of farm supplies. There are several reasons for this substantial farm supply business. The marketing cooperative is sometimes the only cooperative in a given area. In this situation it is common for the cooperative to sell all types of farm supplies. Also, the cooperatives located in the Willamette Valley are in a more diversified agricultural area. The agriculture in this area is undergoing a shift from the extensive grain and grass seed operation to a more intensive type with more row crop enterprises.

Some of the Willamette Valley grain and seed marketing cooperatives have experienced a reduction in the volume of grains

and grass seeds grown in their area. These cooperatives believe this trend will continue and have made plans to adjust the operations of the cooperative to the changing opportunities present in their area. Increased sale of farm supplies is gradually changing the purpose of these cooperatives. Some cooperatives which were formed as marketing cooperatives could evolve into farm supply cooperatives.

Twenty-eight cooperatives were included in the farm supply group. This group was widely dispersed throughout Oregon. The majority of the farm supply cooperatives were in the Willamette Valley, but they were in all other parts of the state.

Farm supply cooperatives had a total business volume of \$20,130,539. A variety of products was handled, but the sale of petroleum products was the most important and consisted of nearly 30 percent of the total volume. Table 2 shows the breakdown of the total volume of business into individual categories.

A statistical comparison was made between the product mix of the 14 largest farm supply cooperatives and the 14 smallest firms. The test showed that the 14 largest cooperatives did a significantly larger proportion of marketing and feed sales than the smaller cooperatives at a confidence level of 99 percent. There was no significant difference, however, in any of the other categories at a 90 percent confidence level.<sup>4</sup>

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<sup>4</sup>The calculated t-values are shown in Appendix B.

Table 2. Total volume of the farm supply group by individual categories, Oregon, 1963.

	Dollars	Percent
Petroleum	5, 936, 129	29. 5
Fertilizers	3, 083, 682	15. 3
Small Equipment and Hardware	3, 139, 803	15. 6
Tires, Batteries and Accessories	368, 528	1. 8
Farm Machinery	909, 469	4. 5
Feed	3, 291, 383	16. 3
Service	274, 852	1. 4
Other <sup>1/</sup>	1, 022, 959	5. 1
Marketing <sup>2/</sup>	<u>2, 103, 734</u>	<u>10. 5</u>
Total Volume	20, 130, 539	100. 0

<sup>1/</sup> Groceries, meats, and household goods are the major items included in this category.

<sup>2/</sup> Grain and grass seeds were the principal products marketed by farm supply cooperatives

The 16 dairy marketing cooperatives were concentrated in the western part of Oregon. Table 1 shows that these cooperatives had a total volume of \$46, 947, 294. Of this total \$40, 913, 577 was dairy marketing and included the sale of fluid milk, powdered milk, butter, and cheese. The \$6, 033, 717 of farm supply volume was derived

mostly from the sale of feed. Some of the dairy cooperatives were faced with a declining volume of milk in the area they served. The managers recognized this trend and were cognizant of the effects this would have on the future operations of the cooperative. Other dairy cooperatives had a more stable supply of milk; and therefore, they had a different outlook toward the future.

The fruit, vegetable, and nut marketing cooperatives were located in western Oregon, along the Columbia River, and in the northeastern corner of the state. From Table 1 it can be seen that of the total volume of \$54,184,499, over 96 percent was made up of marketing and less than four percent was from the sale of farm supplies. Processed fruit, vegetables, and nuts were 82.4 percent of the marketing volume with fresh fruit and vegetables comprising the remaining 17.6 percent.

The marketing volume of the "other" cooperative group consisted of the marketing of eggs, wool, and dressed poultry. Feed sales accounted for most of the farm supply sales. Grain marketing was the largest part of the regionals' volume of \$94,112,365. Farm supply sales, dairy products marketing, and marketing services were also included in this volume. Two of the regionals had only Oregon cooperatives as members. The other two had larger volumes of business and most of their members were cooperatives from outside the state of Oregon.

### Assets

Table 3 shows the combined balance sheets of the local Oregon cooperatives.<sup>5</sup> The \$101,539,370 of total assets of these cooperatives represents an important contribution to the total wealth of the state. Included in this total is a valuable complex of buildings and equipment which are located throughout Oregon. These facilities enable cooperative members to share in the responsibilities and benefits of the marketing of their products and the supplying of their purchases.

Also included in the total assets is \$10,019,562 of investment in other cooperatives. This is mostly investments which Oregon farmers have made through their local cooperatives in regional cooperatives. The regionals spread the influence of the local cooperative and the individual farmer over a much larger area. Oregon cooperative members can consider themselves to be part owners of a complex of assets which extend from their community to other parts of the Northwest.

The four Oregon regional cooperatives controlled \$30,362,163 of total assets. Most of their fixed assets were located in Oregon,

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<sup>5</sup> Balance sheets of each commodity group of cooperatives are shown in Appendix C.

but some regionals had facilities located in other parts of the Northwest. Table 4 lists the balance sheet accounts for these regional cooperatives.

Table 3. Combined balance sheet of 76 local Oregon cooperatives, 1963.

Assets	
Cash	\$ 4,409,852
Accounts and notes receivable	19,656,428
Inventory	28,678,921
Fixed assets	35,891,388
Investments in other cooperatives	10,019,562
Other assets	<u>2,883,219</u>
Total assets	<u><u>\$101,539,370</u></u>
Liabilities and Equity	
Current liabilities:	
Bank borrowings	\$15,613,318
Trade accounts payable	6,637,789
Pool accounts payable	12,449,514
Other current liabilities	<u>2,152,846</u>
Total current liabilities	\$ 36,853,467
Total term liabilities	11,884,320
Total equity	<u>52,801,583</u>
Total liabilities and equity	<u><u>\$ 101,539,370</u></u>

The sale of equipment and production supplies is the major function of the farm supply cooperatives. However, a variety of services from feed manufacturing to extending credit are also offered. Credit extended to its customers in accounts and notes receivable represented 24.8 percent of all assets in the farm supply

group and was the largest asset account.

Table 4. Combined balance sheet of four Oregon regional cooperatives, 1963.

Assets		
Cash	\$ 3,820,034	
Accounts and notes receivable	10,826,693	
Inventory	5,376,184	
Fixed assets	8,241,046	
Investments in other cooperatives	1,547,262	
Other assets	<u>550,944</u>	
Total assets		<u>\$30,362,163</u>
Liabilities and Equities		
Current liabilities:		
Bank borrowings	\$ 3,990,308	
Trade accounts payable	3,817,142	
Pool accounts payable	385,865	
Other	<u>419,692</u>	
Total current liabilities		\$ 9,613,007
Total term liabilities		2,812,743
Total equity		<u>17,936,413</u>
Total liabilities and equities		<u>\$30,362,163</u>

From Table 5 it can be seen that investments in other cooperatives are 22 percent of the total assets. Credits in the regional supply cooperative accounted for the largest part of this investment. The success of many local supply cooperatives is partially dependent upon the performance of the regional cooperative. The regional not only supplies many of the products sold by the local cooperative, but also the patronage refund of the regional is an important source of income.

Table 5. Percentages of total assets in selected asset accounts of commodity groups of Oregon cooperatives, 1963.

	Farm supply	Grain and seed	Fruit, vegetable, and nut	Dairy	Other	Regionals
Cash	6.9	6.7	2.3	5.6	2.5	12.5
Accounts and notes receivable	24.8	21.1	10.1	31.1	33.0	35.5
Inventory	22.5	15.1	46.6	7.4	14.1	17.7
Fixed assets	21.7	43.8	32.5	40.4	41.3	27.1
Investments in other cooperatives	22.0	10.9	5.8	12.8	.6	5.1
Other	2.1	2.4	2.7	2.7	8.5	2.1
Total assets	100.0	100.0	100.0	100.0	100.0	100.0

The marketing of dairy products has less variation during the year than the marketing of many other types of agricultural products. Therefore, dairy cooperatives usually do not have the large seasonal increases in inventories. Table 5 shows that only 7.4 percent of the total assets were represented by inventories. Fixed assets and accounts and notes receivable were the largest asset accounts of the dairy marketing cooperatives. Milk processing requires a large amount of fixed assets. A large amount of credit was extended to the customers and producers on trade accounts and on the purchases of equipment.

The fruit, vegetable, and nut cooperatives usually process the farmers' product into the physical form in which the consumer purchases it. The larger cooperatives market some of their products under their own private brand, and some of the smaller firms use

a regional marketing cooperative and a common brand name. These cooperatives must be able to adjust to consumers' preferences and must have the modern equipment necessary to prepare their products in the style desired by the consumer. Large inventories must also be maintained to fill customers' orders throughout the year. The largest portion of this group's assets is contained in processed marketing inventories and in plant and equipment needed to process the growers' products.

The large facilities constructed for grain and seed storage help explain why these associations have the highest proportion of their total assets. Transportation, cleaning, and materials handling equipment are important in the operation of these firms but the value of the buildings used by these firms far exceeds the value of equipment. The grain and seed marketing operation is principally handling, cleaning, and some storage. Important marketing services are provided, but no direct physical change occurs in the farmer's product. The cooperative sells the grain or grass seed to another marketing agency for processing, exportation, or resale.

## Short- term Borrowed Funds

### Use by Commodity Groups

Agricultural production is usually seasonal. Therefore, firms which market agricultural products and distribute production supplies often have large variations in their volume of business during the year. Additional sources of funds are usually needed to support the seasonal increases in working capital.

Supply cooperative. Trade accounts payable represented a large portion of the current liabilities of the farm supply group. Table 6 shows that trade accounts payable were 65 percent of the total current liabilities of this group. Credit from the regional supply cooperative and other suppliers allowed many of these firms, particularly the smaller ones, to operate without short-term bank credit. Fifteen of the 28 farm supply cooperatives required no short-term bank borrowing. Eleven farm supply cooperatives had short-term loans with commercial banks, and two had loans with the Bank for Cooperatives.

Of the commercial bank loans nine were used only for seasonal capital and were repaid at some time during the year. The other two firms maintained some short-term borrowed funds at all times during the year. Several firms had prearranged lines of credit, but most firms in this group signed 90-day or six-month

notes when they needed additional credit. Occasionally these loans were secured by mortgages on the fixed assets, but usually equipment or inventories were used for collateral. However, some loans were unsecured. Interest rates varied from 5.75 percent to seven percent, and the average interest rate was 6.03 percent for commercial bank loans for this group.

Table 6. Percentages of the total current liabilities in the various current liability accounts of Oregon local cooperatives, 1963.

	Short-term bank loans	Current portion of term debt	Trade accounts payable	Pool accounts	Others	Total current liabilities
Farm supply	11.3	4.7	65.0	8.9	10.1	100.0
Grain and seed	33.5	7.0	42.0	5.6	11.9	100.0
Fruit, vegetable and nut	48.3	1.1	5.2	41.7	3.7	100.0
Dairy	15.3	5.5	35.6	33.7	9.9	100.0
Others	43.4	11.0	24.3	18.6	2.7	100.0

The two associations which borrowed from the Bank for Cooperatives both had seasonal loans. The interest rate on these loans was 4.75 percent plus a required stock purchase. Both of these firms also had term loans with the Bank for Cooperatives.

Grain and seed cooperatives. Financing seasonal marketing inventories was the principal use of short-term bank credit for the grain and seed cooperatives. Grain and grass seed marketing is principally a product handling operation. No direct processing

of the product except for cleaning and packaging is involved. The labor and other expense accrued in the marketing operation are relatively small when compared to the value of the product marketed by the farmer. The value of the inventory is mainly, therefore, the amount paid to the grower.

Payment is usually made to the farmer soon after actual delivery is made. However, there was some variation in this practice. In some cooperatives an informal agreement has developed in which the farmers agreed to have their payment postponed until the cooperative had resold the grain or seed inventories. One cooperative did not take actual title to the grain, but acted only as the selling agent. When the grain was sold, the cooperative would withhold a handling fee.

Under current marketing practices the grain and grass seed inventories are moved from the local cooperatives soon after the grain or grass seed is received from the farmer. In Oregon firms there was a difference in the location and in the availability of transportation. Some cooperatives because of their location and the availability of railroad cars were able to resell the grain or seed rapidly enough to be able to pay the farmers without the use of any borrowed funds. Others were required to wait until railroad cars were available before the grain and seed could be shipped and sold. The amount of short-term credit needed was greatly influenced by the

length of time the cooperative had possession of the grain and seed.

Eight of the 16 grain and seed associations had short-term bank loans. Two of these were with commercial banks and had interest rates of five percent and six percent. One was secured by inventories and the other was unsecured. The Bank for Cooperatives granted loans to six grain and seed cooperatives. On loans that were secured by grain inventories a 4.75 percent interest rate was charged. One cooperative had a short-term loan secured by customers' equipment contracts, and this loan had a 5.5 percent interest rate.

Fruit, vegetable and nut cooperatives. The fruit, vegetable, and nut cooperatives were the largest users of short-term bank credit. In these cooperatives the principal need for credit was to finance the seasonal inventories of processed products. Each farm product is received from the growers in a period of a few weeks, but the processed product is marketed over the entire year. Some of the cooperatives considered it necessary to always carry some inventory in order to satisfy their customers' orders throughout the year, and it is common to carry inventories for over a year.

The processing of fruits, vegetables, and nuts involves the use of large quantities of labor, supplies, and equipment. The cost of these items cannot as a rule be delayed and usually must be paid when they are incurred. The cost of these inputs accounted for a large part of the total cost of the marketing inventory and thus

created a need for large amounts of seasonal credit.

Different methods of paying the growers were used by the individual cooperatives. Some paid the existing cash market price prevailing in their area when the products were delivered. Others advanced a partial payment at time of delivery, and in some cooperatives no payment was given until the processed products were sold. However, most cooperatives gave a partial payment at delivery to growers and a final payment when the processed products were finally sold. The payment plan practiced by the cooperative influenced the amount of short term capital needed. Cooperatives which advanced a large portion of total value to the grower at the time of delivery would naturally need a relatively larger amount of short-term credit than cooperatives which withheld all or most of the value of the growers' product.

It can be seen from Table 6 that 41.7 percent of the current liabilities of this group were due to growers in pool accounts payable. This liability will be paid when the processed fruits, vegetables, and nuts are finally sold. Most non-cooperative processing firms pay in full at the time the growers' product is delivered. Therefore, these pool accounts due to the growers represent a sizeable extension of credit from the growers to their cooperative.

Of the 13 cooperatives in the fruit, vegetable and nut group, 12 had short-term bank loans. The other firm had arranged a line

of credit with a bank, but it was not used in 1963. Only two of the associations in this group had loans from commercial banks. One of these loans was unsecured, and the other was secured by the marketing inventories. Both loans had a six percent interest rate. No minimum balances or other requirements were placed on these loans.

The Bank for Cooperatives extended short term loans to ten of the 13 fruit, vegetable and nut firms. An interest rate of 4.75 percent plus a stock purchase was charged on these loans. The processed fruit, vegetable, and nut inventories served as security for these loans. Eight of the ten firms which had short-term loans with the Bank for Cooperatives also had long-term loans with it.

Dairy cooperatives. Only six out of 16 dairy cooperatives had short-term bank loans. Several of the smaller cheese manufacturing firms sold their raw cheese directly to the regional marketing cooperative for aging. Therefore, these firms had only limited amount of funds in inventories and were able to operate with no short-term borrowed capital. Processors of fluid milk and of powdered milk do not usually have a large marketing inventory, because milk marketing is relatively constant throughout the year. An important use of short-term credit in the dairy cooperative was to finance the accounts payable of their customers. Table 5 shows that dairy cooperatives extended 31.1 percent of their total assets in credit to their customers and producers. Commercial banks

extended credit to four dairy cooperatives. An interest rate of 6.5 percent was paid on all of these loans. Besides these loans several firms had sold interest-bearing notes of their customers to commercial banks. Therefore, no additional funds of the cooperative were tied up in notes receivable, but the cooperative was liable to the bank for the default of any of their customers' notes. Two dairy cooperatives had short-term loans with the Bank for Cooperatives. These loans had an interest rate of 4.75 percent and were secured by the inventories of the cooperatives.

Other cooperatives. The three cooperatives in the "other" group had short-term loans. These loans were secured by marketing inventories and had a range of interest rates from 4.75 percent to 5.50 percent. Two of these loans were with commercial banks, and one was with the Bank for Cooperatives. Three of the four regional cooperatives had short-term loans, and all of these were with commercial banks. Ninety-day notes were the most common form of borrowing. Interest rates on these loans ranged from 4.5 percent to 6.0 percent.

### Interest Rates

Table 7 shows the average rates of interest of each commodity group. In comparing the rates it should be kept in mind that the grain and seed and the fruit, vegetable, and nut groups had

a large proportion of their loans with the Bank for Cooperatives; and, therefore, the required stock purchase must be considered in any comparison.

Table 7. Average interest rate of short-term loans by commodity groups, Oregon cooperatives, 1963.

Groups	Average Interest Rate (Percent)
Farm supply	5.83
Grain and seed	4.91
Fruit, vegetable, and nut	4.76
Dairy	5.24
Other	5.00
Regional	4.84

Commercial bank interest rates varied considerably between groups of cooperatives. The short-term bank loans granted the grain and seed cooperative and the "other" group were used to finance the marketing inventories. The average commercial bank interest rates for the grain and seed group and the "other" group were respectively 5.15 percent and 5.19 percent.

The average interest rates charged by commercial banks when loaning to the farm supply group, the dairy group, and the fruit, vegetable, and nut group were 6.03 percent, 6.50 percent, and 6.00 percent, respectively. These rates are approximately one percent higher than the interest rates charged the two groups which were discussed previously. The loans of the farm supply group and the

dairy cooperatives were usually smaller in size than the other groups, and these loans were usually used to finance customers' accounts, which may account for the higher rate.

The average interest rates of the two sources of short-term borrowed credit are shown in Table 8. The Bank for Cooperatives granted short-term loans at an average interest rate of 4.78 percent. The stock purchase requirement increased the cash interest outlay for these loans. Assuming the borrowing cooperatives regard the present value of this stock to be one-half the cash cost, the adjusted interest rate would be about 5.14 percent.<sup>6</sup> Therefore, the average commercial rate is about .5 percent higher than the adjusted interest rate of the Bank for Cooperatives.

Table 8. Comparison of average interest rate, percent of total short-term loans, and number of cooperatives which use the different sources of short-term bank loans, Oregon, 1963.

Source	Number of Cooperatives	Average Interest Rate	Percent of Short-term Loans
Commercial banks	10	5.60	8.2
Bank for cooperatives	32	4.78 <sup>1/</sup>	91.8

<sup>1/</sup>The adjusted interest rate, considering the required stock purchase, was estimated to be 5.14 percent.

<sup>6</sup>The stock purchase represented .717 percent of the total loan. One-half of the cost of the stock purchase added to the interest rate would give a value of about 5.14 percent (4.78 + .3585). The true value of this stock will depend upon the length of time needed by the Bank for Cooperatives to revolve this stock.

Table 9 lists the totals of all peaks and the totals of all low points of short-term bank loans. The fruit, vegetable, and nut cooperatives had the largest amount borrowed from banks, and the dairy cooperatives had the most constant level of borrowing. The peaks or the low points of short-term bank loans would never occur at the same time in all cooperatives. Therefore, the ranges listed in Table 9 are not an attempt to describe an actual situation, but they can be used as an indication of the total amount of short-term bank loans at different times of the year.

Table 9. Summation of low points and peaks of short-term bank credit of Oregon cooperative groups, 1963.

Group	Low Points	Peaks
	-----Thousands of dollars-----	
Farm supply	32	587
Grain and seed	750	5,825
Fruit, vegetable and nut	5,081	18,878
Dairy	555	975
Other	400	1,900
Total of Locals	6,818	27,781
Regional	1,500	15,450

#### Other Conditions

No operating restrictions were placed on the borrowing cooperatives, and usually no minimum account balance was required. However, a ten percent "dealer reserve" was required on farm equipment loans which were secured by the customers' accounts payable. A balance equal to ten percent of the total value of the

equipment loans was required to be maintained with the bank to offset the failure of any customers to repay their note. Three cooperatives reported this type arrangement. Financial reports were required of all firms to keep the lender informed of the current operations of the borrower.

### Sources

Figure 1 shows that there was a large variation in the source of short-term loans between the groups of local cooperatives. The farm supply group often used short-term credit to finance the seasonal increases of accounts receivable, and commercial banks were the principal source of loans for this group. The grain and seed, the dairy, and the fruit, vegetable, and nut groups used short-term loans to support marketing inventories, and the Bank for Cooperatives was the major lender to these groups. The "other" group used both sources in about equal amounts, and the regionals used only commercial bank credit. Of the short-term loans the Bank for Cooperatives supplied 91.8 percent of the dollar total.

Other sources of short-term credit were available to some cooperative groups. Table 6 lists the percentages of total current liabilities divided into the various current liability accounts. These proportions will change during the year depending upon the type of firm. Trade accounts payable and pool accounts payable represented

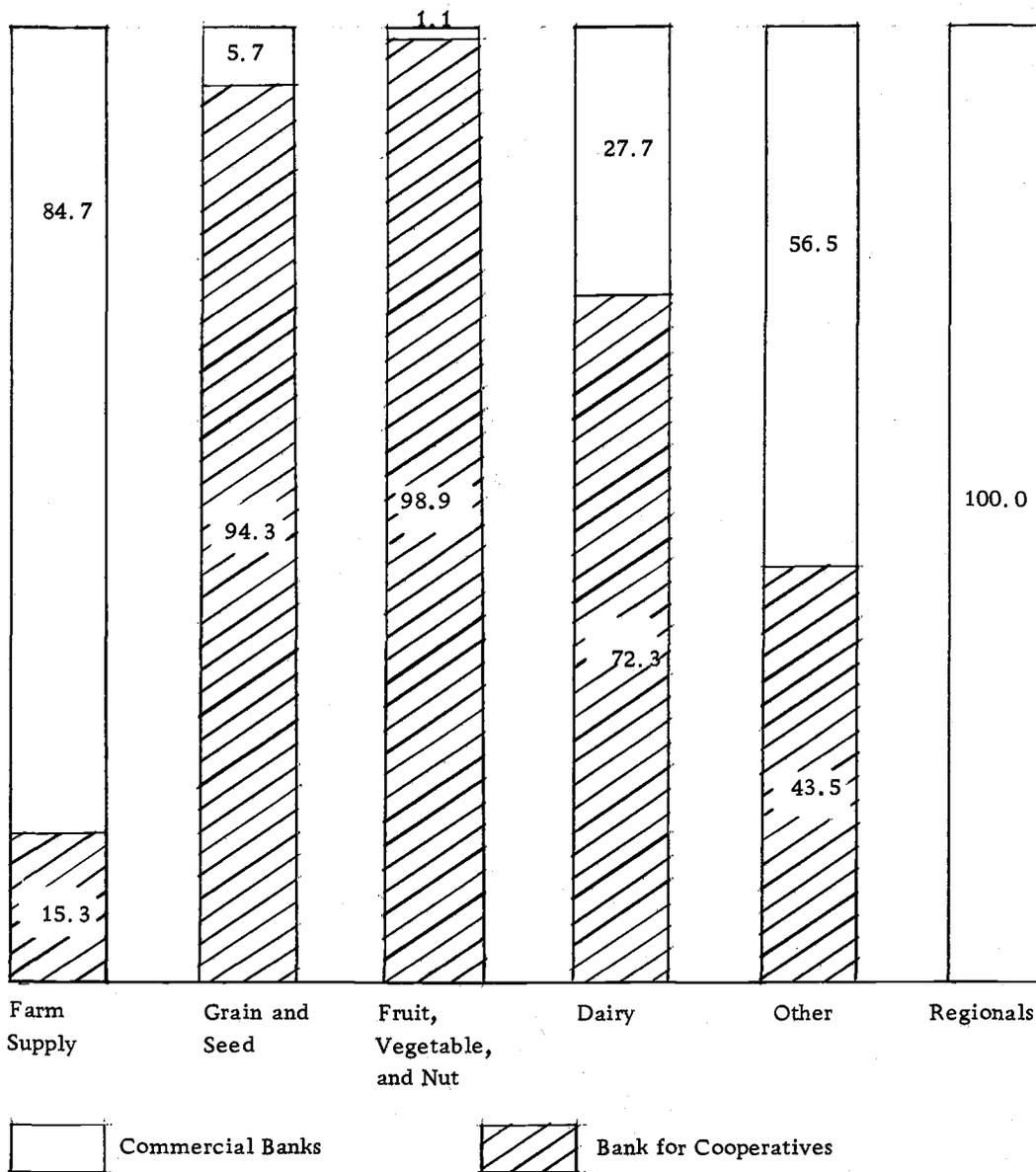


Figure 1. Percentage of short-term bank credit received from commercial banks and from the Bank for Cooperatives, Oregon Cooperatives, 1963.

large extensions of credit to some groups. If changes occurred in the suppliers' reluctance to extend credit or in the growers' reluctance to have their payments delayed, large additional amounts of short-term credit would need to be supplied by the Bank for Cooperatives and commercial banks.

### Long-term Borrowed Funds

#### Use by Commodity Groups

Supply cooperatives. Table 10 shows that the farm supply associations received nearly 42 percent of their total long-term credit from their suppliers. This credit can be divided into purchase agreements and normal trade accounts which have been changed into a long-term debt. Some purchase agreements entered into by the farm supply cooperatives allowed the total payment to be extended for a year or longer. Purchases of real estate or new equipment were commonly made with this type of arrangement. The financing was included in the terms of the contract and was agreed upon before the purchase was made. In this study it was found that equipment contracts allowed one or two years for payment, and land contracts allowed up to ten years. An interest rate of five or six percent was charged for these contracts. Usually these contracts were unsecured; in this group \$33,000 was the largest amount financed under

this type of arrangement.

Table 10. Percentages of term credit received from various sources by groups, Oregon cooperatives, 1963.

Source	Farm Supply	Grain and Seed	Fruit, Vegetable, Dairy and Nut	Other	Regionals
Suppliers	41.9	3.6	2.9	13.4	12.7
Commercial banks	7.6	2.3	.8	28.9	--
Banks for cooperatives	5.2	36.6	84.3	48.7	56.6
Certificates of indebtedness	38.2	53.5	11.7	1.0	26.1
Individuals	2.3	3.8	.1	6.1	--
Deferred credits	2.3	.2	--	1.9	4.6
Other sources	2.5	--	.2	--	--
TOTAL	100.0	100.0	100.0	100.0	100.0

Short-term credit of 30 to 60 days on trade accounts is normally allowed by most firms to their customers. Often customers' accounts will be allowed to be overdue for longer periods before payment is demanded (17, p. 281). Formal long-term loan arrangements for financing trade accounts between a firm and its customers are not nearly as common. Six of the 28 farm supply associations had entered into such long-term credit agreements with their merchandise suppliers. An agreement was reached between the cooperative and supplier which transferred the amount owed to the supplier in trade accounts payable to a long-term liability. The regional farm supply cooperative was the principal source of this type of credit.

Repayment conditions for this type of liability were very flexible. Often a minimum repayment was established with the

understanding that the cooperative would repay a larger amount if possible. In some cases the minimum repayment was only a token amount representing a small percentage of the total amount due.

No interest was charged on one loan, and the interest rates on the other varied from five to 6.5 percent. The largest loan included in this category was over \$300,000 and represented approximately one-half of the total long-term credit extended by suppliers. The larger extensions of long-term trade credit were secured by mortgages or second mortgages on the fixed assets of the cooperative. The smaller ones were usually unsecured.

Firms have a vested interest in maintaining their customers in business. The collapse of a customer's firm may cause permanent loss of accounts receivable and close a valuable market area for the supplier's product. Therefore, a supplier may extend special credit considerations to its customers which are in financial difficulties. Credit from its suppliers may be the only source of funds for a firm that has financial difficulties. The supplier is faced with the decision to either allow its customer to be forced out of business or to offer financial support to keep the firm in operation. If the support is given, the supplier will have considerable influence over its customer and may expect the firm to remain loyal to the suppliers' products. If the firm's financial difficulties are overcome, the supplier will receive full payments for its products and

may enjoy a favored position in the future.

The cooperatives which used long-term credit from their suppliers had a considerably lower proportion of member's equity invested in their cooperatives. This is a general indication that these associations are in somewhat weaker financial position than the average farm supply cooperative included in this study. The regional cooperatives extended 88 percent of the total credit from suppliers. This indicates their willingness to assist local cooperatives.

Certificates of indebtedness made up 38.2 percent of the farm supply long-term debt.<sup>7</sup> Four farm supply cooperatives used this method of term financing, and all four had a larger volume of business than the average of the farm supply group. Three of the four cooperatives received all of their long-term credit from these certificates. These issues were usually sold to support a planned expansion project and were sold mainly to members.

Fifteen years was the usual length of time for which the certificates were issued; however, one issue was for 20 years. Repayment plans varied greatly among the different associations. One firm designated 30 percent of the yearly earnings to the repayment of the certificates; another would repay up to five percent of the

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<sup>7</sup> Certificates of indebtedness included debenture bonds and other types of debt instruments which had a fixed interest rate and maturity date.

gross sales of the cooperative; and one cooperative had no formal repayment and had the issue due as a lump sum. Five or six percent was the interest rates on the certificates; however, one issue paid a cumulative fixed dollar interest rate. The true interest rate on this issue would, therefore, decrease the longer the bond was held. The average interest rate of all certificate issues was 5.70 percent. The current policy of most of these firms allows them to act as the agent in arranging transfers of this paper among members or to repay in the current year any certificates which are presented for redemption. Few certificates were presented for payment before their due date; therefore, no difficulty has been experienced in maintaining the present policy of payment of certificates on demand. Most of the certificates were issued within the last five years. The final test of the advisability of this type of financing for this group will come when the bulk of the issues come due.

The managers of the cooperatives which issued certificates of indebtedness were generally satisfied with the performance of this type of financing. The over \$500,000 raised by these five firms attests to their ability to obtain financial support from their members through the method. Several managers stated that a definite purpose for the certificates helped in promoting the sale of this paper. New building construction was the purpose for the above issues. The confidence of the members in the strength of their cooperative

was also cited as a necessary requirement for the successful use of certificates of indebtedness. The sale of these certificates was not limited to members by the policy of the cooperatives. However, in actual practice almost all of the issues were sold to members. If the general public had confidence in the safety of this paper and was willing to invest, most cooperatives would gladly accept their funds.

Commercial banks supplied 7.6 percent of the total long-term credit used by the farm supply group. Six of the interviewed farm supply associations had long-term bank loans. The average size of the loans was \$18,767, and the average interest rate was 6.0 percent. The range of the interest rates was from five to 6.5 percent. The loans were commonly secured by mortgages on the fixed assets. The average repayment period on these loans was 7.7 years. None of the cooperatives were required to maintain minimum balance with the bank that issued the loan, and no other restrictions were placed on the operations of the associations. The firms were required, however, to submit financial statements.

The Bank for Cooperatives was the source of long-term credit for three farm supply cooperatives. These loans accounted for only

5.2 percent of the total long-term credit of the farm supply group.

The Bank for Cooperatives has a current rate of 5.25 percent on all long-term loans.<sup>8</sup> The loans were secured by mortgages on the fixed assets. The average length of the existing loans was five years.

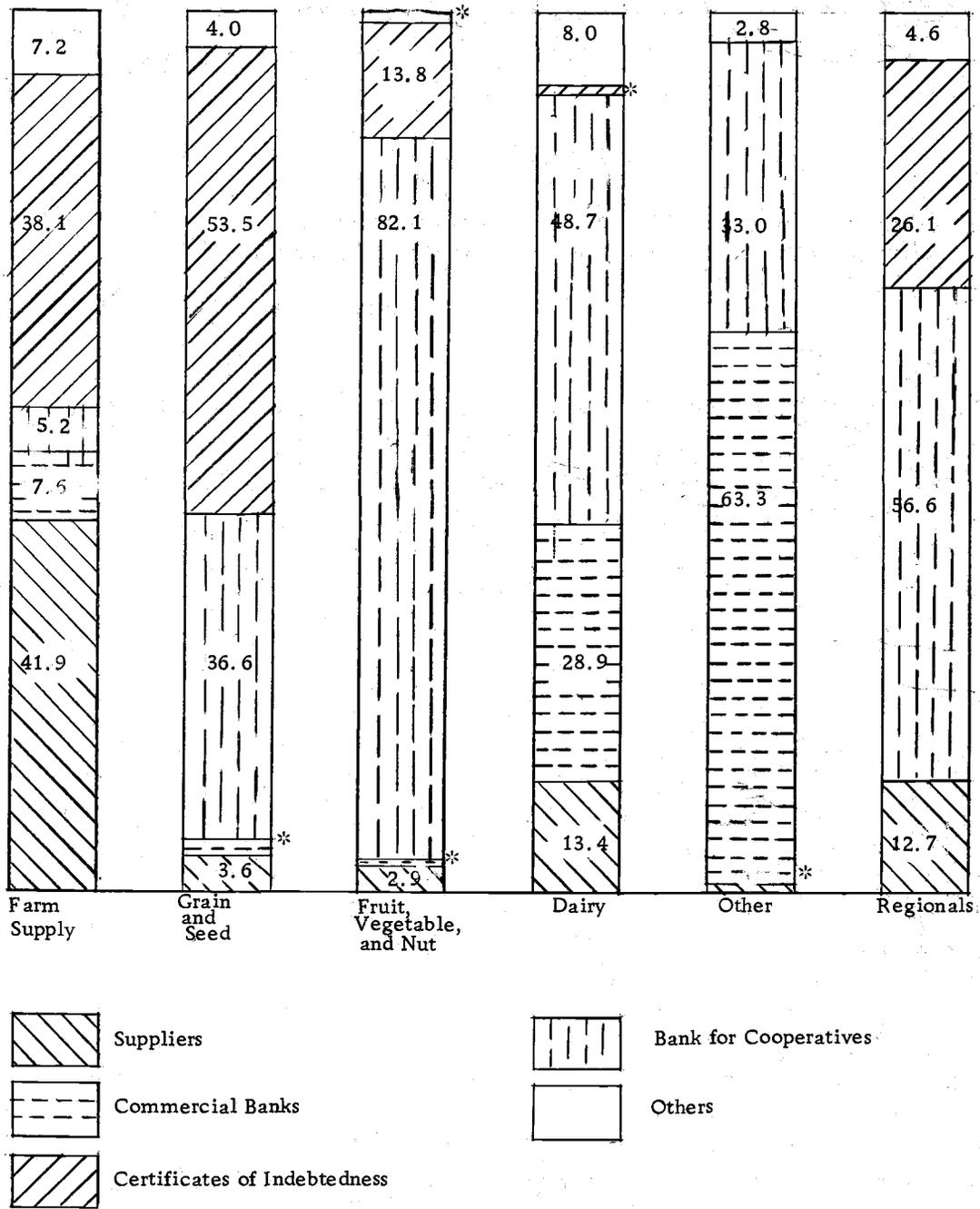
This group of cooperatives received five loans from private individuals accounted for 2.3 percent of the total long-term credit of this group. A six percent interest rate was earned on all loans of this type. They were not usually secured by claims on any assets. The average repayment period was 4.5 years. Five cooperatives had deferred credits listed on their balance sheet. These credits represented 2.3 percent of the total long-term liabilities. Two loans were from other sources, and they represent only 2.5 percent of the term liabilities.<sup>9</sup>

Figure 2 shows that the farm supply group borrowed a lower proportion of their long-term credit from banking institutions, commercial banks and the Bank for Cooperatives than other types of cooperatives. This group obtains a much higher percentage of their

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<sup>8</sup>Loans with the Bank for Cooperatives currently require, in addition to the interest rate of 5.25 percent, a stock purchase of Bank of Cooperative stock equal to 15 percent of the interest charges.

<sup>9</sup>The by-laws of some cooperatives designated that a portion of their proceeds be used for a particular purpose. Education, advertising, and 4-H club awards are purposes for which this type of fund was used. The cooperative was obligated in a general way to honor these liabilities. These liabilities were not with a second party, but they only represented the wish of the cooperatives members that certain amounts of money be spent in the designated manner.



\* under 2 percent

Figure 2. Average percentages of long-term credit received from various sources, Oregon Cooperatives, 1963.

long-term credit from their suppliers than any other group. Certificates of indebtedness were also an important source of long term capital.

Grain and grass seed cooperatives. Table 11 shows that the grain and seed marketing cooperatives had 21.7 percent of their total liabilities and equities in long-term liabilities. This was a higher percentage than any other of the cooperative groups. Three cooperatives of this group received long-term credit from their suppliers. Two of these had long-term purchase contracts, and the other cooperative received a long-term loan from the regional farm supply cooperative. Interest rates of five and six percent were charged on this type of credit. One purchase contract had a due date in two years, and the other was due in four years. Both of these contracts were unsecured. The loan from the regional had no prescribed date for repayment, and the member cooperative's stock in the regional was used as collateral for the loan.

The grain and grass seed marketing cooperatives had \$2,130,801 outstanding in debentures and other certificates of indebtedness. This according to Table 10 was 53.5 percent of the total long-term liabilities of this group. Three cooperatives had certificates of indebtedness and one of these had several issues outstanding. One cooperative had authorized a large amount of its revolving fund to be exchanged for certificates of indebtedness. These revolving fund

credits were reissued as long-term paper bearing an interest rate of three percent. Since this was a transfer of internal funds of the cooperative, the three percent interest rate of this issue cannot be compared to interest rates of other issues which were used to draw external funds into the cooperative.

Table 11. Percentages of total liabilities and equities in various accounts of Oregon cooperative groups, 1963.

Accounts	Farm Supply	Grain and Seed	Fruit Vegetable and nut	Dairy	Other	Regionals
Bank borrowings	3.5	10.3	26.4	5.0	12.7	13.1
Trade accounts payable	13.3	9.3	2.8	8.5	5.7	12.6
Pool accounts payable	1.8	1.1	22.3	8.0	4.4	1.3
Other current liabilities	2.1	1.9	2.0	2.4	.6	4.7
Total current liabilities	20.7	22.6	53.5	23.9	23.4	31.7
Term indebtedness	12.4	21.7	7.2	10.4	18.7	9.2
Total equity	66.9	55.7	39.3	65.7	57.9	59.1
Total liabilities and equities	100.0	100.0	100.0	100.0	100.0	100.0

Interest rates of four or six percent were earned by the other debenture issues. The four percent interest rate was earned by the older issues which are now approaching their expiration date. The average interest rate of certificates of indebtedness of this group was 3.56 percent. However, all recent issues of certificates which were used to attract new funds carried a six percent interest rate.

Long-term commercial bank loans accounted for 2.3 percent of the term liabilities of this group. All of these loans were secured by mortgages on the fixed assets. Interest rates on this type of loan are in the five to six percent range, and the repayment periods varied from two to six years.

The Bank for Cooperatives supplied 36.6 percent of the total long-term credit needs of the grain and grass seed marketing cooperatives. Four cooperatives had loans with this bank. All long-term loans from the Bank for Cooperatives had an interest rate of 5.25 percent and were secured by mortgages on the fixed assets. The average repayment period of these loans was 9.1 years.

Three cooperatives had loans from private individuals, and two firms obtained all of their long-term credit from this source. Some loans were secured by claims on the fixed assets, but most of these loans were unsecured. One to five years was the range of the repayment periods of these loans.

Dairy cooperatives. Only two dairy marketing cooperatives obtained long-term credit from their suppliers. These firms had arranged long-term purchase contracts. This credit was 13.4 percent of the long-term liabilities of the dairy marketing group. Interest rates of 5.5 and 6.0 percent were charged on these contracts. One contract was for the purchase of a processing plant and had a repayment period of eight years. The other contracts were for

equipment and supplies, with a repayment period of between one and two years.

Five dairy marketing cooperatives had term loans with the commercial banks. Table 10 shows that these represented 28.9 percent of the long-term liabilities of this group. The interest rate varied from 5.5 to 6.0 percent. Six percent was the average interest rate, and 4.7 years was the average period remaining to repay these loans. The loans were secured by mortgages on the fixed assets or on the equipment being purchased. No minimum balance requirements or other restrictions were reported on these commercial bank loans.

Three dairy marketing cooperatives had term loans with the Bank for Cooperatives. These loans were secured by mortgages on the fixed assets and had an interest rate of 5.25 percent. One loan had no formal repayment plan; the other two had repayment periods of seven and nine years. These loans accounted for 48.8 percent of the long-term liabilities of this group. Only one series of certificates of indebtedness was issued by the dairy marketing group. This issue was used as a means of returning marketing retains to the members and it was not used to raise new funds.

Fruit, vegetable, and nut cooperatives. Loans from the Bank for Cooperatives were the major part of the long-term credit of the fruit, vegetable, and nut cooperatives. This group obtained 84.3

of its long-term credit from this source. Figure 2 shows that this was the largest proportion any group received from any credit source. Nine of the 13 cooperatives in this group had term loans with the Bank for Cooperatives. The average length of these loans was 5.5 years, and the average size of the loans was \$29,621. The loans were secured by first mortgages on the fixed assets and the interest rate was 5.25 percent.

Term purchase contracts of the fruit, vegetable, and nut group accounted for all the long-term credit from suppliers. Equipment contracts, real estate contracts, and a contract for plant improvements were the purchases involved. Interest rates varied from five to six percent on these contracts. Only one firm had a term loan from a commercial bank, and credit from individuals, deferred credits, and other loans provided only .4 percent of the total long-term liabilities. It can be seen from Table 10 that long-term notes with members represented 11.7 percent of the term liabilities. Interest rates of three to five percent were paid on these series of notes, and most of these issues were due to be repaid in the next five years.

Other cooperatives. In the "other" cooperatives category not included in the previous groups, commercial banks and the Bank for Cooperatives provided 99.3 percent of the total long-term credit of this group. Interest rates charged varied from 4.5 to six percent.

Table 10 shows that the regional cooperatives obtained the largest portion of their term credit from the Bank for Cooperatives. On these loans the same interest rate and loan conditions were established for the regionals as were established for the loans to local cooperatives. Certificates of indebtedness issued by the regionals earned a five percent interest rate, and loans from suppliers had a range of interest rates from five to 5.5 percent. Regionals had a total of \$2,812,734 of long-term liabilities and had an average interest rate of 5.59 percent.

In summary, each group of cooperatives used different combinations of long-term liabilities. Figure 2 illustrates the variation in sources of long-term credit among the groups. Suppliers were the major source of long-term credit for the farm supply group, but only a minor source for all others. Loans from commercial banks supplied an important part of the term credit for the dairy cooperatives, but they issued only a small portion of the term loans for the grain and seed group and the fruit, vegetable, and nut group. The regional cooperatives reported no long-term loans from commercial banks.

Certificates of indebtedness represented most of the long-term liabilities of the grain and seed cooperatives. They were also used in varying degrees by the other marketing groups, the farm supply and the regionals. The Bank for Cooperatives' share of long-term

liabilities ranged from a high of 84.3 percent in the fruit, vegetable, and nut group to a low of 5.2 percent in the farm supply group. It was the principal source of long-term loans for the fruit, vegetable, and nut cooperatives, the dairy cooperatives, and the regional cooperatives. Loans from individuals, deferred credits, and other credit sources supplied only minor amounts of long-term credit.

Table 12 divides the total liabilities of the local cooperatives into the various sources. The Bank for Cooperatives issued the largest volume of loans and was used by the largest number of cooperatives. Of the total term liabilities 47.7 percent came from this source. This demonstrates the importance of the Bank for Cooperatives to the local cooperatives of Oregon.

Table 12. Amount, percent of total long-term liabilities, and number of cooperatives which used the various sources of term liabilities, Oregon cooperatives, 1963.

Source	Number of Cooperatives	Amount (Dollars)	Percent of total long-term liabilities
Bank for Cooperatives	20	5,673,403	47.7
Certificates of indebtedness	12	3,096,829	26.1
Commercial banks	16	1,462,724	12.3
Suppliers	19	1,171,792	9.9
Individuals	10	349,795	2.9
Deferred credits	14	83,226	.7
Others	3	46,511	.4
Totals		11,884,320	100.0

## Loan Conditions

Interest rates. The average interest rates of the various sources are shown in Table 13. Certificates of indebtedness have the lowest average interest rate. However, it has previously been stated that in some associations certificates bearing a due date and a fixed rate of interest were exchanged for member equity credits. Usually less than the "market" rate of interest was paid on this paper. Therefore, the 4.09 percent average interest rate of these certificates cannot be directly compared to interest rates of other debt paper which were used to attract outside funds. It should be noted that recently issued certificates, which were sold for cash, carried an interest rate of six percent.

The stock purchase requirement of the Bank for Cooperatives adds a 15 percent charge to the 5.25 interest rate. This increases the cash payment due on these loans to 6.03 percent. However, the borrowing cooperatives are allocated a proportional share of any savings of the Bank for Cooperatives, and these savings plus the stock will be revolved back to the cooperative in the order in which it was issued (18, p. 406). The value of these credits in the Bank for Cooperatives will depend upon the time required to revolve them back to the cooperatives.

The interest rates of term loans from suppliers, commercial

banks, and individuals were all within a range of .3 percent of each other. It can be assumed that certificates of indebtedness must have a six percent interest rate in order to attract outside funds; and it can be assumed that because of uncertainty and futurity of the repayment by the Bank for Cooperatives, the borrowing cooperatives might consider the "true" interest rate to be the mid-point between the cash charge of 6.03 percent and the listed interest rate of 5.25 percent. Therefore, an adjusted interest rate of 5.64 percent could be considered to be the cost of borrowing from the Bank for Cooperatives. Using the two adjusted interest rates, all long-term interest rates would fall into the range of 5.62 percent to 6.00 percent.

Table 13. Interest rate and average remaining repayment period of various sources of long-term credit, Oregon cooperatives, 1963.

Source	Average Interest (Percent)	Repayment Period (Years)
Suppliers	5.83	4.7
Commercial banks	5.92	5.5
Bank for Cooperatives	5.25 <sup>1/</sup>	9.1
Certificates of indebtedness	4.09 <sup>2/</sup>	--
Individuals	5.62	7.1

<sup>1/</sup> A stock purchase equal to 15 percent of the interest payment is required.

<sup>2/</sup> Some certificates of indebtedness were exchanged for member equity credits. These certificates usually bore a lower rate of interest than certificates which were issued to attract outside funds.

The average interest rate of each group of local cooperatives reported in Table 14 reflects the influence of their major sources of credit. The interest rate of the farm supply group is similar to the average interest rates charged by suppliers, which were their principal source of term credit. The average interest rate of the grain and seed associations on all interest-bearing term debts except the certificates of indebtedness was 5.25 percent, and is exactly equal to the interest rate of the Bank for Cooperatives, their principal source of borrowed funds. The fruit, vegetable, and nut cooperatives also borrowed most of their term funds from the Bank for Cooperatives, and their average interest of 5.19 percent was close to the interest rate of the Bank for Cooperatives.

Table 14. Average interest rate and average repayment period of long-term loans, Oregon cooperatives, 1963.

Group	Average Interest (Percent)	Average Repayment Period <sup>1/</sup> (Years)
Farm supply	5.75	10.0
Grain and seed	4.36 <sup>2/</sup>	8.4
Fruit, vegetable, and nut	5.19	6.3
Dairy	5.57	5.4
Other	5.67	6.9

<sup>1/</sup> Certificates of indebtedness were not included in the calculations of the average repayment period.

<sup>2/</sup> The long-term liabilities of the grain and seed group included a large amount of certificates of indebtedness which were issued to replace revolving fund credits and earned a low rate of interest. The average rate of interest for all other interest-bearing liabilities was 5.25 percent.

Length of repayment period. It can be seen from Table 14 that the different sources of term loans had varying repayment periods. Suppliers had the shortest average length. However, in the farm supply group much longer loans were extended by suppliers. The average length of the commercial bank loans was 5.5 years for all local groups, but the average length of the loans extended to the farm supply group was longer. The Bank for Cooperative loans had the longest average length. Loans from individuals had an average length of over six years but the length of this type of loan varied greatly. It is difficult to generalize about these types of loans, because the individuals who furnished this credit were often directly connected with the cooperative and this influenced the terms of the loan.

Other loan conditions. The Bank for Cooperatives and commercial banks, in practically all cases, require mortgages on the fixed assets. Loans from suppliers and individuals were often secondary to the bank loans. If, however, the firm had no bank loans then these sources would require the fixed assets as security. The certificates of indebtedness had no specific claim to any asset, only a general claim against the company.

None of the cooperatives were required to maintain a certain bank balance or maintain certain inventory levels. The Bank for Cooperatives and commercial banks did require complete financial

statements and often would review any major expenditures or major changes in policy. In some cases guide lines on the relation of current assets and current liabilities were established, and the cooperatives would be expected to closely follow these. Suppliers and other non-bank sources of credit did not usually set up any operating restrictions, but they were often in excellent position to informally review the operations of the borrowing cooperatives.

### Equity Capital

Equity capital of a firm may arise in two different ways. An investment of cash or other assets may be made in the firm, or funds from the operation of the firm may be retained as equity capital.<sup>10</sup>

Table 15 shows the high proportion of the equity capital which has been generated by the operation of Oregon's cooperatives and the limited amount which has come from actual cash investments of the members. All of the groups except the regionals received over 90 percent of their total member's equity from the operations of the firm.

Many cooperatives have paid back the initial cash investment

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<sup>10</sup> Retained earnings and marketing retains were the methods used to obtain equity capital from the cooperatives' operations. These retains are credited to the account of each member in proportion to his patronage.

which was used to start the cooperative, and now funds retained from their operations account for a large part of their equity capital. Sixteen of the cooperatives have no cash investment remaining in their association. One cooperative began its operations with a leased gasoline storage tank and an extension of credit from a petroleum supplier, and from this modest beginning the cooperative has grown without ever receiving any cash equity capital from its members.

Of the total member's equity of the local cooperatives in 1963, 94.7 percent was generated from the firm's operations. Often, a small membership fee was the only requirement for joining the cooperative. There may be very valid and practical reasons for not requiring a greater cash outlay from the members. For example, a higher membership fee could greatly increase the resistance of prospective members to join. In any case, the experience of the interviewed cooperatives does show that cash investments from members accounted for a limited part of equity capital.

Table 15. Percentage of total equity capital from cash investment and from retained funds in Oregon cooperatives, 1963.

Group	Cash Investment	Retained funds
	Percentage of total equity	Percentage of total equity
Farm supply	9.2	90.8
Grain and seed	9.0	91.0
Fruit, vegetables and nuts	2.8	97.2
Dairy	4.3	95.7
Others	.1	99.9
Average of local cooperatives	5.3	94.7
Regionals	16.1	83.9

The group of regional cooperatives did have a larger proportion of its equity capital coming from the direct investments of its members. A regional does not, as a rule, have the opportunity to begin operation on a small scale, and it usually needs a sizeable amount of resources to even start in business. The regionals included in this survey were not generally in business as long as the local cooperatives, and they have not had the same amount of time to generate internal capital.

Preferred stock made up the largest proportion of cash investment in all of the groups. Table 16 shows the percentage of cash equity capital divided into equity accounts.

Table 16. Breakdown of total member cash equities by individual equity accounts for Oregon local cooperatives, 1963.

Equity accounts	Percent of total cash equities
Common stock	19.1
Preferred stock	55.3
Certificates of investment	16.3
Membership fees	4.7
Paid in surplus	4.6
Total	100.0

The regional cooperatives received 85.1 percent of their cash equity capital from preferred stock and 14.9 percent from the other forms of equity capital.

Preferred stock or certificates of investment were commonly

sold when the cooperative began operation or expanded their facilities. Later, funds retained from the operations of the cooperative were often used to redeem the previous cash investments. The amount of common stock needed for voting rights or the membership fee as a rule required only a partial cash payment from the member, and the remainder could come from the member's retained patronage dividends. Following these practices, little new cash investment would be made in the cooperative, and the existing cash investments would be reduced over time.

#### Dividends on Equity

Some of the associations paid dividends on the members' equity; others did not. Dividends were paid on 19.9 percent of the equities of local associations, and the average dividend rate was 4.96 percent per year. The proportion of the total members' equity and the average dividend rate varied among the groups of cooperatives. The "other" group of cooperatives had the highest average dividend rate and paid dividends on the highest percentage of its equities.

One of the three cooperatives in this group paid dividends on all of its equities. Substantial losses had occurred in the past few years in this cooperative, but these losses were not allocated to the individual members' accounts.<sup>11</sup> Therefore, the listed equity

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<sup>11</sup>It is normal accounting procedure of most cooperatives to not allocate the current year's losses.

credits in the members' accounts on which interest was paid was greater than the actual equity credits of the cooperative, and the average dividend rate paid on the actual equity credits was greater than the rate paid on the individual members' equity. This helps to explain the high average dividend rate of this group.

The revolving funds accounted for the largest part of the interest-bearing equity capital in the dairy, the grain and seed, and the fruit, vegetable, and nut groups. On the part of their revolving fund which earned interest, the dairy group paid four percent interest; the fruit, vegetable, and nut group paid a range from three to five percent interest; and the grain and seed group paid from two to five percent interest. Several of these cooperatives have changed their policies and are not paying interest on their recently issued revolving fund credits. The older interest-bearing credits are gradually being revolved, and in the future these cooperatives will not pay interest on their revolving funds. Some firms paid interest on only special parts of their revolving funds. For example, a few cooperatives paid interest only on patronage credits earned from feed purchases. The trend of Oregon cooperatives seemed to be away from interest-bearing revolving funds.

Dividend rates on preferred stock usually ranged from two to eight percent. Several cooperatives allowed their boards of directors to set the preferred stock dividends within a designated range.

For all groups the most common dividend rates were five and six percent for preferred stock. Interest rates on common stock varied from two to six percent between the different associations, and four percent was the most common rate. Some of the interest-bearing common and preferred stock was bought by the members, and some was earned through patronage credits. Table 17 shows the breakdown of the interest bearing equity capital among the various equity accounts.

Table 17. Amount, average interest rate and percentage of total interest-bearing equity capital of the different types of equity accounts of local Oregon cooperatives, 1963.

Equity account	Amount (Dollars)	Percentage of total	Average interest rate
Preferred stock <sup>1/</sup>	2,477,639	23.6	5.54
Common stock	319,651	3.0	3.93
Revolving fund	7,722,247	73.4	4.82
Total interest-bearing equity capital	10,519,537	100.0	4.96

<sup>1/</sup> Interest bearing certificates of investments were included with preferred stock.

In summary, it can be said that Oregon cooperatives paid dividends on less than one-fifth of their equity capital, and that the revolving fund credits account for the largest portion of the interest-bearing capital. In general it can be stated that Oregon cooperatives are gradually dropping the practice of paying interest on their revolving funds.

### Members' Financial Support

The cooperative member has the dual role of being the owner and the customer of his association. This unique situation changes the interpretations of several balance sheet accounts. In marketing cooperatives the pools accounts payable represents the value of the member's product which has been received by the cooperative, but for which the member has not yet received payment. This is a short-term liability of the association that will be paid when the processed products are sold and the pool is closed. When the cooperative member authorizes this payment to be withheld, the firm can operate with a lower level of working capital.<sup>12</sup> Therefore, the delayed payments to the producer can be considered to be a type of member financial support.

Debentures and other certificates of indebtedness were another way in which members gave financial support to their cooperative. Members obtained this long-term paper from the earnings of the cooperative or by loaning funds to the cooperative. Almost all certificates of indebtedness were held by members.

Pool accounts payable to the producers and certificates of indebtedness can be combined with member equity to show the full

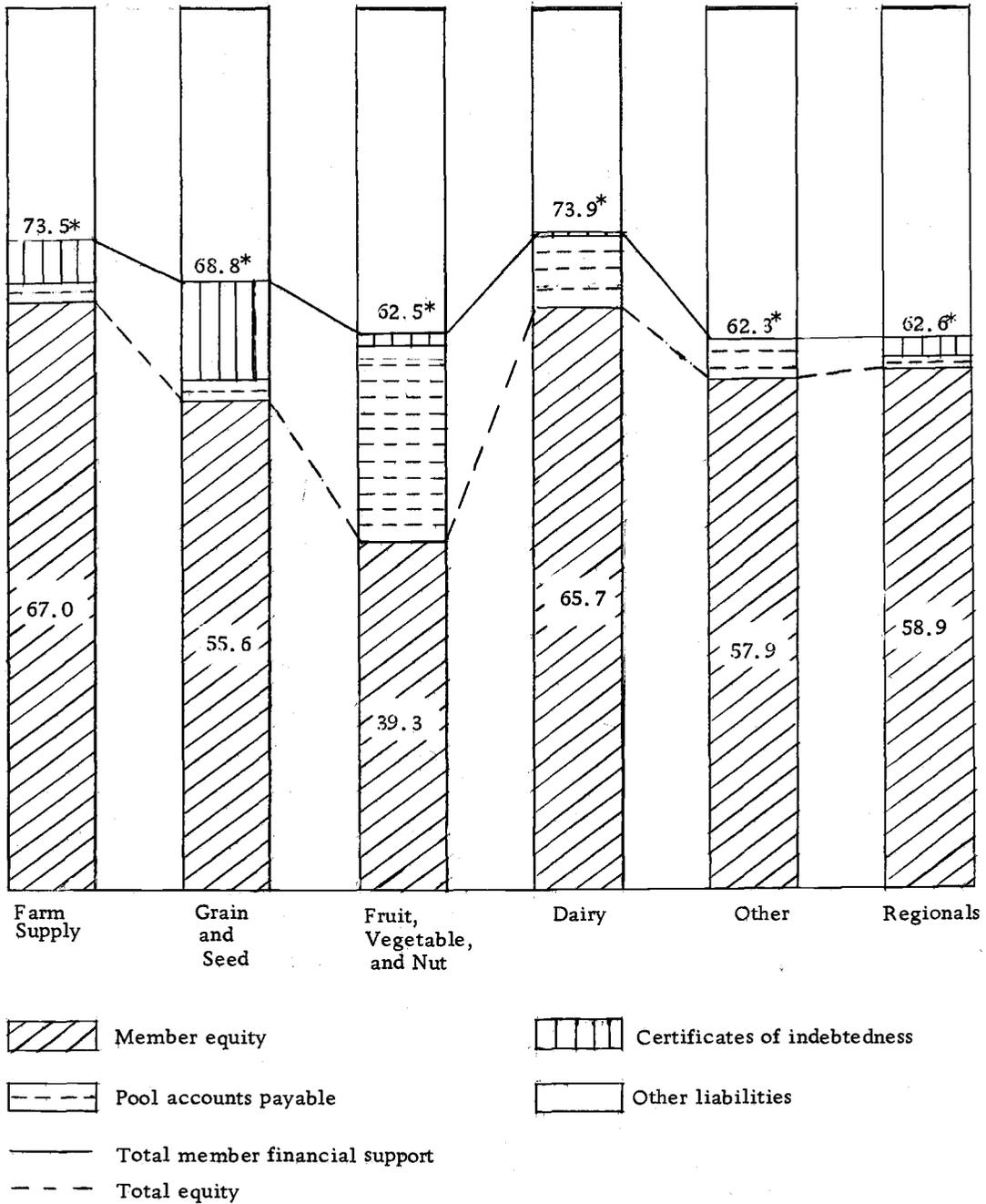
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<sup>12</sup>Working capital is the difference between current assets and current liabilities (2, p. 236).

measure of member financial support. Figure 3 shows that part of total liabilities and equities which each of these types of member financial support represent.<sup>13</sup> Table 18 shows that the fruit, vegetable, and nut cooperatives have a much lower percentage of equity capital than the other groups; but when the total member financial support is considered, this group's proportion is more comparable to the other groups. From this table the groups can be ranked according to percentage of equity capital as follows: (1) farm supply, (2) dairy, (3) regionals, (4) other, (5) grain and seed cooperatives, and (6) fruit, vegetable, and nut. The percentage of equity capital varies 27.7 percentage points from the high of 67.0 percent to the low of 39.3 percent. Also the groups can be ranked according to percentage of total member financial support as follows: (1) dairy; (2) farm supply; (3) grain and seed; (4) regionals; (5) fruit, vegetable, and nut; and (6) other cooperatives. The percentage of total member financial support varies 11.6 percentage points from a high value of 73.9 percent to a low of 62.3 percent. It can be noted that the range between the high and low percentage of total member financial support was less than half the range between the high and low percentages of member equities.

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<sup>13</sup> Table 25, Appendix B, lists the dollar amounts and percentage of total liabilities and equities of each type of financial support by cooperative groups.



\* Percentage of total member financial support.

Figure 3. Percentage of total equities and liabilities represented by member equities, pool accounts payable, and certificates of investment, Oregon Cooperatives, 1963.

Table 18. Member equity and total member financial support as a percentage of total liabilities and equities of Oregon cooperative groups, 1963.

Group	Member equity	Total member financial support <sup>1/</sup>
Farm supply	67.0	73.5
Grain and seed	55.6	68.8
Fruit, vegetable, and nut	39.3	62.5
Dairy	65.7	73.9
Other	57.9	62.3
Regionals	58.9	62.6

<sup>1/</sup> Total member financial support included member equity, pool accounts payable to the members, and debentures and certificate of indebtedness.

The financial strength of a firm is often judged by the amount of the equity capital included in the capital structure. The above analysis suggests that several other accounts in addition to what is shown as equity capital should be considered in evaluating the financial strength of cooperative firms. The pool accounts payable and long-term paper issued to the cooperative members often are important sources of funds. These funds have a prescribed time of repayment and are therefore less flexible than equity funds, but they do represent member financial support. A more realistic view of the cooperative's member financial relationship is obtained from using a measure of total member financial support. When using this value, the percent of member's investment to total investment is comparable among all the groupings.

## CHAPTER IV

## ANALYSIS

Capital NeedsAsset Requirements

The functions of the fruit, vegetable, and nut cooperatives require more assets per dollar of volume than do the functions of any of the other groups. This point is emphasized in Table 19.

Table 19. Assets of Oregon cooperatives divided by their volume shown by commodity groups, 1963.

Group	Dollar Assets Divided by Dollar Volume
Fruit, vegetable and nut	.832
Farm supply	.596
Dairy	.462
Grain and seed	.338

The nature of the processing and marketing functions performed by the fruit, vegetable, and nut cooperatives combined with only seasonal use of part of the facilities help explain the higher assets requirements of this group. The operation of the grain and seed marketing operations are usually not as complex and required the least amount of capital per dollar volume of

business performed by the cooperative.

The following formula can be used to evaluate the relationship between the assets of a cooperative and the volume of patron business transacted.

Formula A

$$\frac{\frac{\text{Assets of cooperative}}{\text{Volume of cooperative}}}{\frac{\text{Volume of patron's business}}{\text{Volume of cooperative}}} = \frac{\text{Assets of cooperative}}{\text{Volume of patron's business}}$$

The purpose of these values is to rank the types of cooperatives according to the relationship of cooperative assets to patron's volume. The calculations below give the values of the different cooperative groups. In these calculations the assets to volume proportions of Table 19 are used.

For the farm supply cooperatives the volume of patron's business would be identical to the total volume of the cooperative. Therefore, the volume of patron business to the volume of the cooperatives would be 1.0. The calculations for the farm supply group are the following:

$$\frac{.596}{1.0} = .596 \quad (\text{proportion of cooperative assets to volume of patron's business for the farm supply group}).$$

The dollar volume of the grain and seed cooperatives would represent the value of the growers product plus the handling and transportation services performed by the marketing cooperative.

The operating statements of several representative firms indicated that at least 90 percent of the total sales was returned to the growers as payment for their products. The average grower's share of the grain and seed cooperatives volume was therefore hypothesized to be 90 percent. Inserting this value into Formula A gives the following:

$$\frac{.338}{.90} = .376 \quad (\text{proportion of cooperative assets to volume of farm products marketed by the grain and seed group.})$$

For a typical dairy cooperative it was estimated that the farmer's product represents 60 percent of the total volume of sales.<sup>14</sup> When this value and the appropriate value from Table 19 are inserted in Formula A, the proportion for a typical dairy cooperative becomes the following:

$$\frac{.462}{.6} = .770 \quad (\text{proportion of cooperative assets to volume of farm products received for the dairy group.})$$

In a fruit, vegetable, and nut cooperative the value added by the processing and marketing accounted for the largest part of the total value. For a typical firm it was estimated that the value of the growers' product was 45 percent of the total processed

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<sup>14</sup> Calculations from a recent Oregon study indicate that the amount paid to producers represents about 45 percent of the value of processed and distributed fluid milk and about 74 percent of the value of cheese (16, p. 12-13).

value.<sup>15</sup> Using this estimate in Formula A, the following is determined:

$$\frac{.832}{.45} = 1.849 \quad (\text{proportion of cooperative assets to value of products marketed by the fruit, vegetable, and nut group}).$$

The value which is calculated with Formula A could be expressed another way as an estimate of the number of dollars of assets needed by a cooperative to support one dollar of its patrons' business. Of the marketing groups the fruit, vegetable, and nut group had the highest proportion of assets to patrons' volume. For this group about \$1.85 of assets are needed for each one dollar of products marketed. For a representative firm in dairy marketing \$ .77 of assets are estimated to be required for each dollar of product bought from the producers, and about \$ .38 is estimated to be required by a grain and seed firm to support one dollar of the grower's volume.

Let it be assumed for the moment that a firm from each marketing group handles the same marketing volume and obtains all of its equity capital from marketing retains. In this situation the fruit, vegetable, and nut cooperative would be required to retain the highest proportion of the value of its patrons' product in order to acquire

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<sup>15</sup> An Oregon study suggested that the growers received slightly over 37 percent of the total F. O. B. processed value of processed vegetables, and growers received 46 percent of the total processed value of fruit and nuts (16, p. 20-25).

an assets to equity capital ratio comparable to the other groups.

The value derived by using Formula A indicates that a farm supply firm needs about \$.60 of assets to support each dollar of patron business. This value ranks the farm supply above the grain and seed cooperative but below the dairy marketing and fruit, vegetable, nut cooperative in asset intensity per unit of patron's business.

The estimated values of the proportion of assets to patrons' volume of the groups of cooperatives are summarized as follows:

1. Fruit, vegetable, and nut	1.849
2. Dairy	.770
3. Farm supply	.596
4. Grain and seed	.376

This analysis shows rather clearly that fruit and vegetable growers can expect to provide more capital to support their cooperative than other commodity groups. While not a part of this study there are indications that the potential net returns to members of fruit and vegetable cooperatives can exceed those of most other commodity groups.

### Expected Growth

The production of fruits and vegetables is expanding in Oregon. There are also indications that consumers are buying more highly

processed foods, and this may require the food processing firms to add new products and modify their existing products. More processing, packaging, and handling equipment may be needed to enable the processing firms to satisfy the customers' requirements.

It has previously been shown that processing fruits, vegetables, and nuts requires more capital per dollar of grower volume than other types of associations. Producing more highly processed foods may in the future increase the capital requirement.<sup>16</sup> The increased volume of fruits, vegetables, and nuts and the possibly greater capital requirements for equipment is likely to increase the need for additional capital among the cooperatives of this group.

The potential market will be increasing for most supply cooperatives; however, severe competition will be present in most areas. The future increases in volume may not come from serving more members but from offering a more complete line of services to the existing members. The increased use of more equipment and new and improved practices will not only increase the need for petroleum and chemical products but may also open new opportunities in repair services and technical consultation.

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<sup>16</sup> Increased capital needs of new equipment may be offset by greater utilization of existing facilities. The present facilities in some cooperatives are capable of increased volume with no additional facilities needed.

Not all farm supply cooperatives will have equal opportunities to expand. The areas which some cooperatives serve have stable or declining agricultural production, and there may be only limited opportunities to expand their services. Firms in this situation may have only limited needs for growth capital.

The volume of milk produced in Oregon is decreasing. Therefore, it may be difficult for Oregon dairy cooperatives to expand their milk marketing operations. Mergers between cooperatives could produce larger units, but the combined milk volume of all cooperatives will probably be lower in the future. Extending their operations into different areas is a possibility, and some cooperatives have gone into feed manufacture and sales. However, milk processing is a very specialized operation, and it may be very difficult to combine any other activity with the dairy marketing firm. The need for additional capital for growth in most dairy cooperatives may be limited. Of course, more efficient equipment and new procedures may be introduced into the firm. Bulk handling of producers' milk is an example of this type of change.

Dairy cooperatives extend large amounts of credit to their customers; if the strong competition continues between the dairy processing firms, this extension of credit will probably be maintained. It is believed that the capital needs for Oregon dairy cooperatives will remain stable.

Under current marketing conditions the grain and seed cooperatives rapidly move the marketing inventories from the local elevator to other points. With these current practices the existing physical facilities of most cooperatives will be adequate for handling the expected volumes of grain and seed. The handling operations of this cooperative should not require large new investments of capital. However, the increased emphasis on farm supply sales of some cooperatives in this group may require additional capital for new facilities and sales inventories. The amount of needed capital will depend upon the amount of adjustment toward farm supply sales and added services these cooperatives decide to add to their activities.

Government programs are an important factor in the type and amount of grain produced and in the amount and location of grain storage. Changes in government programs could significantly alter the operations and capital needs of the grain and seed cooperatives. Under present government programs and with a trend toward more services offered by grain and seed cooperatives, the capital requirements of this group will increase moderately.

The growth of Oregon cooperatives appears likely to continue in the future, but not all types of cooperatives will share evenly in this growth. The most promising opportunities appear to be in fruit and vegetable marketing and in farm supply sales. Favorable general trends of growth will not guarantee automatic growth to the

individual association. A general expansion of the total economy or of the agricultural sector will make increased growth easier to obtain, but the ability of the cooperative's management and the support of its patrons will decide the future growth of the individual cooperative.

### Sources of Capital

#### Retained Funds

Previously it has been shown that most equity capital of Oregon cooperatives has been accumulated from retained funds, which are retained earnings and/or marketing retains. Future reliance on internally retained funds for expansion will depend on the level of marketing retains and retained earnings which the cooperatives are able to maintain. The percent of total earnings and retains of each group is shown in Table 20. From the total amount of earnings and retains, dividends on capital must be paid, previously retained funds may be redeemed, and a cash refund may be made. The remainder, if any, could be used for capital expansion.

These values indicate that some problems may be encountered by cooperatives using a normal revolving fund. If it is assumed that all equity credits of given firm are contained in the revolving fund, with a 9.00 percent level of earnings the cooperative would have a

revolving fund of slightly over 11 years. The above example does not consider the required 20 percent cash refund which would further extend the length of the revolving fund. With lower levels of earnings the length would increase further, and when the cooperatives attempt to accumulate additional equity capital, the fund will again be lengthened. As the revolving funds increase in length, the cooperative member will discount the value of his equity credits. Alternative methods of financing which would supplement the revolving fund may be of great value.

Table 20. Total earnings and marketing retains divided by member equity capital, Oregon cooperatives, 1963.

Group	Percent
Farm supply	8.81
Grain and seed	8.97
Fruit, vegetable, and nut	7.77
Dairy	6.41
Other	-4.44
Regional	6.84

Federal regulations require 20 percent of the current year's earnings to be returned to the cooperative member. Some local cooperatives have established procedures which return more than the required amount. Ten of the 28 farm supply cooperatives

returned more than 20 percent of the current year's earning to their patrons. In the other groups, however, only the required amount was usually returned.

The grain and seed cooperatives had the highest percent of earnings of any group. In the past, revenue from government storage was an important source of income for this group. However, government programs have changed, and this revenue from government storage will be largely eliminated. The group of "other" cooperatives includes only three firms. The large losses of one firm is the main cause of the negative earnings of this group.

Table 21 reports the net margin of sales of the different types of associations. These margins vary greatly within each group. In the farm supply group one firm reported a net margin of over ten percent, and several other firms reported negative margins. In the grain and seed groups 7.6 percent was the highest margin, and a negative margin of 1.5 percent was the lowest. The cooperatives in the fruit, vegetable, and nut group had the lowest amount of variation within their group. Many associations in this group operate marketing pools, and a certain proportion of the grower's product was retained by the cooperative for its capital needs.<sup>17</sup> This

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<sup>17</sup> The board of directors usually established this proportion within the ranges established in the cooperative's by-laws.

procedure gives the cooperative more direct control over the amount of the remained funds and helps account for the lower amount of variation in the level of retained funds. The dairy cooperatives' net sales margins ranged from a high of over six percent to one firm that reported a small loss.

Table 21. Total earning and marketing retains divided by total volume of Oregon cooperatives, 1963.

Group	Percent
Farm supply	3.51
Grain and seed	1.69
Fruit, vegetable, and nut	2.54
Dairy	1.94
Others	-1.22
Regionals	1.30

The level of earnings and marketing retains cannot be used as the only method of measuring the efficiency of a cooperative. The benefits of an efficient cooperative could be transmitted to the member through lower prices for farm supplies, higher prices for farm products sold, or greater services rendered to the member. The level of earnings and retains does, however, indicate the amount of funds which normally can be generated internally by the cooperative.

### Borrowed Funds

Borrowed funds were used by 57 of the local cooperatives and by all four of the regional cooperatives. Some associations needed only seasonal loans; others borrowed only to support planned expansion projects. Some cooperatives included borrowed funds as a permanent part of their capital structure, other associations did not use borrowed funds at all. The role of borrowed funds in an individual cooperative depends upon the type of firm, other sources of capital, rate of growth, and the attitude of the cooperative's management and members. The number of cooperatives which use different combinations of types of borrowed funds is shown in Table 22.

Table 22. Number of Oregon cooperatives which used various combinations of short and long-term borrowing, 1963.

Groups	Only short-term	Only long-term	Both short and long-term	No borrowed funds
	----- Number -----			
Farm supply	3	7	10	8
Grain and seed	4	6	4	2
Fruit, vegetable and nut	2	1	10	-
Dairy	-	1	6	9
Others	-	-	3	-
Total of local cooperatives	9	15	33	19
Regionals	1	-	3	-

Nine of the dairy cooperatives and eight of the farm supply

cooperatives had no borrowed funds in their operations. Most of the dairy cooperatives which did not borrow funds had small volumes and sold their products to another firm for distribution. Therefore, no large inventories or large accounts receivable balances were maintained by these firms. Only equity capital was used to finance these cooperatives.

The managers and financial officers of some cooperatives believed that their cooperatives should try to reduce their borrowing as much as possible. Individual managers in other types of cooperatives also expressed this view, but it was more common in the farm supply group. These managers believed that members would have greater loyalty to their cooperative if the members had a large investment in their cooperative. Saving the interest expense was also cited as a benefit of being free from debt. This resistance of some cooperatives to borrowed funds may be explained by their success at retaining internal funds and the availability of credit from the regional supply cooperative and other suppliers.

Interest rates. There appeared to be important differences between the short-term interest rates of the Bank for Cooperatives and of the commercial banks. The adjusted interest rate of the Bank for Cooperatives was 5.14 percent and the average rate for

the commercial banks was 5.60 percent.<sup>18</sup> The Bank for Cooperatives has a standard interest rate which applies to all cooperatives which qualify. Commercial banks charge varying rates of interest depending upon the size of loan, how capital may be employed, and the risks involved.

The Bank for Cooperatives supplied almost 92 percent of the total short-term credit of the local cooperatives. The lower interest rate is one of the probable reasons for this large proportion of total short-term loans. However, the farm supply groups received almost 85 percent of its long-term loans from commercial banks, and the average interest rate on these loans was 6.03 percent. It appears that some interest savings could be achieved in this group if the source of short-term loans was shifted to the Bank for Cooperatives. However, it must be realized that not all short-term borrowers may qualify for loans with the Bank for Cooperatives. Loans secured by farm equipment contracts payable may be examples of loans that might not qualify. The fruit, vegetable, and nut group and the grain and seed group needed large amounts of short-term capital. The low interest rate of the Bank for Cooperatives was beneficial to these groups and probably accounts for

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<sup>18</sup> The short-term interest rate of the Bank for Cooperatives was 4.75 percent. The required stock purchase represented .717 percent of the total loan. It was assumed that the present value of the stock was one-half the cash value. Therefore, the adjusted interest rate was considered to be 5.14 percent.

the high percentages of these groups' loans with the Bank for Cooperatives.

Table 13 shows the average interest rates for the various sources of long-term borrowed funds. If the adjusted interest rate of the Bank for Cooperatives is used and if the current interest rate of the certificates of indebtedness is used, the range of long-term interest rates is .38 percent between the highest and the lowest. This small range seemed to indicate that the interest rates of all sources of long-term credit are about the same.

Sources. It is important for a borrowing firm to develop and maintain a close working relationship with its lender. If the lender understands the problems which the firm confronts, it may be easier to obtain borrowed funds when they are needed. To develop this understanding, it is often considered necessary to obtain both long and short-term loans from the same source. Using one source of credit also simplified the collateral arrangements of the loans.

It could be suggested that the short-term interest rate of the Bank for Cooperatives attracted many marketing firms to this loan source, and that the source of the short-term loans tended to also dictate the source of long-term credit. Most firms that require large amounts of short-term credit were borrowing from the Bank for Cooperatives. These firms also tended to use the Bank for Cooperatives for their long-term credit needs.

The actions of the regional cooperatives do, however, conflict with the above observation. The Bank for Cooperatives supplied most of the long-term credit for the regional group, but commercial banks supplied all of the short-term loans. Several reasons can be offered for the different borrowing behavior of this group. The regional grain cooperative borrowed the largest amount of short-term credit, and these loans were secured by grain in certified storage. These loans were large, for short periods, and practically free from risk. Under these special conditions commercial banks offered a short-term interest rate lower than the Bank for Cooperatives. The regional farm supply cooperative also received a lower rate of interest from commercial banks than the rate these banks offered to smaller local cooperatives. The policies of the Bank for Cooperatives do not make it possible to offer different rates to regionals than is offered to local cooperatives.

Certificates of investment were a valuable source of borrowed funds for some cooperatives. Sale of certificates provides a way to raise new funds for expansion projects. Member financial support and involvement can be gained from this type of financing. Any cooperative which considers this type of financing must critically evaluate its operations and the confidence its members have in it. Member confidence would be an important factor in determining the success of a certificate issue. This type of financing is probably not

applicable to all firms.

In the survey of Oregon cooperatives the managers were asked, "Have you changed sources of borrowed credit in the last five years?" The reasons for the changes in sources of borrowed capital were also noted. Thirteen cooperatives reported changes in loan sources. These reasons are summarized in the following table.

Table 23. Reasons given by Oregon cooperatives for changes in sources of borrowed funds, 1963.

Reason	Number of Times Reason was given
Lower interest rate	6
Larger loan capacity	4
More reliable source of funds	2
Less restrictions	<u>1</u>
Total	13

Lower interest rates were the most common reason for changing sources. Cooperatives borrowing from individuals and small local banks were forced in four situations to choose a loan source which was able to loan larger amounts. Two cooperatives who had been borrowing from private individuals chose bank sources because of more readily available funds. One firm changed from a bank source to a private source because of fewer restrictions.

Minimum account balances. Loan agreements with banks may expect or require a minimum account balance to be maintained by

its borrowers (5, p. 575-576). Several cooperatives which handled farm equipment lines were required to maintain a deposit equal to ten percent of all equipment loans. These dealer reserves were designed to protect the bank's loans. These equipment loans were the only type of loan which reported any loan conditions similar to minimum account balances.

The Bank for Cooperatives was the principal source of loans for Oregon cooperatives. This bank does not handle accounts; therefore, minimum account balances would not be an applicable loan condition. Cagle reports that minimum balances are less common in the West and are often not required of small borrowers (5, p. 575-579). Most of the cooperatives which used bank credit would be classified as small firms. The size of the borrower, the large amount of loans with the Bank for Cooperatives, and the banking procedures common to the West are offered as explanations for the absence of the minimum account balances requirements in the loan conditions of Oregon cooperatives.

Future needs. The fruit, vegetable, and nut cooperatives may very likely have the greatest need for capital in the future. The level of retained funds which this group has is lower than the grain and seed group and the farm supply group. If their volumes do increase rapidly, increased long term borrowed funds may become necessary. Short-term financing will continue to be very important in the

financing of the product inventories. With increased volume of producers' marketing, the role of borrowed funds may become more important in the future.

The capital needs of dairy cooperatives may tend to remain about constant. With current levels of earnings some of these firms will probably be able to maintain their current revolving periods and be able to reduce their long-term borrowings. Short-term borrowing is estimated to remain constant.

Farm supply cooperatives are located in all parts of the state. Some cooperatives are located in areas which have limited opportunities for expansion. These firms will have limited capital needs and limited needs for more borrowed funds. Other farm supply firms will have opportunities to expand their volume and increase their services offered. Increased capital will be needed by these firms. The regional supply cooperative has been active in offering long and short-term credit, and recent policy statements of one regional indicates that this policy will continue. Cooperatives which are closely affiliated with the regional may obtain large amounts of credit from this source. Other cooperatives in this group have been successful in the sale of certificates of indebtedness and plan to continue to use this source. It is estimated that borrowed funds will increase in importance, but most of the increase will be from non-bank sources.

Capital needs in the grain and seed marketing cooperations may be limited. The amount of capital needed by this group will depend upon the amount of adjustment in different areas, particularly toward farm supply and service, made by this group. The need for borrowed funds will be influenced by the level of retained earnings that is maintained.

In summary, it is estimated that short-term borrowing may increase in importance in Oregon cooperatives due mainly to the influence of the fruit, vegetable and nut group. The need for long-term borrowed funds will depend to some extent on the amount of adjustment Oregon cooperatives make in products and services offered their members. Rapid adjustment will require additional borrowed funds.

#### Member Financing

Cooperatives should be very sensitive to the credit needs of their patrons. Credit problems which limit the members' production will eventually affect the volume of the cooperative. Lack of adequate capital by the member will make it more difficult to finance the cooperative. Among the farm supply cooperatives the managers were very concerned about the increase in accounts receivable. They realized that failure to extend credit might lose members for the cooperative, but offering more credit would greatly increase the

cooperative's need for capital. In Oregon's supply cooperatives, credit extended to members has grown proportionally faster than sales (15, p. 3).

No simple answer is possible to solve the problem. A credit policy which reflects the cost of extending credit would be equitable to all members. Discounts for prompt payment and interest charges on credit over a certain length of time are used in some associations. More associations might consider adopting these policies. Assisting members in utilizing other available sources of credit may be a partial answer. Members' investments in agricultural cooperatives is an acceptable use for production credit and federal land bank loans (19, p. 17). Informing members of this possibility or helping members obtain loans from the local bank are possible ways which may help the member and may lessen the pressure for increased credit from the cooperative.

Most fruit, vegetable, and nut cooperatives pool the products of all their growers, and when the entire pool is sold, each grower receives his share. Often partial payment is made at the time of delivery, but the final payment will be delayed until the pool is closed. This method of payment has been a simple and equitable way for growers to help finance their cooperative. Established growers have adjusted their operations to compensate for these delayed payments. However, an individual grower who is faced

with an immediate need for funds may find that the simplest method is to market his products through a non-cooperative firm which offers a cash price for his product on delivery. This grower may be willing to forego a possible higher total return with the cooperative and may choose, therefore, to market his product with the non-cooperative firm.

One cooperative owns its own finance corporation and is able to help with its members' credit problems in this way. Other cooperatives are paying a higher proportion of the total value at delivery. All cooperatives should be aware of the way this delayed payment affects their patrons' decision to use or not use the cooperative. It may be advantageous to the fruit, vegetable, and nut cooperatives which use the delayed method of payment to consider direct or indirect methods of extending credit to growers who need it.

## CHAPTER V

SUMMARY AND CONCLUSIONS

In Oregon agricultural cooperatives perform an important part of the marketing of agricultural products and the distribution of production supplies and equipment. In this study 76 local cooperatives reported a total volume of \$181,727,644 in 1963. Farm supply sales were 23.5 percent of the total volume, and the marketing of agriculture products represents the other 76.5 percent. Four regional cooperatives were located in Oregon and had a total volume of \$94,112,365. However, most of the volume of the regional cooperatives was with cooperatives outside the state of Oregon. Oregon's local cooperatives had total assets valued at \$101,539,370 and the regionals had assets of \$30,362,163.

The amount of members' equity varied among the different types of cooperatives. The farm supply group had the highest percent equity, 67 percent. The fruit, vegetable, and nut group had the lowest, 39 percent. The average member equity of all local cooperatives was 52 percent of all liabilities and equities, but only a small portion of the equity capital was invested directly by the members. Cash investments by the members accounted for only five percent of member equity in the local cooperatives; the

remainder was accumulated through retained earnings and marketing retains. The local cooperatives paid dividends on less than one-fifth of their equity capital. Revolving funds credits accounted for the largest portion of interest-bearing capital. In general, it can be stated that Oregon cooperatives are gradually dropping the practice of paying dividends on their revolving funds.

Oregon cooperatives obtained funds from their members in still two other ways. Certificates of indebtedness were sold by some cooperatives to their members, and marketing associations often withheld the final payment to the grower until the processed products were sold. When the amount of certificates of indebtedness and the accounts due to the grower are added to members' equity, all types of local cooperatives have roughly equivalent financial support from their members.

Short-term borrowed funds were important to Oregon cooperatives particularly to the grain and seed marketing and fruit, vegetable, and nut marketing associations. Large marketing inventories were accumulated in these associations and short-term loans were used to finance these inventories. The summations of the reported peaks and low points of short-term bank loans gave a range from a low of \$6,818,000 to a high of \$27,781,000 for the local cooperatives. The Bank for Cooperatives supplied over 90 percent of the total short-term loans. The average interest rate on Bank

for Cooperatives loans was 4.78 percent plus a required stock purchase. The average interest rate on commercial bank short-term loans was 5.60 percent.

The total amount of long-term debt was \$11,884,320 and this was 11.7 percent of total equities and liabilities of the local cooperatives. When an allowance was made for the required stock purchase of the Bank for Cooperatives and the interest rate of recently issued certificates of indebtedness was considered, there appeared to be no important difference in the long term interest rates of the various sources.

The fruit, vegetable and nut cooperatives required the largest amount of capital per dollar of member volume handled. This indicated that members of fruit, vegetable, and nut cooperatives would be required to supply proportionately more capital than the other groups. However, there are indications that the returns from these cooperatives may very likely justify the capital requirements.

The adjustment which Oregon cooperatives will make in offering new products and services was considered to be an important factor in the future need for capital. Increased grower marketing was estimated to increase the need for capital in the fruit, vegetable, and nut group, but in the other groups the ability of the cooperatives to perform new services for their members was considered to be the determinant of the future role of borrowed capital.

The farm supply cooperatives' principal source of long-term credit was their suppliers, and they received most short-term loans from commercial banks. The Bank for Cooperatives was the principal source of both long and short-term borrowed funds for the grain and seed and the fruit, vegetable, and nut cooperatives. The dairy cooperatives and the regional cooperatives made use of both the Bank for Cooperatives and commercial banks for their credit needs.

The total capital needs of Oregon cooperatives will likely steadily increase in the future. However, current federal regulations which require partial return of the current earnings to the patrons and the general trend towards smaller earning margins indicated that the level of internally generated funds may be reduced or at least remain fairly constant in the future. Many cooperatives have lengthened their revolving funds. Further lengthening of the revolving fund in the future may cause inequities to long time members and cause others to lose confidence in the financial strength of the cooperative.

The increased capital needs combined with possibly lower amounts of internally generated capital indicate a more important role for borrowed funds among Oregon cooperatives. It is estimated that short-term borrowings may increase due mainly to the influence of the fruit, vegetable, and nut cooperatives. The need for

long-term borrowed funds will depend to some extent on the amount of adjustment Oregon cooperatives make in products and services offered their members. Rapid adjustment will require additional borrowed funds.

The unique owner-patron relationship of the member and the cooperative gives special importance to the credit and payment policies of the cooperative. Managers and directors of cooperatives should understand how these policies influence their members' operations and prospective members' attitude toward joining the cooperative.

Some cooperatives have placed strong emphasis on being debt free and have expressed pride in the high proportion of members' equity achieved by their association. Firms faced with declining volume or extreme uncertainty would be justified in avoiding the use of borrowed funds, but established firms may unduly limit their operations by relying only on member capital for financing their association.

Some Oregon cooperatives have made liberal use of long-term borrowed funds, but prudent use of borrowed funds could be of value to additional associations. Productive enterprises should not be delayed or abandoned simply because insufficient member capital is not available for completely financing the project. Using borrowed funds for projects which promise to repay the capital

invested in them over time can increase the benefits and services offered to cooperative members.

The use of borrowed funds cannot, of course, be increased indefinitely. Member equity must always form the foundation of the firm's capital structure. Capital structures which place fair capital requirements on members and make liberal but wise use of borrowed funds when needed will better enable Oregon cooperatives to meet the challenges and opportunities of the future.

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## APPENDICES

## APPENDIX A - THE SURVEY QUESTIONNAIRE

ROLE OF BORROWED FUNDS IN  
CAPITAL STRUCTURE OF OREGON FARMER COOPERATIVES

Name and address of cooperative: \_\_\_\_\_

Name of manager: \_\_\_\_\_

1. Summary of how capital is employed in the business  
(Breakdown of assets--most recent balance sheet).

Information from \_\_\_\_\_ end of year.

a. Cash on hand	\$	
b. Accounts receivable		
c. Inventory		
d. Land, plant, equipment		
e. Investments in other Coops		
f. Other		
TOTAL	\$	

2. Sources of capital (liabilities + equity capital)

a. Total current liabilities		\$ _____
(1) Bank borrowings	\$	
(2) Trade accounts payable		
(3) Pool accounts payable		
(4) Other		
b. Total term indebtedness		\$ _____
(1) _____	\$	
Name of lender	Amount	

(2) \_\_\_\_\_ \$ \_\_\_\_\_  
 Name of lender Amount

(3) \_\_\_\_\_ \$ \_\_\_\_\_  
 Name of lender Amount

c. Total equity capital \$ \_\_\_\_\_

(1) Invested capital:

(a) Common stock\* \$ \_\_\_\_\_

(b) Preferred stock\* \_\_\_\_\_

(c) Certificates\* \_\_\_\_\_

(d) Membership fee\* \_\_\_\_\_

(e) Other \_\_\_\_\_

(2) Retained earnings (or net proceeds),  
 allocated and revolved:

(a) Book credits \_\_\_\_\_

(b) Certificates \_\_\_\_\_

(c) Common stock \_\_\_\_\_

(d) Preferred stock \_\_\_\_\_

(e) Membership fee \_\_\_\_\_

(f) Other \_\_\_\_\_

(3) Reserves or surplus (not allocated,  
 not revolved): \_\_\_\_\_

---

\* Not all common stock, preferred stock and certificates of equity capital arise from invested capital. Some retained earnings (or net proceeds) are evidenced by common stock, preferred stock and/or certificates of equity.

3. Dollar volume of business \$ \_\_\_\_\_ 1 year \_\_\_\_\_

a. Product mix--supplies

- (1) Petroleum products, \_\_\_\_\_ of dollar volume  
 (2) Fertilizer and chemicals, \_\_\_\_\_ of dollar volume  
 (3) Small equipment and hardware \_\_\_\_\_ of dollar volume  
 (4) Tires, batteries, accessories, \_\_\_\_\_ of dollar volume  
 (5) Farm machinery \_\_\_\_\_ of dollar volume  
 (6) Feed, \_\_\_\_\_ of dollar volume  
 (7) Service, \_\_\_\_\_ of dollar volume  
 (8) Other, \_\_\_\_\_ of dollar volume

b. Product mix--marketing: (Indicate fresh or processed)

- (1) (Name) \_\_\_\_\_ of dollar volume  
 (2) \_\_\_\_\_ of dollar volume  
 (3) \_\_\_\_\_ of dollar volume  
 (4) \_\_\_\_\_ of dollar volume  
 (5) (All other) \_\_\_\_\_ of dollar volume

4. Sources of borrowed capital, interest cost, terms, and loan conditions:

a. Long term (over 18 months) Short term:  
 (Show each loan separately)

		<u>Low point</u>	<u>Peak</u>
Amount due	\$ _____	\$ _____	\$ _____
Source(name)	_____	(name) _____	_____
Interest rate	% _____	% _____	_____

Interest cost % \_\_\_\_\_ % \_\_\_\_\_

Repayment terms \_\_\_\_\_

(Monthly, quarterly, annual, etc.)

Loan conditions:

(1) Acct. balances \_\_\_\_\_  
(Specify minimum % or \$)

(2) Minimum inventory \_\_\_\_\_  
(Specify amount and %)

(3) Other \_\_\_\_\_ Specify \_\_\_\_\_

(4) Other \_\_\_\_\_ Specify \_\_\_\_\_

b. Long term (over 18 months): Short term:  
(Show each loan separately)

		<u>Low point</u>	<u>Peak</u>
Amount	\$ _____	\$ _____	\$ _____

Source (Name) \_\_\_\_\_ (Name) \_\_\_\_\_

Interest rate % \_\_\_\_\_ % \_\_\_\_\_

Interest cost % \_\_\_\_\_ % \_\_\_\_\_

Repayment terms \_\_\_\_\_  
(Monthly, quarterly, annual, etc.)

Loan conditions:

(1) Acct. balances \_\_\_\_\_  
(Specify minimum % or \$)

(2) Minimum inventory \_\_\_\_\_  
(Specify amount and %)

(3) Other \_\_\_\_\_ Specify \_\_\_\_\_

(4) Other \_\_\_\_\_ Specify \_\_\_\_\_

c. (If other loans, show in detail on back of schedule)

5. Interest and dividends paid members for capital.
- a. Gross amount. \$ \_\_\_\_\_ in \_\_\_\_\_ (years)
  - b. (1) Rate paid on common stock \_\_\_\_\_ %
  - (2) Rate paid on preferred stock \_\_\_\_\_ %
  - (3) Rate paid on certificates of equity  
(not revolved) \_\_\_\_\_ %
  - (4) Rate paid on revolving fund equities \_\_\_\_\_ %
6. a. Net margin for distribution to members, \$ \_\_\_\_\_  
\_\_\_\_\_ (year).
- b. Amount of above paid in cash to members. \$ \_\_\_\_\_
  - c. Average net margin available for distribution to members  
for last 5 years \$ \_\_\_\_\_.
  - d. Were there any losses during that last 5 years, \_\_\_\_\_  
number
7. a. Are you affiliated with a regional cooperative? Yes \_\_\_ No \_\_\_
- b. If yes, name of regional \_\_\_\_\_
8. Managers views concerning role of borrowed capital.
- a. What proportion of capital structure should consist of  
borrowed capital? \_\_\_\_\_ % Why? \_\_\_\_\_
  - b. In what ways are lenders' policies too restrictive?
  - c. In what ways may lenders' policies be too lenient?
  - d. Have you changed sources of borrowed capital in last  
5 years? \_\_\_\_\_ Why? \_\_\_\_\_
  - e. Where do you expect to be in 10 years with respect to your  
capital structure in terms of borrowed versus equity capital?

## APPENDIX B

Table 24. Calculated t-values of the comparison between the product mix of the 14 largest and 14 smallest local farm supply cooperatives, Oregon, 1963.

Product	t-value
Petroleum	-.2476
Fertilizer	-.7248
Small equipment and hardware	-.7730
Tires, batteries and accessories	-.1264
Feed	3.0014*
Services	1.0347
Other	-.1613
Marketing	7.2425*
Farm machinery	-.3325

\*Significant at 99 percent confidence level.

APPENDIX B

Table 25. Amounts and percentage of total liabilities represented by equity capital, pool accounts payable, certificates of indebtedness, and total member financial support of groups of Oregon cooperatives, 1963.

	Equity Capital		Pool Accounts Payable		Certificates of Investment		Total Member Financial Support <sup>1/</sup>	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Farm supply	8,032,514	67.0	220,289	1.8	566,774	4.7	8,819,577	73.5
Grain and seed	9,958,443	55.6	219,687	2.3	2,130,801	11.9	12,308,931	68.8
Fruit, vegetable, and nut	17,716,075	39.3	10,049,636	23.3	377,624	.9	28,143,335	62.5
Dairy	14,246,774	65.7	1,745,376	8.1	21,660	.1	16,013,810	73.9
Other	2,847,777	57.9	214,526	4.4	--	--	3,062,303	62.3
Total of locals	52,801,583	52.0	12,449,514	12.3	3,096,859	3.0	68,347,956	67.3
Regionals	17,936,413	58.9	385,865	1.3	733,000	2.4	19,055,278	62.6

<sup>1/</sup> Total member financial support includes equity capital, pool accounts payable, and certificates of investment.

## APPENDIX C

Table 26. Combined balance sheet of 28 Oregon farm supply cooperatives, 1963.<sup>1/</sup>

Assets	
Cash	\$ 827,635
Accounts and notes receivable	2,979,203
Inventory	2,699,872
Fixed assets	2,596,700
Investments in other cooperatives	2,644,035
Other assets	<u>251,029</u>
Total	<u><u>\$11,998,474</u></u>
Liabilities and Equity	
Current liabilities:	
Bank borrowings	\$ 397,403
Trade accounts payable	1,611,048
Pool accounts payable	220,289
Other	<u>251,768</u>
Total current liabilities	\$ 2,480,508
Total term liabilities	1,485,452
Total equity	<u>8,032,514</u>
Total liabilities and equity	<u><u>\$11,998,474</u></u>

<sup>1/</sup> Some farm supply cooperatives had fiscal years ending in 1964.

## APPENDIX C

Table 27. Combined balance sheet of 16 Oregon grain and seed marketing cooperatives, 1963. <sup>1/</sup>

Assets	
Cash	\$ 1,196,928
Accounts and notes receivable	3,765,662
Inventory	2,709,000
Fixed assets	7,832,933
Investments in other cooperatives	1,956,937
Other assets	<u>427,250</u>
Total assets	<u>\$17,888,710</u>
Liabilities and Equity	
Current liabilities:	
Bank borrowings	\$ 1,599,392
Trade accounts	1,656,951
Pool accounts payable	219,687
Other	<u>471,140</u>
Total current liabilities	\$ 3,947,170
Total term liabilities	3,983,097
Total equity	<u>9,958,443</u>
Total liabilities and equity	<u>\$17,888,710</u>

<sup>1/</sup> The grain and seed marketing cooperatives ended their accounting periods in April, May, or June. The grain and seed inventories are at their lowest point at this time of year.

## APPENDIX C

Table 28. Combined balance sheet of 13 Oregon fruit, vegetable, and nut marketing cooperatives, 1963.<sup>1/</sup>

Assets	
Cash	\$ 1,045,567
Accounts and notes receivable	4,554,963
Inventories	20,975,977
Fixed assets	14,665,344
Investments in other cooperatives	2,611,420
Other assets	<u>1,206,261</u>
Total assets	<u>\$45,059,532</u>
Liabilities and Equity	
Current liabilities:	
Bank borrowings	\$11,915,028
Trade accounts	1,246,741
Pool accounts payable	10,049,636
Other	<u>884,772</u>
Total current liabilities	\$24,096,177
Total term liabilities	3,247,280
Total equity	<u>17,716,075</u>
Total liabilities and equity	<u>\$45,059,532</u>

<sup>1/</sup> Most fruit, vegetable, and nut cooperatives ended their accounting periods in March or April.

## APPENDIX C

Table 29. Combined balance sheet of 16 Oregon dairy marketing cooperatives, 1963.

Assets	
Cash	\$ 1,217,691
Accounts and notes receivable	6,731,982
Inventories	1,599,407
Fixed assets	8,768,198
Investments in other cooperatives	2,778,240
Other assets	<u>579,702</u>
Total assets	<u>\$21,675,220</u>
Liabilities and Equity	
Current liabilities:	
Bank borrowings	\$ 1,075,328
Trade accounts payable	1,843,487
Pool accounts payable	1,745,376
Other	<u>514,551</u>
Total current liabilities	\$ 5,178,742
Total term liabilities	2,249,704
Total equity	<u>14,246,774</u>
Total liabilities and equity	<u>\$21,675,220</u>