AN ANALYSIS OF THE FINANCIAL OPERATIONS AND ORGANIZATIONAL CHARACTERISTICS OF FOUR CO-OPERATIVE CREAMERIES IN MANITOBA

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ABSTRACT

Although co-operative marketing activities have continued to expand in Manitoba only limited information is available concerning the co-operative and financial characteristics of many of the local type co-operatives. The purpose of this study was to delve into the operations of four local co-operative creameries and outline their co-operative and financial characteristics. Consideration was given to the presence or absence of co-operative principles and business standards which are considered essential for success.

Chapters II to V contain a review of co-operative development, laws and principles, an outline of creamery marketing functions and a description of the procedures followed in the analysis. The four co-operatives are outlined in chapters VI to IX. In the review of each co-operative consideration was given to special By-laws, type and financial results of operations, financial structure, equity accumulation and membership relations and support.

It was observed that differences existed among the four co-operatives in the application of basic co-operative principles and in the degree of financial success of operations. Differences were attributed to the age of the co-operative, to variation in the experience of managers and directors in handling co-operative organizations, to variations in the characteristics of districts and to the type and volume of production. Three of the four co-operatives paid interest on outstanding share capital with one paying as high as seven per cent during some years. Most of the net margin from operations was allocated on the basis of patronage although

some inequities were observed in the method of allocation. Three of the creameries retained most of the dividends while the fourth paid out the dividends as a cash bonus. The latter had a much lower rate of equity accumulation which tended to restrict expansion of operations over that possible at the other three plants. The revolving surplus funds or retained dividends provided a more equitable but less stable source of funds than outstanding share capital and reserves. Considerable variation was observed in the placement of the retained dividends on the financial statements which suggested disagreement as to the proper legal status of these funds. It was observed that special legislation and by-laws were necessary to rectify this situation to give the financial structure of the co-operatives increased soundness.

Non-active members and non-member patrons were more of a problem at the older co-operatives. The oldest co-operative resembled more closely the corporate financial structure. Variation existed in the amount of co-operative education supported among the four co-operatives although none of the programs appeared sufficient for adequate public relations and co-operative education among members. Considerable variation occurred in the financial success of operations among co-operatives and among years at each co-operative which resulted in a similar variation in the level of dividends declared on patronage. As many of the variations in co-operative principles, accounting procedures and terminology resulted from the lack of adequate co-operative education and advisory services, it was recommended that a central auditing and statistical service be established to provide service and information to local type co-operatives in Manitoba.

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CHAPTER I

INTRODUCTION

Manitoba farmers have always been concerned about the marketing of their products. The existence of farmer owned co-operative marketing associations is indicative of their dissatisfaction with past marketing conditions and their desire to insure proper handling of their products. At the outset many of these organizations were loosely formed but following the turn of the century there was a general trend towards more formal types of co-operative marketing associations. These operated in competition with other marketing organizations, first at the local level and eventually in the central market. The competitive position of these co-operative marketing associations has made possible the introduction of standardized forms of marketing which tended to reduce marketing margins. This has resulted in higher returns and improved service to farmers. At the same time, the formation of marketing co-operatives has provided many farmers with the opportunity to become acquainted with the problems inherent in the marketing of farm produce.

Over the years there has been a gradual increase in the number of marketing co-operatives in the province. In 1951 they handled about $102,000,000[1] of farm produce which represented about 38 per cent[2] of the

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[1]Co-operatives in Manitoba, Third Annual Report, (The Co-operative Services Branch, Manitoba Department of Agriculture, Winnipeg, December 1951), p. 14.

[2]D.B.S. 1951 (Calculated on the basis of the Revised Estimate of Farm Cash income from the Sale of Farm Produce).

total sale of farm produce during that year. As a consequence, problems associated with co-operative marketing are of direct interest to a large number of farmers in the province.

The importance of the various types of produce handled by the co-operatives is indicated by the fact that, of the $102,000,000 mentioned above, about 83 per cent was from grain and seed sales, eight per cent from livestock sales and five per cent from the sale of dairy produce.[3] The grain co-operatives, by the nature of the type of agricultural production, have long held the leadership among the co-operatives in Manitoba.

Despite the fact that the value of dairy produce only represented five per cent of the total produce handled by marketing co-operatives, about 30,000 Manitoba farmers sold dairy produce during 1950.[4] This meant that creameries played an important part in the processing and marketing of farm produce for about three-fifths of the farmers in the province. Dairy co-operatives handled about $4,705,000[5] worth of dairy produce in 1951 which represented about 24 per cent of the total farm income from the sale of dairy produce during that year.[6] In addition to this, about 70 to 80 per cent of the fluid milk produced in the Winnipeg

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[3] Co-operatives in Manitoba, Loc. cit.

[4] Census of Canada, 1951.

[5] Co-operatives in Manitoba, Loc. cit.

[6] D.B.S. (Revised Estimate of Farm Cash Income 1951.).

milk shed was sold under contracts between the Winnipeg Milk Producers Co-operative Association and the milk distributors in Winnipeg.[7]

Although co-operative creameries and cheese factories were reported to be among the first marketing co-operatives in Canada[8] this could not be verified for Manitoba due to the lack of adequate records. It is reported[9] that many creameries and cheese factories were started around 1885 and later, although many were soon closed due to lack of volume and transportation difficulties. It is considered likely that a number of these were co-operatives[10] for most of the settlers were from Eastern Canada and United States where co-operative creameries were known to be in existance. Regardless of the original activities, co-operative creameries have remained as a minority among creameries in Manitoba. This resulted partly from the fact that the farmers were most concerned about grain sales and partly from the fact that in 1886 the Manitoba Dairy Association[11] was formed as a promotional type of organization directly concerned with the general welfare of the dairy industry. Another factor which may have reduced the need for farmers to actively support co-

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[7] Co-operatives of Manitoba, op. cit., p. 6.

[8] The Report of the Royal Commission on Co-operatives, (Ottawa, Kings Printer, 1945), p. 15.

[9] Fifty Years of Dairying in Manitoba, (Published by The Manitoba Dairy Association, Winnipeg, Manitoba, January, 1935), pp. 7-27.

[10] J. A. Ruddick, et al., The Dairy Industry in Canada, (Toronto, The Ryerson Press, 1937), p. 52. (Ruddick indicated that a co-operative cheese factory was started at Birtle, Manitoba, in 1887.)

[11] Statutes of Manitoba 1886, Chapter 19, p. 57. This Association only allowed one vote for each member. They had to be present at the annual meeting to vote. Apparently many of the original members were farmers.

operative creameries to insure proper service, grading and product standardization was the fact that the provincial government provided some supervision as early as 1895 and started short courses in dairying in 1896.[12]

The oldest co-operative creamery operating today was started in 1907. The two next oldest were started in 1920 and 1925. These were the only three creameries registered as co-operatives in 1931 although a co-operative dairy was started during that year. The Manitoba Co-operative Dairies Limited, which was organized in 1920 had branch creameries in Winnipeg, Brandon and Dauphin by 1931.[13] This meant that there were five co-operative creamery plants in operation which represented about nine per cent of all plants operating in the province.[14]

In 1941 there were seven co-operative creameries registered. These co-operatives had 11 plants operating; two of which were primarily dairies. Five of these creameries were single plant organizations. The 11 plants represented about 16 per cent of the total number of creameries in the province.[15] By 1951 there were 14 plants in operation. Eight of these belonged to the Manitoba Dairy and Poultry Co-op Limited, two to The

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[12]Ruddick, *op. cit.*, p. 111.

[13]Annual Reports of the Registrar of Co-operatives, (Unpublished data, Co-operative Services Branch, Manitoba Department of Agriculture, 1931). There were a number of cheese factories operating in Manitoba as co-operatives in addition to the creameries and dairies discussed here.

[14]Report on Crops, Livestock, etc., Issued by the Manitoba Department of Agriculture and Immigration, (Winnipeg, December, 1931), p. 16.

[15]Ibid., (December, 1941), p. 22.

Peoples Co-op Limited, and the other four were single unit plants. These 14 plants represented about 21 per cent of the creameries in the province.[16] Consequently, there has been a gradual improvement in the relative importance of co-operative creameries in Manitoba from nine per cent in 1931 to 21 per cent in 1951.

A. <u>Statement of Problem</u>: Although this study is primarily concerned with four co-operative creameries the factors leading up to the initiation of the study were common to most co-operatives in the province.

During the latter part of the 1930's and in the 1940's there was a substantial increase in the number of marketing co-operatives in the Province.[17] Although this increased activity was welcome concern was expressed over the fact that information was not available to indicate the general well being of the new co-operatives. Manitoba co-operatives, as a group, have not attempted to gather their own statistics and this function has gone by default to the provincial and federal governments. Resulting statistics express provincial and national totals which provide little comparative information for individual co-operatives as many of the important characteristics cannot be determined from the grouped data.

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[16] <u>Ibid</u>., (December, 1941) p. 22. These co-operatives handled about 24 per cent of the dairy produce sold by Manitoba farmers in 1951. See p. 2.

[17] Annual Report of Registrar, <u>op</u>. <u>cit</u>. (1928-49 inclusive). As an example in 1933 there were 184 marketing co-operatives registered and in 1945 about 227. The 227 co-operatives represented approximately 425 marketing units. See Table 1, p 20).

Consequently, it became increasingly difficult for administrators, co-operative leaders, and others to keep up to date with the various developments.

Due to the lack of information it was difficult for the co-operative leaders and administrators to determine if co-operatives were following the rules set out in their by-laws and whether or not such by-laws were adequate to meet existing needs. It was also difficult to determine the adequacy of statutary laws. Such laws are formulated to make successful co-operative activities possible. Here the concern was with the fact that they could retard normal co-operative development if they were not adjusted to satisfy changed conditions. Concern was also expressed over the status of some of the older co-operatives that were organized under conditions and laws different from those presently existing. The concern here was with the ability of the older co-operatives to adjust to changing conditions. At the same time, it was considered possible that, without appropriate information, new co-operatives would have difficulties that could be avoided. This is not a new problem. Thomsen points out that "most of the difficulties encountered by co-operatives stems simply from failure to be guided by their vast experience".[18] Such experience may be gained from other co-operatives if provision is made for the recording of activities and results. Otherwise, much experience must be gained first hand.

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[18]F. L. Thomsen, Agricultural Marketing, (New York: McGraw-Hill Book Company, Inc., 1951) p. 433.

Most of the concern was with the condition of the local type co-operative. It was assumed that the larger co-operatives had sufficient funds to hire competent administrators and accountants to determine the best courses of action. As this was not available to local type co-operatives they had to rely on the ingenuity and intuition of local management. Consequently, it was expected that this would cause considerable variation in policies and organizational characteristics with some deviation from sound co-operative principles and recognized business standards. This was considered most important among new co-operatives, particularly those located in areas where few other co-operatives existed.

As the co-operatives lacked comparative data, some doubt existed as to their ability to make the most efficient use of their resources. Inefficiency was expected as the results of decisions were subject to a higher degree of uncertainty than would otherwise be necessary. It was assumed that, with more information available, management would be in a position to avoid mistakes and the co-operatives would be more successful. The important fact here was that, with expanding activities, decisions had to be made at more important levels with the results of these decisions influencing more and more people.

B. Selection of Co-operatives: Although concern existed over all co-operatives in the province there was greater concern over the status of the co-operative creameries. This resulted from the fact that several privately owned creameries were reported to be in financial difficulty and a few were forced to close between 1943 and 1951.

Of the co-operative creameries in the province, these four were selected for analysis as they were single plant co-operative creameries. The main functions of the four creameries were to assemble cream, manufacture and sell butter. This gave them similarity of purpose. Other factors in favor of the selection of these creameries were:

1. They were located in different production areas which made possible some comparison of the influence of area characteristics on the success of the co-operative;

2. The co-operatives were started at different times between 1907 and 1940. This made possible some comparison of the time of starting and the present legal and operational status of the four co-operatives;

3. All four co-operatives had operated over ten years by 1950 which made possible the analysis of operations during the 1941-50 period;

4. They were within reasonable distances of Winnipeg;[19]

5. They all agreed to co-operate in the study and provide the necessary information.

These co-operatives were not selected because they were particularly successful or unsuccessful in their co-operative or business activities. For this reason, all observations made in the study were considered in an impersonal nature as it was assumed that similar observations would be made of any other group of co-operatives.

C. <u>Purpose and Scope of Study</u>: The basic purpose of this study is to

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[19]This was important in gathering the data as no financial assistance was appropriated to this study. (The location of the four creameries is given in Figure 1, p. 10).

delve into the operations of the four co-operative creameries and evaluate their co-operative and financial characteristics. Certain co-operative characteristics and principles are considered essential for successful operations. Therefore, consideration is given to their presence or absence, as well as the apparent influence on the financial status of the co-operatives. Special consideration is also given to financial and operational activities relative to recognized and established levels of performance. The determination of strong or weak co-operative or financial features and the reasons for their existance is of vital concern.

Specifically the objectives are these:

1. To provide detailed information on the co-operative and financial characteristics of the four co-operatives.

2. To establish the presence or absence of specific policies or characteristics and indicate the apparent influence on the success of the co-operative.

3. To indicate the extent of the differences among the four co-operatives despite their co-operative nature and common basic function.

4. To point out changes that could lead to improvement for the co-operatives studied as well as marketing co-operatives generally.

This study was limited in scope to a case study of the four co-operative creameries. As indicated above these were the only local type co-operative creameries in the province. The limited number of co-operatives included in the study and the variations which exist among the four removed the possibility of using average figures for the group as a bench mark. For the same reason the findings could not be extrapolated

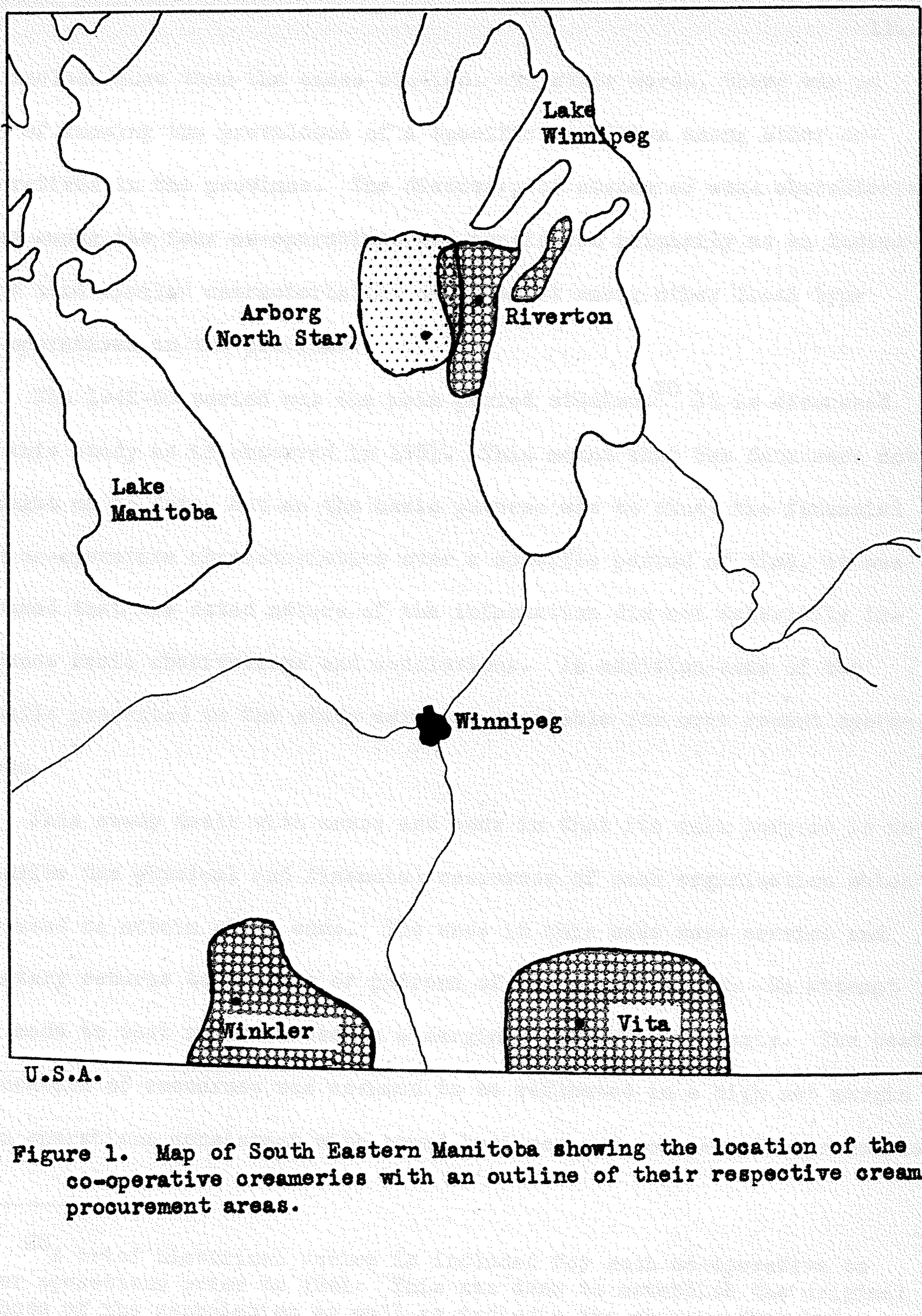

Figure 1. Map of South Eastern Manitoba showing the location of the co-operative creameries with an outline of their respective cream procurement areas.

to include more than the cases studied. In other words, there was no way of knowing the prevalence of a specific condition among other co-operatives in the province. The discovery of strong or weak characteristics among the four co-operatives was considered primarily as an indication that similar characteristics could exist among other local type co-operatives in the province.

The 1941-50 period was the main period studied.[20] It is discussed in this study as if observed in 1951. This meant that the data were not brought up to date, but as the basic purpose was to study the financial and co-operative characteristics over a specific period of time, it was assumed that the dated nature of the information did not materially influence basic observations and conclusions. In addition some of the details presented in the study were not available for more recent operations.

This study deals with means and ends in that its main purpose is to describe the physical and financial resources of each organization which are used to attain given ends. The ends in this case were service and monetary returns to members or patrons of the organization. No attempt was made to test resource use on a marginal productivity basis. The best allocation of resources was assumed to be reflected in a high net margin from operations consistant with sound business and co-operative principles.

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[20] A brief historical review is included for each co-operative to cover operations prior to 1941. This was done to establish the original purpose of the association as well as indicate the changes that had occurred.

The measures of soundness were based on standards established for both, private and co-operative businesses. These measures were assumed to be sufficiently accurate to bring out the most important features of the four co-operatives.

D. Source of Material: Most of the data used in the analysis were taken directly from the annual financial statements supplied by the creameries. These statements were for the years 1941-50. The "By-Laws" and "Articles of Incorporation" were the main source of information on the legal status of each co-operative. This information was necessary in the interpretation of the various data recorded by the auditors in the annual statements. The "By-Laws" and "Articles of Incorporation" were also useful in indicating the changes which had occurred in the legal status of each association since it was incorporated. Most of these changes were in connection with the co-operative characteristics and policies.

A questionaire was used to obtain additional data not available in the financial statements or the "By-Laws". The objective of the questionaire was to gain more knowledge of the co-operative and business policies, membership relations and support, and historical features of the co-operative. Annual meeting reports were reviewed to obtain information on membership attendance. The physical characteristics of the plant and the function performed were determined by personal investigation of the plants. Basically, this additional information was necessary to establish the co-operative features of the firm as well as develop a greater knowledge of the organizational and functional characteristics. Such background knowledge were necessary before the financial statements could be analyzed.

E. General Outline and Presentation of Data: Prior to the analysis of the four co-operatives it was necessary to consider the framework within which the co-operatives were operating. Chapters II to V are used to outline this background material.

In Chapter II the nature of co-operative marketing is considered. This consists of a brief review of the development of co-operative marketing, a review of federal and provincial statutes to determine the legal implications, and an outline of co-operative and financial principles considered necessary for successful operations. The functions performed by the co-operative creameries are briefly outlined in Chapter III. This chapter also contains a discussion on a few of the factors that influence the costs of production and the financial success of operations.

The standard form of financial, operating and cost of manufacture statement are outlined in Chapter IV. The use of the standard forms is necessary as there was considerable variation in the original annual statements provided by the creameries. The main purpose of this chapter is to define the terms used in these statements so that the results of the analysis could be more accurately interpreted.

The procedures used in the financial and co-operative analysis are outlined in Chapter V. The main purpose is to indicate the underlying assumptions implicit in each procedure and the levels at which the results of each test were considered satisfactory or critical. The procedures used in the analysis of the data are based on methods illustrated by several authorities.[21] As these authors were mainly concerned with the analysis of corporate firms from the standpoint of investors or creditors it was necessary to supplement these procedures with some used in the analysis of marketing co-operatives.[22] As the co-operative is a special type of corporation the main consideration in the use of the various tests is with the level at which the results become significant. Many of the same general tests may be used for both privately and co-operatively owned organizations.

As a fairly complete outline of the procedures is given in Chapter V only a brief comment is included here. To facilitate analysis the data were transferred from the annual statements to comparative tables for all years. The subsequent analysis deals with internal relationships (between items in the same annual statement) and external relationships (changes or trends that occur over the ten year period).

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[21]The authorities referred to most frequently were: H. A. Finney, General Accounting, (New York: Prentice-Hall, Inc. 1946); R. A. Foulke, Practical Financial Statement Analysis, (New York: McGraw-Hill Book Company, Inc., 1945); S. Gilman, Analyzing Financial Statements, (New York: The Ronald Press Company 1939); H. G. Guthmann, The Analysis of Financial Statements, (New York: Prentice-Hall, Inc., 1946); and others.

[22]Procedures used for the analysis of co-operatives were outlined by D. D. Brubaker, Co-operative Creamery Accounting, Farm Credit Administration, Co-operative Research and Service Division, Bulletin Number 39. (Washington, D.C., June 1939); H. H. Bakken and M. A. Schaars, The Economics of Co-operative Marketing, (New York: McGraw-Hill Book Company, Inc., 1937); V. S. Alanne, Manual for Co-operative Directors, (Superior, Wisconsin: Co-operative Publishing Ass'n., 1945); and others.

The results of these analyses are presented for each co-operative in Chapters VI to IX. Uniformity in the presentation of the results is maintained as close as possible for each co-operative, consequently much of the description and basic material is repetitive in nature. An attempt is made to reduce this repetition by discussing only the more important features in each case although the complete data are presented in the tables.[23]

In the analysis of the data the co-operative nature of the organizations is a basic consideration. Associated with this is the general hypothesis that the purpose of a co-operative business is to increase the income or service to the co-operators.[24] Either income, service or both has to be increased as no amount of co-operative philosophy will replace these encouragements. Consideration is also given to the fact that these co-operatives are primarily business organizations competing with privately owned organizations. Price changes were also considered in interpreting the results.[25]

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[23] Due to the variety of data contained in the main tables they are grouped together in Appendix A.

[24] M. C. Bond, "Extension of Co-operative Business Management, (Small Co-operative Organizations)", Journal of Farm Economics, 15:678, December, 1933.

[25] As illustrated in Figure 2, p. 16, the price of butter reached a peak in 1948 and then receded somewhat by 1950 but the general wholesale price index continued to rise throughout the ten year period.

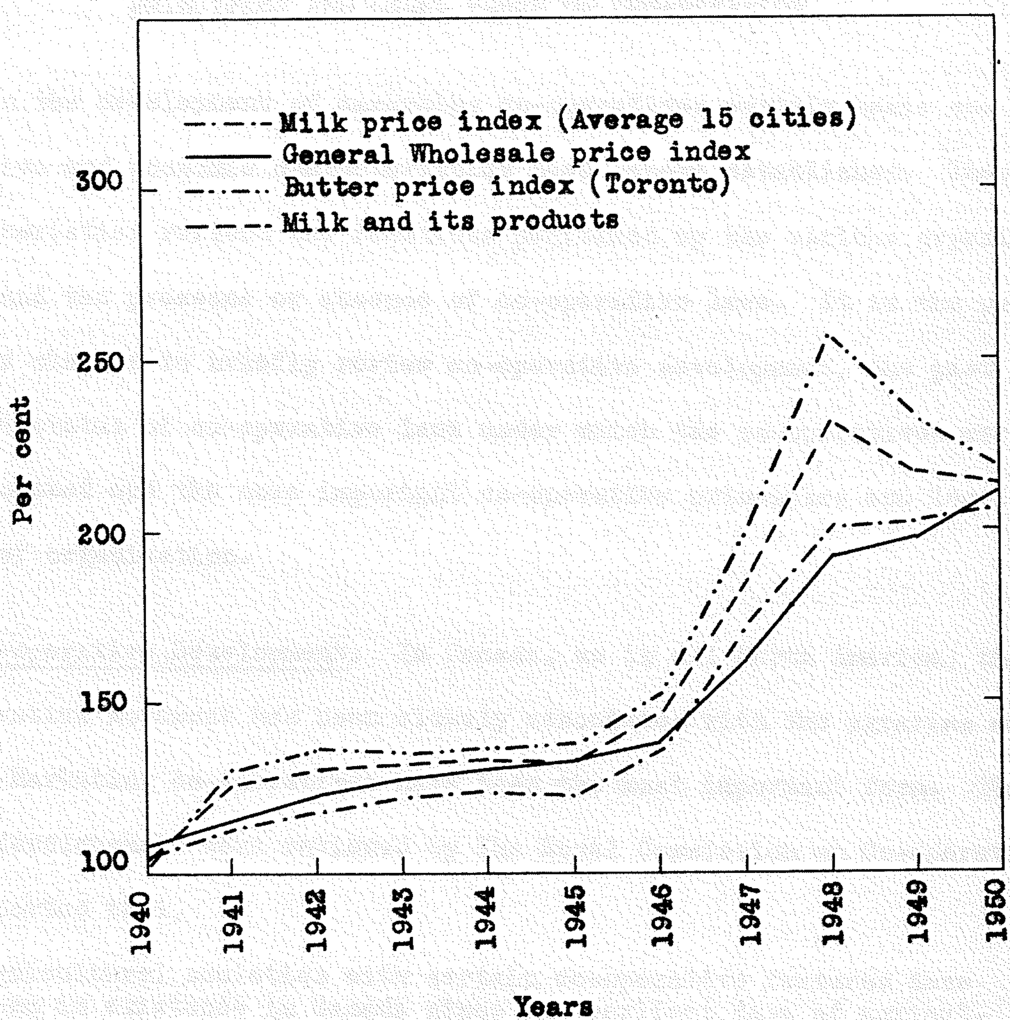

Figure 2. The level of some price indexes for the period 1941-50 as reported by the Dominion Bureau of Statistics (base 1935-39 average price).

CHAPTER II

DEVELOPMENT OF MARKETING CO-OPERATIVES AND RELATED LAWS, PRINCIPLES AND LEGAL FORMS OF ORGANIZATION

In the development of marketing co-operatives certain basic co-operative and economic characteristics have become established. These characteristics reflect the functions performed by the various organizations and the presence or absence of co-operative laws. It is the purpose of this chapter to briefly review co-operative development, the past and present status of co-operative laws under which the co-operatives were incorporated and the more important co-operative principles and legal forms of organization.

A. Co-operative Development: In Canada, as in all North America, the co-operative movement has been closely associated with the agrarian movement. Marketing co-operatives have been the most important form. The early developments were reviewed by The Royal Commission on Co-operatives who reported that,

> "Agricultural societies with certain co-operative features have been in existence in Canada since the earliest days of agricultural settlement. Records indicate that some of these were active towards the end of the eighteenth century, but these were unincorporated, informal and mainly interested in improving the production methods rather than in undertaking buying or selling functions for their members. Organized co-operation in Canada for purchasing or marketing goes back to the sixties of the last century. About this time, creameries and cheese factories put in their appearance. Most co-operatives organized before 1900 were loosely formed organizations without definite provisions for such features as are now considered to be the characteristics of a co-operative society. These features were not provided in company legislation, and for that reason most of the co-operatives

organized before 1890 were unincorporated."[1]

Following 1900 there was a move towards more formal organizations with many of the locals in a given commodity federating to perform central marketing selling activities.[2] With the adoption of central marketing activities the co-operative marketing associations moved into a greatly expanded sphere of operations and became more effective in their efforts to improve marketing conditions.

In the development of co-operative marketing there have been numerous obstacles to overcome. Thomsen points out that,

> "co-operative marketing has played a prominent part in the history of efforts to improve agricultural marketing. Many thousands of co-operative associations...have blazed a co-operative trail to better marketing or another trail to failure and disappointment".[3]

Thomsen suggested further that much of the difficulty resulted from a lack of over-all planning or supervision in the early years of development. There was a definite lack of communication, consequently, many projects which had been found to be dismal failures were reproduced time and again only to end up with the same result. The movement also tended to follow certain vogues. Such ideas as price fixing, controlled markets, membership contracts, pooling, and others have all been emphasized at one

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[1]Report of the Royal Commission on Co-operatives (Ottawa: Kings Printer, Canada 1945), p. 15.

[2]C. F. Phillips and D. J. Duncan, Marketing Principles and Methods (Chicago, Illinois: Richard D. Irwin, Inc., 1951), p. 490.

[3]F. L. Thomsen, Agricultural Marketing, (New York: McGraw-Hill Book Company, Inc., 1951), p. 433.

time or another, often at the expense of important co-operative principles.[4] Thomsen observed that co-operatives were most successful when they filled an economic need[5] and were looked upon as a business rather than a religion.[6]

Despite the many difficulties encountered co-operatives have made great strides in Canada. Fowke reported in 1951 that,

> "for the co-operative year ending July 31, 1950, it was estimated that co-operatives handled 35 per cent of all Canadian farm produce entering commercial channels. For grain the co-operative portion was 60 per cent and for all other farm produce as a group, 25 per cent. Over the past ten years Canadian co-operatives have increased their share of total marketings of all farm produce, and of all major classes of such produce. While they now handle more than one third of all farm produce, in 1941 they handled less than one-quarter of the total."[7]

As suggested in Chapter I few statistics are available to record the earlier development of co-operatives in Manitoba. Information was available on the number of co-operatives registered for the two periods 1928 to 1935 and 1944 to 1949.[8] These data are recorded in Table 1 to indicate roughly the changes over the 20 year period. Although increases were recorded for each type of co-operative included this only represented the net changes in the number registered. These data were influenced by the fact that a number of registered co-operatives were actually inactive

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[4] Ibid., p. 444. [5] Ibid.

[6] Ibid., p. 440.

[7] V. C. Fowke, "Development of Canadian Co-operation", Journal of Farm Economics, 33:910, November, 1951.

[8] Annual Report of Registrar of Co-operatives, (Unpublished data, Co-operative Services Branch, Manitoba Department of Agriculture, 1928-35 and 1944-49).

and there was an increasing tendency for several co-operatives to form into one organization. Although the latter would reduce the number of co-operatives registered it did not reduce the service provided. As there was a large drop in the number of co-operatives registered between 1932 and 1933 this suggested that a considerable number of inactive co-operatives had been registered prior to that date.[9]

Table 1. Number of co-operatives registered in Manitoba for the years 1928 to 1935 and 1944 to 1949 by types of co-operative organization[a]

Years	Type of co-operative			
	Marketing	Consumer	Miscellaneous	Total[b]
		- number -		
1928	177	33	6	216
1929	221	57	9	287
1930	232	73	11	316
1931	234	74	13	321
1932	233	79	16	328
1933	184	60	13	257[d]
1934	184	60	14	258
1935	183	63	16	262
c	-	-	-	-
1944	226	106	18	350
1945	227	115	22	364
1946	230	130	27	387
1947	234	141	31	406
1948	228	144	33	405
1949	245	143	37	425
c				

a. Source: This information was obtained from the annual reports of the Registrar of Co-operatives.
b. Credit unions are not included in this total figure.
c. The information was not available for the years 1936 to 1943 inclusive and was presented in slightly different form in 1950 and following.
d. The sudden drop between 1932 and 1933 was assumed due to the fact that all co-operatives had to be registered under the new Act of 1932. Prior to that time a number of inactive co-operatives were included.

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[9]During 1933 all co-operatives had to re-registered under the 1932 Act. Thus, the inactive organizations would be excluded from the 1933 registrations.

B. Development of Co-operative Law:

1. Historical: In their discussions on the history and development of co-operative laws Evans and Stokdyk point out that:

> "the development of the law of Corporations, of which agricultural co-operative marketing law is a part, has covered centuries of time... Up to the end of the Eighteenth Century, excepting for its use in the guilds and training companies, it (the corporate form) was used for the benefit and advantage of the public and not as an instrument for the promotion of private interests. The principles involved in it, however, were found readily adaptable to private enterprise and the point was eventually reached were...legislative bodies made occasional grants or concessions to individuals to make use of the corporate structure in private undertakings. These, however, were carefully guarded against abuse, under the supervision of the state...Gradual relaxation of state concern and supervision permitted a like gradual expansion of the operations of the corporation, until the point is now reached where almost unlimited and unrestricted use of the corporate form of organization is enjoyed in private business....One after another of our great industries, including transportation, banking, mining, and public utilities has come into the corporate field. Each has received special legislative consideration. Laws have been enacted for the encouragement, protection and regulation of these various industries. It is a process of gradual unfoldment, in response to changing or newly developed economic conditions. In this process of expansion of the corporate field, agriculture, too, so far as its marketing phase is concerned, has in recent years been included in special legislation."[10]

The special legislation for co-operatives has been granted due to the ever pressing demands of the agricultural people supported by the slow but continuous success of the co-operative movement. At first only narrow co-operative laws were passed but gradually broader clauses were included and the restrictive nature of the original laws greatly reduced. As a result of the evolutionary nature of the formation of co-operative

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[10]Frank Evans and E. A. Stokdyk, The Law of Agricultural Co-operative Marketing, (Rochester, New York: Lawyers Co-operative Publishing Co., 1937), p. 20.

laws, considerable variation exists in the present structure of co-operative organizations. Many of the older co-operatives resemble closely the corporate type of organization while those formed more recently have more definite co-operative characteristics.

2. Federal Government Laws: In Canada, there are no special statutes for co-operatives in the federal laws. To acquire federal status a co-operative must incorporate under 'The Companies Act'. Basically, it will be a joint-stock company with its co-operative nature set out in the by-laws. O'Meara indicated that there have been several attempts to pass a federal act. The first attempt was defeated in the Senate in 1908. All attempts since that time have been without success.[11]

Despite its inability to pass a co-operative act, the Federal Government has been sympathetic towards the co-operative movement. In more recent years it has moved to provide some assistance. As an example, the "Agricultural Products Co-operative Marketing Act" was passed in 1939. This act was set up to safeguard the co-operatives against a loss from over-estimating initial payments to producers.[12] Here the government backed the principle of pooling with initial and final payments by underwriting the co-operative for situations beyond the scope of reasonable expectations.

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[11] J. E. O'Meara, "Co-operative Legislation in Canada", The Economic Annalist, 11:69, October, 1941.

[12] Ibid., (The amount of the initial payment was agreed to by the co-operative and government)

The Royal Commission on Co-operation was set up in 1944. It was instrumental in gathering considerable background material on Canadian co-operatives. As a result of the findings of this Commission, the Income Tax Act was revised in 1947. This act set forth the basis of taxation on co-operatives.[13] Besides increasing the tax rates to many co-operative and co-operative like organizations, these revisions and subsequent investigations illustrated the necessity of clear-cut by-laws and accurate accounts. Both reduce the likelihood of misinterpretation and possible errors in the payment of taxes as well as in business decisions.

The lack of a federal co-operative law has placed emphasis on provincial laws. It is generally recognized that most provincial corporate laws are modeled after federal corporate laws. In the case of co-operative marketing laws there were no federal laws to follow. As a result, considerable variation exists among the co-operative laws set up by the provinces. This has influenced both terminology and structural organization.[14] Although these differences are considered disadvantageous to the co-operative movement, most differences are a matter of degree rather than a basic principle.[15]

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[13]W. B. Francis, K. C., Problems of Income Tax as They Relate to Non-Profit Commercial Corporations (Ottawa, The Co-operative Union of Canada, November, 1951). (Co-operatives were subject to income tax on their surplus equal to three per cent of the capital employed, on excessive non-member business, on all non-member business for which patronage was not paid and on reserves or unallocated surplus retained by the association.

[14]Report of Royal Commission, op. cit., pp. 20 et. seq.

[15]Ibid.; also O'Meara, op. cit., pp. 68-74.

3. Manitoba Laws: In Manitoba, special legislation has been passed from time to time to allow for the incorporation of various co-operative principles. The early co-operative laws resembled closely corporate laws with a few special sections allowing co-operative characteristics. Subsequent amendments and revisions spelled out the co-operative characteristics more clearly and allowed greater activity and expansion. The provincial laws are reviewed here to indicate the type of legislation that existed at the time each of the four co-operatives were incorporated. This review also provides a record of the gradual acceptance of each new co-operative idea or principle.

The first Co-operative Act was passed by the Manitoba Legislature in 1887.[16] It indicated that the "Certificate of Incorporation", "Rules of Organization" and all subsequent amendments were to be filed with the district Registrar.[17] This act established that there had to be at least seven members.[18] Limited liability was granted[19] but there was no mention that the word co-operative need be used in the name of the association. "Transferable" and "withdrawable" shares were allowed.[20] No member could

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[16] Statutes of Manitoba, 1887, Chapter 12, p. 221.

[17] Ibid.

[18] Ibid., Sec., 1, p. 221 (The minimum of seven members was necessary so that partnerships or stock companies could not organize under this special legislation. These have a minimum of two and three respectively.)

[19] Ibid., Sec. 2, p. 221.

[20] Ibid., Sec. 8, p. 223.

have more than $750 worth of shares of which $500 could be "transferrable" and $250 could be "withdrawable". The association could use either or both types of shares, it could establish the par value of the shares, and if desirable set limits on the investment per member lower than allowed by statute.[21] Shares could be paid for by installments.[22]

The principle of one vote for each member was allowed.[23] This act restricted the co-operative to business by cash only. The main restriction was in trading activities as credit was allowed in the purchase of real estate to house the association.[24] An annual report had to be made to the Provincial Secretary which was to include an audited financial statement.[25]

In the "Revised Statutes of Manitoba" 1913 there was little or no alteration to the 1887 legislation.[26]

"The Co-operative Association Act" was passed in 1916 and replaced the Bills of 1887 and 1913.[27] This Act established the position of "Registrar of Co-operatives".[28] This centralized the work of the district Registrars' and Provincial Secretary and was designed to allow closer supervision of the co-operative associations in the province. A standard

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[21] Ibid., Sec. 9, p. 223. [22] Ibid. Sec. 7, p. 223.

[23] Ibid., Sec. 11, p. 223.

[24] Ibid., Sec. 15, p. 224 (This is a co-operative principle which is still advocated but difficult to follow in practice.)

[25] Ibid., Sec. 18, p. 225.

[26] Revised Statutes of Manitoba, 1913, Chapter 41, pp. 295-300.

[27] Statutes of Manitoba, 1916, Chapter 23, pp. 59-69.

[28] Ibid., sec. 2, p. 59.

set of by-laws were attached to the Act.[29]

The par value of the shares could not exceed $30.[30] The number of members could not be reduced below seven or 75 per cent of the maximum membership that existed at any previous time.[31] The one vote principle was maintained and no proxies were allowed.[32] Members were to receive an annual statement.[33]

In this Act the net returns of the association were called profits. It provided that 10 per cent of the profits be transferred to a statutory reserve until this reserve equalled or exceeded 30 per cent of the paid up share capital, that interest could be paid on paid-up share capital up to seven per cent,and the remainder be divided among members according to patronage. Non-members as well as employees could receive patronage dividends but such monies were to be retained and applied to the purchase of a share.[34]

The act stipulated that an association could use the word "co-operative" in its name providing it (1) divided profits on the basis of patronage, (2) restricted voting to one per member and (3) did not allow proxies.[35]

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[29] Ibid., Sec. 13, p. 61.

[30] Ibid., Sec. 14, p. 61. (This was consistant with the fact that most members had limited funds.)

[31] Ibid., Sec. 18, p. 61. (This regulation was designed to stop the association from going into the hands of a few.)

[32] Ibid., Sec. 21, p. 62.

[33] Ibid., Sec. 22, p. 62.

[34] Ibid., Sec. 25, pp. 62-63.

[35] Ibid., Sec. 7, p. 60 and Sec. 32, p. 64.

In 1921, a series of amendments were passed. Credit restrictions were left partly to the discretion of the directors but the terms of credit were not to exceed 90 days.[36] The directors were also allowed to pledge the credit of the association.[37] The word "surplus" was to be used instead of "profit" in reference to net returns.[38] An important amendment stipulated that the surplus could be apportioned only "after making proper allowance for depreciation".[39]

The 1916 Act was repealed in 1925 and replaced the "The Co-operative Association Act 1925".[40] Most of the provisions were similar to those of the repealed Act but the information was given in greater detail. Marketing contracts were allowed.[41] The interest rate allowed on share capital was increased to eight per cent. No member could purchase more than five per cent of the authorized shares.[42] Provision was made for the easy dissolution of co-operatives that had ceased to function.[43]

"The Co-operative Marketing Board" was established by the Manitoba Legislature in 1926.[44] This board had at its disposal the income from a trust fund of $128,800.[45] These monies were to be used to assist devel-

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[36] Statutes of Manitoba, 1921. Chapter 10. Sec. 3, p. 23.

[37] Ibid., Sec. 4, p. 23.

[38] Ibid., Sec. 11, p. 25.

[39] Ibid., Sec. 7, p. 24.

[40] Statutes of Manitoba, 1925, Chapter 8, p. 23.

[41] Ibid., Sec. 26, p. 31. (Marketing contracts were popular about this time.)

[42] Ibid., Sec. 16, p. 30.

[43] Ibid., Secs. 32-33, p. 35.

[44] Statutes of Manitoba 1926, Chapter 58, Sec. 8, p. 253.

[45] Ibid., Sec. 4, p. 252. (These monies were derived from the surplus of the Wheat Board in 1919 and 1920 and were handed over from the federal government to the provinces. This Board later became "The Co-operative Promotion Board".)

opment of co-operative marketing among agricultural producers, to provide prizes and scholarships for individuals, and give "gifts in aid of agricultural co-operative research carried on by The University of Manitoba".[46]

In 1932, the Legislature repealed "The Co-operative Association Act" and provided for the incorporation of co-operatives under Part V1 of the Companies Act.[47] Co-operatives were allowed to retain the declared dividends and pay interest on these funds. A limit of four years was set on the time that retained dividends could be held towards full payment on a share.[48] More lenience was allowed with reference to contracts between members and their co-operatives.[49] Each branch of a co-operative was allowed to send delegates to vote at annual meetings. Dissolution was made more difficult as, of the total membership, a 75 per cent vote was required. Under this act the granting of charters and the receipts of annual returns became the function of the Provincial Secretary.[50] This function was formerly performed by the Registrar of co-operatives. The effect of this legislation was that "no statistics were available as to the progress of the co-operatives organizations as a whole in the pro-

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[46] Ibid., Sec. 13, pp. 253-4.

[47] Statutes of Manitoba, 1932, Chapter 5, Part V1, p. 53.

[48] Ibid., Sec. 134, p. 58. (Such monies had to be transferred to a special reserve.)

[49] Ibid., Sec. 133, p. 57.

[50] Ibid., Sec. 389, p. 136 and Sec. 411, p. 148.

vince".[51] Apparently this was not altered until 1947.[52] During the years between 1932 to 1947 the Registrar relied on statements voluntarily sent in by co-operatives. This was usually limited to a few specific co-operatives, consequently, it was not possible to interpret accurately the broad overall changes during this period.

The Statutes of Manitoba were revised in 1940 and the co-operatives section became Part V11 of this Act.[53] With the exception of the above mentioned adjustment made in 1947 the 1940 statutes govern the incorporation and operation of co-operative association up to 1956.

C. Principles of Co-operative Marketing Associations:

1. Basic Principles: There are a number of basic principles of organization and operation which exist to a greater or lesser degree in every co-operative. These have proved to be sound from both the co-operative and the business point of view.

Democratic control is maintained by closely following the one-man one-vote rule. In some cases this is restricted to active members so that control lies with those who use the co-operative. The use of proxies is limited to delegates, therefore, the responsibility of the association

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[51] Annual report of the Registrar of Co-operatives (Unpublished data, Co-operative Service Branch, Manitoba Department of Agriculture, April 1933).

[52] Statutes of Manitoba 1947, Chapter 7, Sec. 2, p. 16. (The co-operatives were to send in information direct to the Registrar of Co-operatives at his request.)

[53] Revised Statutes of Manitoba 1940, Chapter 36, Part V11, pp. 363-370.

rests with members who attend the annual or special general meetings. The dividend rate on invested capital is limited[54] to insure the non-profit characteristic of the association. The source of the invested capital is usually restricted to prospective patrons of the association. The equitability of earnings or savings is maintained by distribution upon a patronage basis, that is, members receive their returns according to the quantity or value of the products they have marketed through the association.

The development of co-operative methods of marketing farm produce has formulated some principles of operations that are basically economic in nature. In a co-operative, instead of endeavouring to make a profit on the capital invested, members want to reduce the costs of marketing so they will receive a higher return for their produce. Most marketing co-operatives were formed as a result of farmers' dissatisfaction with existing facilities and marketing agencies. They supported marketing co-operatives rather than market their products individually.[55] In this way they did not incur the high costs of individual marketing and maintained some control over the movement of their produce to the market. An important principle in co-operation is that ownership and control of the association reside in the member as one of the rights of membership

[54]Although the dividend rate is limited some co-operatives follow the practice of paying a five per cent dividend on paid up share capital which may be considered a reasonable rate of return by some investors.

[55]M. C. Bond, "Extension of Co-operative Business Management (Small Co-operative Organizations)", Journal of Farm Economics, 15:678, October, 1933.

and not on the basis of capital invested. In this way, control is decentralized but it still permits, through the agency of the association, a centralized economic control of the product.

a) Membership: Membership in a co-operative marketing association is considered a privilege and not a right. An accepted co-operative principle is that membership be unlimited among patrons but limited to patrons. The restriction of membership is on a functional basis rather than on the basis of race, religion or politics. Traditionally, it is argued that the main claim which a member has on an association is the service the association provides.[56]

Members are considered more important to a co-operative than stockholders are to a stock company. This results from the fact that (1) the volume of business and the number of members are closely correlated, (2) members are normally required to accept greater responsibility in the operation of the co-operative and (3) they normally provide most of the capital.

b) Special Education of Members: It is generally agreed among co-operative leaders that increased membership support will result from increased understanding of a co-operative by its members. As the success of the co-operative depends largely on the volume of business provided by members and their willingness to accept added responsibilities, the importance of informed membership becomes obvious. Consequently,

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[56]This idea is subject to dispute in cases where the original members provided the funds for the various reserves to the net benefit of later members.

provisions are usually made in the by-laws of a co-operative for the support of an educational program.

An educational program for a marketing co-operative should inform the members of both the co-operative and business features. The primary concern here is that the philosophy of co-operative business is somewhat different from that of private business and the function performed by the association is normally different from that performed by the members in his own occupation. As an example the type of organization on a farm is an individual or family unit, whereas, the marketing co-operative is a joint project that requires delegation of authority and responsibility among members. With increased size and complexity of marketing associations the problem of keeping members adequately informed becomes more difficult but not less important.

2. Financial Structure: A co-operative is essentially a business institution, therefore, it requires: fixed capital for land, buildings and equipment; and operating or circulating capital for payrolls, insurance, taxes and other general expenses arising out of the operation of the business. The financial requirements of a marketing co-operative vary with the function of the association. As an example, livestock marketing co-operatives that mainly contribute service require much less capital than a creamery that must purchase, process and occasionally store the product.

The main source of capital in co-operatives has been deductions from sales. This has become the most popular as it has been found to be a more equitable and also a more certain means of accumulating capital resources. The practice of retaining patronage and capital dividends[57] is another important source of capital supplied by the members. Both the above are possible only after the business has begun operations. Subscription of capital by members has been found to be most useful for organizational purposes and fixed capital requirements but is seldom used for actual operations. Loans are another source of capital. For normal business requirements, the banks or credit unions are the most frequent source of loan capital. In times of dire stress or during the initiation period loans may be obtained from members, but such action usually places a large portion of the risk on a few members. In some organizations, capital is supplied by assessment of the members. Very often, in the lifetime of an association, a number of methods may be used or a combination of two or more methods may be developed.[58]

The majority of the co-operative associations are incorporated, therefore, the members have limited liability. The incorporation of a co-operative increases its status and at the same time decreases the liability of the members.

In the capital-stock type of co-operative association, each member must have at least one share. This may be purchased by a direct cash payment or from retained patronage dividends.[59] The ownership of capital

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[57]This is discussed more fully on page 34, *et seq*.

[58]H. H. Bakken and M. A. Schaars, *The Economics of Co-operative Marketing* (New York: McGraw Hill Book Company, Inc., 1937), Chapter XlV and XV. "Financing Co-operative Marketing Associations".

[59]A legal problem could arise in a case where shares are being paid

in a co-operative takes on some of the characteristics of loan capital (bonds) because the returns and transferability are limited and the speculative value minimized. Within certain limits, the association may purchase some of its own stock. This practice has been used mainly to purchase the shares of members who have become inactive.[60]

a) Revolving Fund Plan:[61] The revolving fund plan developed partly as a result of the desire to keep membership and the source of capital

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for by accumulated patronage. If this is automatic, the patrons may be liable for the remainder of the share if the co-operative was dissolved. Legally, the appropriate method is to retain the patronage dividend in a fund until it is sufficient to purchase the minimum number of shares required for membership. (See p.28).

[60]Formerly few capital stock co-operatives made provisions for the members to recover their equity in the association. This was based partly on the need for the funds and partly due to the philosophy that service was the only claim the members had on the co-operative. It was found, that this policy caused little conflict during the early stages of a co-operative's development, but, as the associations became older, the need for repayment of membership equity to inactive members became evident. As older members became inactive they tend to acquire an "investor complex" for their main concern is to receive returns on their investments. If the older inactive members own a large part of the shares they may have more control than the active members and patrons. This is not a healthy situation for the co-operative takes on corporate characteristics and consequently is operating under false pretences. If such is the case for any individual co-operative, strong measures should be taken to see that the situation is alleviated or the association removes the word "co-operative" from its title. Stricter regulations on the part of co-operative organizations in matters such as this would do much to reduce the private-versus-co-operative struggle.

[61]For discussion of revolving funds and their use see E. A. Stokdyk, Financing Farmers' Co-operatives, Farm Credit Administration, Circular E-20, (Washington, D.C., October, 1939), p. 5; E. F. Koller, "Some Aspects of the Financing of Farmer Co-operatives", Journal of Farm Economics, 34:954-7, December, 1952; Harold Hedges, "Financing Farmer Co-operatives", Journal of Farm Economics, 33:925, November, 1951; Bakken and Schaars, op. cit. p. 392.

active and partly as a natural evolution of the practice of retaining declared dividends. This plan can be used, with slight variation, by setting up a special loan account or by transferring the dividends to a share capital account. The loan account is more flexible but the share account will give the co-operative more security; in both, there is the problem of over-capitalization.

(1) <u>Loan Account</u>: If a co-operative has made provision in its by-laws for a patronage loan account and declares a patronage dividend on amount equal to all or a specified part of the dividend is automatically loaned by the patron to the co-operative. In this way, the co-operative increases its supply of capital and the member increases his equity in the co-operative. The monies received may be used to pay off similar loans made previously or for current needs.

The main advantages of the revolving fund plan are (1) that the members contribute to the current capital requirements on the basis of current patronage and (2) that it allows dividends to be declared early in the life of a co-operative. This makes possible the recovery by members of much of the money normally tied up in statutory or other special reserves. The overall result is that it tends to promote equality of commitments among new and old patrons. It is primarily a method of borrowing that relies on the savings of the business and makes the active members assume greater responsibility in supplying capital. When interest is paid this represents a form of debt financing.

There are disadvantages to the revolving loan funds but they can be avoided by making proper provisions in the by-laws and by astute management. The main disadvantages are:

1. Monies may be accumulated in excess of need and invested in unnecessary improvements to buildings and equipment.
2. If a fixed rate of interest is charged it could cause difficulty during a period of stress, especially if a major portion of the funds were in this form.
3. Difficulties may arise if there is a fixed date of maturity. Dividends declared during years of peak activity and high savings could come due during years of less activity and low savings.[62]
4. These loans are often given the same priority as loans from non-members.[63] To give the co-operative more stability it should be established in the by-laws that these funds are part of members equity.

(2) Capital Stock Account: If a capital-stock type of revolving fund is formed, then the dividends go direct to capital stock and the members receive dividends in the form of stock or "certificate of equity" rather than a note. This plan has an advantage in that the members and patrons are never segregated and the membership equity situation is never in doubt. This type of plan allows the actual capital stock of the association to be built up as the business expands. Its revolving features are identical to that of the loan account. The main advantages of this

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[62] As this could place the co-operative in an embarassed financial position it is desirable that flexibility be allowed in repayment. This embarassed position would likely only occur if a large share of the earnings had been tied up in fixed assets as the association would have more cash available during a recession of activity than during peak activity.

[63] If proper provision is not made these loans are legally retained dividends. Retained funds are a direct liability of the association and are in the same category as a loan from the bank. In the event of liquidation these have a higher priority than capital in form of shares.

type of fund is that it provides the co-operative with the maximum of security.

In practice, both revolving funds could be used at the same time. By allowing a percentage of the net margin to go to each, a proper balance of the advantages and disadvantages of both could be achieved.

A problem of over-capitalization could develop from either of these plans. Over-capitalization[64] can only exist in relation to the use made of the funds. During years of high net savings there may be a tendency to expand the buildings and offices beyond that required for efficient service to patrons. The situation is the same whether the funds are invested in assets or held as cash in excess of requirements. Should such a situation exist it represents a condition where the demands of the co-operative and particularly management has been dominant over those of the patrons.

D. <u>Legal Forms of Organization:</u>[65] Out of the evolutionary development of co-operative marketing associations, three forms have become standard. They consist of the local, federated and central types of organization. Other forms that exist are usually some modification of one or more of these three.

1. <u>Local:</u> The local type is typically a single unit organization situated in the centre of a production area. Its usual service to the

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[64] The term suggests inefficient use of capital funds.

[65] Thomsen, *op. cit.*, pp. 446-448.

members is through grading, packing and sometimes processing. This type of organization is locally run and operated and has no special ties with other associations. Basically, the local type association is the easiest to organize, membership interest is usually high but it has little or no influence in marketing beyond the local level.

2. Federated: The federated is formed by uniting a number of locals which usually have similar functions. The farmers are members of their own local and the locals are members of the central body of the federated association. The normal function of this central body is to co-ordinate the activities of the locals and act as the agent of the locals in the central market. This extends the farmer's control over the marketing of his produce.

3. Central: The central type of organization has both a local and central function but the locals are usually formed from a decision at the central rather than at the local level. All the farmers are members of the central and it is only through the central that they can control their own local service unit.

All three forms of organization have been successful in the past. Their relative merits depend on the function to be performed and the existing conditions at the time of incorporation.

CHAPTER III

CO-OPERATIVE CREAMERIES, THEIR FUNCTION AND OPERATIONS

The main functions performed in the operation of a single plant co-operative creamery are outlined in this chapter. The influence of volume and the seasonal nature of production on average costs is also indicated. The problems and benefits of diversified production are discussed briefly as all four co-operatives handled more than one product.

A. Function of Creamery:[1] In a creamery there are three principle marketing functions performed: assembly (procurement, concentration); processing (preparation for consumption); and dispersion (distribution).[2]

1. Assembly: The action of concentrating the output of a number of producers at one point is the assembly part of marketing. Products have to be gathered in sufficient volume to permit efficient plant operations and sale shipments. Thomsen points out that in a creamery "the success or failure...will depend in large measure upon the efficiency of its procurement department".[3] Although the assembly function is an important part of marketing, processing and dispersion normally represent a large share of the marketing costs and have more influence on consumer demand.

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[1]In a multi-enterprise plant the functions will include the handling of other farm produce. Only those functions concerning the handling of cream and butter were included here as this was the major enterprise.

[2]F. L. Thomsen, *Agricultural Marketing* (New York: McGraw-Hill Book Company, Inc., 1951), p. 74.

[3]*Ibid.*

2. Processing: (Creamery Operations). The processing function of the creamery is the manufacture of butter. The efficiency of this operation is roughly indicated by the level of over-run. This normally amounts to about 21 or 22 per cent and results from the fact that water and salt are included with butterfat to make butter.

3. Dispersion: (Sales). Creameries normally sell most of their produce to the wholesale trade but some butter is sold to local retail merchants and to the creamery patrons. By selling at various levels in the marketing process the creamery is faced with a variety of sales and collection problems. The importance of these problems will depend upon the relative amount sold to the wholesale market, local retail market or direct to the consumer. Sales to the central market are normally in larger volume and involve fewer problems of collection than sales to small stores and especially to the consumer. In a creamery, the manager will handle a large part of the bulk sales while local sales may be handled by a clerk or by the cream truckers. A large amount of butter sold to the central market is sold on a contract basis where one sale agreement covers a period of a year or more.

B. Factors Influencing Costs:

1. Volume of Production or "Make": The volume of production or "make" of butter has been one of the more pressing problems which have plagued creamery managements. To start with, a certain minimum plant is necessary for production. Consequently, the fixed charges are relatively high per unit of production at the lower levels of production

and will vary with changes in scale and the efficiency of utilization of scale. Bain suggests that,

> "the level of cost...is not given or fixed regardless of the rate of output at which the firm produces. It will vary also with (1) the size or scale of the productive plant and of the firm operating a plant or plants, and (2) with the rate of utilization, or percentage of full capacity used, of the plant. The firm may build to different scales or capacities; having attained any given scale, it may utilize various proportions of its capacity. Changes in either scale or rate of utilization will potentially influence real and money costs. In effect, variations in scale and variations in rate of use of plant or firm are two methods of getting variations in output; output variations accomplished in either way will influence cost of production."[4]

a) Scale of Plant: The economies of size or scale in butter manufacture result mainly from the fact that increased capacity can be attained by less than relative increases in plant and equipment costs and increased efficiency from labour and management through specialization. Factors which will remain fairly constant for limited changes in size of one churn creameries are: buildings, office facilities, refrigeration units, storage space and the boiler plant. Vats and churns can be varied more readily but the increase in cost is less than the relative increase in capacity. Consequently, the overhead costs per pound of butter will become less as the size of this equipment is increased and used to capacity. Much of the general equipment such as scales, testing equipment, trolleys and washing equipment are fairly standard and will service a

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[4]Joe S. Bain, Pricing, Distribution and Employment, Economics of an Enterprise System (New York: Henry Holt and Company, 1949) p. 62.

wide range in production.[5]

b) Efficiency of Utilization: The more fully each given scale of plant is utilized the lower the per unit costs of production as most of the fixed costs will remain relatively constant. The cost per unit of output will decrease until a point is reached where inefficiencies set in due to the limits to scale, then the per unit cost will increase. The decreasing costs per unit of output are due mainly to the fact that fixed cost inputs (buildings, machinery, management and part of labour) are combined with variable cost inputs (butterfat, manufacturing material and supplies, fuel, electricity, and part of labour, etc.). The fixed cost inputs remain relatively constant while the variable cost inputs vary almost directly with output within each scale of plant.[6]

With fairly high fixed costs or overhead charges, creamery manage-

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[5]Here a difference exists between the scale of the overall plant and the scale of individual piece of equipment. This illustrates one of the inefficiencies of scale resulting from the indivisibility of some of the factors of production. See George J. Stigler, The Theory of Price, (New York: The MacMillan Company, 1949) p. 133.

[6]See J. R. Frazer, et. al. The Cost of Manufacturing Butter, Agricultural Experiment Station, Iowa State College, Reserach Bulletin 389 (Ames, Iowa, June 1952) pp.789-90. They pointed out in this study that for one churn plants the additional requirements for buildings, equipment and labour was much less proportionately than the increase of output for creameries ranging in size from about 200,000 up to 700,000 pounds of butter per year. As a result, it was found that creameries which produced less than 200,000 pounds of butter annually frequently had costs as high as eight to ten cents per pound while those that produced at the 300,000 to 350,000 pound level could achieve costs less than five cents and those at the 600,000 to 700,000 pounds level could have average costs of less than four cents per pound. Beyond 700,000 pounds there were apparently no reductions in costs for one churn creameries.

ment has tended to think in terms of a volume of production required to meet these costs. Net returns are only possible above this level. In essence they have established a "break even" point in their volume of production, below which the net margin is negative. For any given creamery the scale of plant is normally fixed over a number of accounting periods. Churns and vats, which are the main factors influencing scale, will last for 10 to 15 years and within this period it is unlikely that managements would change the scale of plant unless the volume of cream was greatly in excess of plant capacity.[7] Consequently, management considers itself limited to a given scale of plant for any accounting period and budgets future operations from this base.

2. Effect of Seasonal Production on Scale: The greater the fluctuation in the volume of cream delivered during the year the more difficult the manufacturing and storage problems and the larger the scale of plant for a given annual volume of production. To illustrate this, three hypothetical cases have been drawn up in Figure 3. The annual production for creamerys A, B and C are assumed to be the same. The only differences are the seasonal fluctuation of production and, as a result, the scale of plant. If we assume that all plants are producing 600,000 pounds of butter per year, then plant A will require sufficient capacity to handle 50,000 pounds per month, plant B will have to handle 100,000 pounds dur-

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[7]The capacity of the plant may be changed by varying the number or size of vats for each churn, by changing the size or number of churns or by changing both vats and churns in approximate proportions.

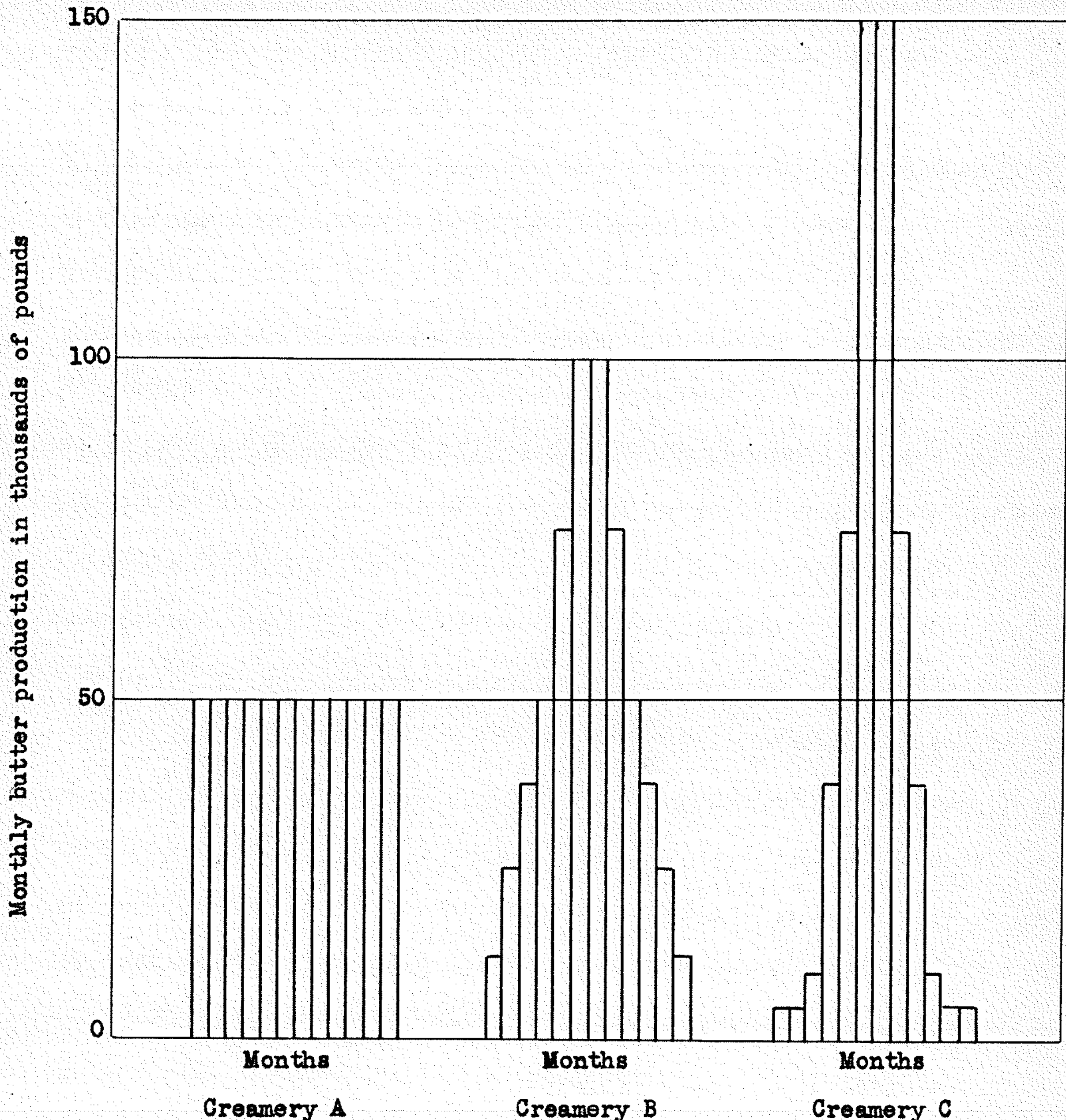

Figure 3. An illustration of the monthly output of three hypothetical creameries, each with a different seasonal production pattern.

ing the peak months, and plant C will have to handle 150,000 pounds during peak months. Therefore, the scale of plant is definitely influenced by the seasonal fluctuation of cream production. The greater the seasonal fluctuation, the larger the plant required for a given production, and the greater the amount of time the plant is under-utilized. This is one of the limiting factors to efficiency in the handling of agricultural products, particularly, the more perishable ones.

3. Effect of Seasonal Production on Average Costs: As indicated above the plants do not operate at the same level of output each month of the year. Due to this seasonal variation the average cost of production for each month may be above or below the annual average costs of production. Normally, for a given volume of output, an increase in the range between high and low production months will cause a corresponding increase in total costs. The lowest annual average costs will be obtained for a given seasonal fluctuation if the scale of plant is such that the majority of the output is produced at low cost.

The seasonal variation makes it necessary to set up a plant that has a fairly wide range of adaptability in its production program. This actually causes the average costs to be somewhat higher than under a fixed rate of production. This situation is further complicated by the fact that considerable variation can be expected between years due to influence of the weather and the farmers' production plans.

The existence of these many variables explains partly why wide ranges of production exist among creameries having the same physical capacity.

There is also some merit to the observation that the scale of plant was seldom decided on the basis of an extensive survey to discover the potential supply of cream.

C. Reduction of Overhead Costs: Overhead costs can only be reduced by increasing the volume handled. A creamery may accomplish this by (1) increasing the volume of cream handled or (2) by adding other enterprises.

1. Increased Volume of Cream: Creameries have attempted to increase the volume of cream handled by providing trucking services or by paying price bonuses to farmers. Both methods increase the cost of product delivered to the creamery. Net gains from either policy will depend upon where the creamery was operating on its short-run cost curve and the extent to which the utilization of plant is changed. As the creamery industry is highly competitive a change in policy at one plant usually leads to similar changes at other plants. Consequently, with a given supply of cream and without a change in the number of creameries only limited success may be anticipated from either of these policies.

2. Diversified Production: The inclusion of other enterprises is made possible by the fact that most creameries are located in areas where farmers produce a number of different products. It is often necessary because the supply of cream is limited to the farm output within a given area. By handling other produce the overhead and administrative costs are spread over a larger volume of business. Under such conditions the association will be in a position to hire competent management. Providing they do hire a competent manager and utilize labour, buildings and

machines more efficiently, they will increase net returns as well as increase the service to members.

In the multi-enterprise co-operative problems may develop in the allocation of dividends due to the difficulty of properly dividing overhead costs among the enterprises. There is a possibility that membership relations may be strained due to an unequitable use of services. Management and directorship becomes more complicated requiring greater ability on the part of those who take on such responsibility.

Accounting requirements are heavy in any co-operative due to the necessity of separate member records for patronage purposes. This problem is difficult for one product having several grades but becomes more so as additional products are added. The increasing complexity of accounting and costing plus the increased demand on management, directorship and membership relations is a limiting factor to co-operative expansion into a multi-product type of marketing association.

CHAPTER IV

STANDARDIZED STATEMENT AND DEFINITION OF TERMS USED

The basic purpose of this chapter is to outline the forms of the various annual statements as they were used in the analysis and to define the components of these accounts. This standardized form was necessary for analysis. Its necessity resulted from the fact that considerable inconsistancy existed among terms and location of components in the original financial and operating statements. These discrepancies existed among the statements from the four creameries and among years[1] at the same creamery. In either case, many of the differences apparently resulted from disagreement among auditors as to the naming of specific accounts and their respective location in the statements. The account that caused the most difficulty was equity capital in the form of retained dividends or revolving surplus.

For each item changed from the creamery statement to the form used here it was necessary to determine if the item referred to was, in fact, the same or different from the similarly named item on the standard form. It was recognized that some differences did exist among these co-operatives and these differences should be reflected in the accounts. The primary concern here was that the co-operative nature of the association be described adequately along with the financial and operational aspects.

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[1]The discrepancy among years at the same creamery usually occurred when auditors were changed.

It was assumed that the financial statements were sufficiently accurate for the purposes of this study. In most cases it was not possible to go beyond the annual business statements to clarify the items in the accounts. The managers were consulted in reference to the more important items of the account when some doubt existed as to the proper interpretation.

A. Description of Balance Sheet Components: The following are the components of the balance sheet as used in this study.

1. Assets:

a) Current Assets:

(1) Cash plus government bonds: The government bonds were included with cash on hand and at the bank because they were immediately convertible to cash.

(2) Accounts Receivable: The amount shown here was the net value after allowances for bad debt. Only current receivables resulting from business operations were included here.

(3) Inventory:[2] Only produce inventory, raw or finished were included in this account. Basically, this was made up of butter on hand but additional produce were included to allow for other enterprises when they were combined with butter operations in the annual statements.

[2]Prepaid expenses (primarily office and plant supplies) were included as part of the inventory in some balance sheets, whereas, in others this item was included with miscellaneous assets. Variation in the handling of this account was found among years for the same co-operative as well as among the four co-operatives.

The primary purpose was to include in inventory only those items that, in the normal process of operations, would be turned into cash or receivables.[3]

(4) Total Current Assets: This was the sum of the above three accounts. It represented the share of the total assets which were relatively liquid in nature. Although the components which make up current assets may fluctuate considerably the counteracting characteristics of these items cause the total current assets to change much less.

b) Other Assets:

(1) Prepaid Expenses and General Supplies: This item included the value of plant replacements[4] and office supplies on hand and prepaid insurance, taxes, wages and fuel.

(2) Manufacturing Supplies and Materials: Such items as salt, butter wrappers, butter boxes, egg crates, and other similar supplies on hand were included here. Basically, these are prepaid expenses but they are used directly in the manufacture and sale of the produce so they were separated from the rest.

(3) Intangible Assets:[5] The intangible assets included here were mainly for organizational expense or for a trucking franchise. The

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[3] D. D. Brubaker, Co-operative Creamery Accounting, Farm Credit Administration, Co-operative Research and Service Division, Bulletin 39 (Washington, D. C., 1939) p. 20.

[4] The plant replacements included here were in the nature of repairs rather than new equipment.

[5] In this study the intangible assets were not included with fixed assets although they are normally designated as such. They were included here with other assets primarily to show the fixed assets as tangible.

trucking franchise was considered the more legitimate asset of these two especially after the co-operative had been in operation for a number of years.

(4) Total Other Assets: This section contained a variety of assets which were not readily included with current or fixed assets. Fluctuations in this account resulted from variation in the number of enterprises handled and the level of intangibles included.

c) Tangible Fixed Assets:[6] This account included the value of land and the depreciated book value of buildings, machinery and equipment. As fixed assets were depreciated at a low rate this account normally remained fairly constant over several accounting periods.

d) Total Assets: This was the sum of current, other and fixed assets[7] and was equal to the liabilities of the co-operative to members,

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[6]For a given industry there are characteristic requirements for fixed assets which make it possible to establish a range within which the investment in fixed assets is considered satisfactory. Despite the fact that these organizations were classified as creameries considerable variation existed among the fixed assets accounts. This was due primarily to differences in type of operation, difference in the age of plant and equipment, differences in the purchase date of these properties and differences in the rate of depreciation allowance on similar equipment. Under conditions where an old plant was recently purchased, the book value was raised above what it would have been without the changes in ownership. This was caused by the increase in the price level or a decrease in the purchasing value of the dollar. The rebuilding of a worn-out plant or the purchase of new equipment also directly affect book value of fixed assets. These factors, although important considerations in the trend analysis of a single firm, take on more importance in the analysis between firms.

[7]The use of the term fixed capital is often used interchangeably with fixed assets. As used in this study fixed capital refers to the source of the funds rather than the value of the property or properties in which the funds are invested.

patrons and public. This represented the total of all investment in assets including intangible assets. The allowances for bad debts and depreciation reserves had been deducted before this total was calculated.

2. Liabilities and Net Worth: The breakdown of the liabilities and net worth was adjusted so that the liabilities to the public were separated from the liabilities to members. The purpose here was to determine members equity capital. In this division, monies owed to members as a result of loans[8] made to the co-operative, as separate from retained dividends, were not considered as part of members equity capital. It was assumed that such loans did not differ significantly from other liabilities to the public. On the other hand, monies owed to members as a result of operations were included in the equity portion of the source of funds. Some of these funds were current in nature in that they were declared payable during the next accounting period. In the analysis, consideration was given to the current nature of this portion of the equity capital, that is, the current liabilities to members were included in total current liabilities.

a) Liabilities to Public:

(1) Current Liabilities to Public:

(a) Debts to Bank and Credit Union: This account included all current loans and overdrafts at the bank or credit union. The total

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[8]Usually such loans are made by only a small number of members who have accepted an inequitable degree of risk unless compensatory interest charges are made.

value of the current debt was entered here rather than the net debt after deducting deposits at the bank.[9]

(b) Accounts Payable: The accounts payable included here represent the liabilities to suppliers of manufacturing materials other than raw products. Primarily these resulted from the purchase of materials, supplies and other similar business accounts.

(c) Accrued Expense: Such items as accrued wages, property taxes and others were included here. At creameries where this account was negligible it was combined with other current liabilities.

(d) Other Current Liabilities: Included here were such items as reserves for income tax, short term non-bank loans, and other current liabilities not included above. As a result, the value of this account tended to vary more than the above current accounts.

(e) Total Current Liabilities to the Public: This represented the total current debt exclusive of dividends declared payable to members.[10]

(2) Deferred (Fixed) Liabilities:[11] Primarily this account con-

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[9]This was the most common practice followed by the auditors. This had a tendency to lower the ratio of current assets to current debt below what it would have been had the net value been used.

[10]As indicated previously the dividends declared payable were included in equity capital. This deviation from normal accounting practice was justified on the grounds that it made possible the division of membership equity from the liabilities to public.

[11]Some difficulty arose in the handling of direct loans from members. These were poorly classified, and were included in the current liabilities in most of the original statements but in some instances were not due for a number of years. These were segregated into short and long-term loans on the basis of the length of time the debt was carried on the books. As it was possible that some of these were demand loans from members this

tained long-term loans, funded debts and long-term notes. Most of these resulted from the initial purchase of the plant and the replacement or repair of equipment and buildings.

(3) Total Liabilities to Public: This represented the sum of the liabilities to the public. The remainder of the funds are supplied through equity capital.

b) Members Equity Capital:

(1) Allocated Surplus:

(a) Dividends Currently Payable: This was made up of dividends currently payable which were part of total current liabilities. This account included both dividends declared on patronage and outstanding share capital.

(b) Retained Patronage Dividends: This included dividends declared on patronage which were retained in the business. Payments were to be made at a later date, usually on a revolving dividend fund plan.

(c) Total Allocated Surplus: This represented the portion of members equity which developed from the division of surplus. The relative importance of this account was determined by the presence or absence of the revolving surplus fund as the dividends currently payable did not make up a significant share of this source of funds.

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adjustment tended to underestimate the level of current liabilities. As used in this study the terms fixed and deferred are synonymous. For use of the term fixed liabilities see V. S. Alanne, Manual for Cooperative Directors (Superior, Wisconsin: Cooperative Publishing Association, 1945) p. 129.

(2) Net Worth:

(a) Capital (Outstanding): This was the paid up portion of authorized share capital. It represented the funds members had invested in shares either by direct cash purchase or from the transfer of retained dividends.

(b) Reserves:[12] The largest portion of this account was made up of reserves which were necessary by statute. Of lesser importance were special reserves for possible back taxes, specific debts, expenditures or contingencies. Reserves for bad debts and depreciation were deducted from their respective accounts and therefore, were not included here.

(c) Undivided Surplus (Deficit): This account represented the excess of total assets over liabilities, capital outstanding and reserves.[13] It was that portion of net worth that had not been allocated to the members or to a reserve. Because of its residual nature its true value was greatly affected by the procedure followed in handling the other accounts in the balance sheet.[14]

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[12] An important characteristic of the reserves is that no claim can be made on them by the members unless the co-operative is dissolved. A reserve reduces the size of the surplus account and, consequently, the tendency for the declaration of excessive dividends. The presence of large reserves reflects conservative policies on the part of management and gives the association an appearance of greater stability.

[13] At some of the creameries the undivided surplus represented a permanent source of capital, at others, it represented the years net margin from operations that was to be allocated at the next annual meeting.

[14] The true value of surplus is influenced by the level of reserves for bad debt or depreciation, the presence or absence of intangibles in with the assets, etc.

Alanne pointed out that "a surplus...indicates that the net worth of the business...has been increased over and above the paid in share capital, while a deficit implies a reduction of the net worth below the amount of paid in share capital".[15]

(d) Total Net Worth: This account contained the contributions to share capital plus the capital owned by the membership as a group.

(3) Members Equity: This was the sum of the net worth and the surplus allocated to members. It represented the members' investment in shares and their accumulated savings retained by the co-operative.

c) Members Equity plus Total Liabilities to Public: This was the sum of all funds supplied to the association from members, investors and current creditors. By definition it is equal to the book value of total assets. As suggested above, the relative importance of each source depended upon the needs of the co-operative and the specific policies followed by management.

B. Description of Operating Statement Terms: The balance sheet statement indicates the position of the association at the end of each accounting period. The operating statement, on the other hand, is a summary of what has happened during the accounting period. The surplus account is the link between the operating statement and the balance sheet statement. The net result of the years operations, shown as a surplus or deficit in

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[15]Alanne, *op. cit.*, p. 130.

the operating statement, is reflected directly by a corresponding change in the surplus account of the balance sheet.

The following outline deals with the main items included in the operating statement[16] as used in the analysis.

1. Gross Sales: This included the total income from all regular sales. Sundry or side-line sales were included with other revenue. They were excluded from the gross sales figure so that it represented, as closely as possible, the sales of the same product or group of products among years.

2. Net Sales: As used here, net sales represented the sale value of all products F.O.B. plant. To arrive at this figure the cost of outgoing freight, allowance for returns and selling costs were deducted from gross sales. Net sales were used so the results of operations could be compared more accurately among firms.[17]

3. Cost of Product Manufactured: This included the cost of produce, materials, wages and depreciation of the plant which were incurred to manufacture the products during the year.[18]

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[16]The operating statement was set up, as far as was possible, to include only the ordinary costs and income. As an example, extraordinary gains or losses were applied directly to the surplus account. Here the basic purpose was to remove from the analysis the irregular influences caused by non-recurring costs or sales.

[17]When the margin between gross sales and net sales was large these accounts were further analyzed to show the source of the costs. The main concern here was that all deductions from gross sales have a direct influence on the net margin or savings.

[18]The Cost of Product Manufactured is outlined in more detail on pages 59to 60.

4. Net Inventory Change: The value of the change in inventory as at the beginning and end of year was recorded here. As shown in the tables a negative value represented an increase in the end of year inventory over the beginning whereas a positive value represented a decrease. The net inventory change is the link between cost of products manufactured and cost of products sold.

5. Cost of Product Sold: This represented the cost of manufacturing the products sold during the year regardless of when they were manufactured. It was arrived at by adjusting the cost of products manufactured by the net inventory change which allowed for an excess or reduction of sales over the amount manufactured during the year.

6. Gross Margin on Sales: This was calculated by deducting the cost of products sold from net sales. This was the gross revenue from the main source of income.

7. Other Revenue from Operations: This included the net revenue from sources other than net sales. In most cases the amounts entered here resulted from the sale of cream cans, egg crates, and other supplies to members. This source of income was normally small[19] but due to the changing functional activities there was some variation in the items included here among years and among creameries.

8. Total Gross Margin: This represented gross revenue from all normal sources and was calculated by adding other revenue to gross margin on

[19]Revenue from the sale of fixed assets above their depreciated value was removed from this total and applied directly to the surplus account.

sales.

9. Administrative and Overhead Expense: The cost of the following items were included in this account: bookkeepers' wages, directors' fees, travelling expenses, postage, telephone, stationary supplies, bank charges, interest and exchange, educational fund, audit and sundry services, legal expenses, depreciation on office fixtures and miscellaneous expenses.

10. Net Margin on Operations: This represented the portion of the revenue that remained after all ordinary expenses were paid. The net margin was the most important indicator of the success of the year's activities. The funds included in the net margin were available to be applied to extraordinary expense[20] or as a net credit to the surplus account. The amount credited to the surplus account could be applied to special or statutory reserves, be allocated to members on a patronage or capital dividend basis, or remain as undivided surplus.

C. Description of the "Cost of Manufacture Statement Terms": The cost of manufacture statement includes the breakdown of costs for materials and plant operations which have gone into the manufacture of the product. It deals with the total operations for the year. As such it is part of the operating statement but it has been separated for ease of presentation and analysis. The following are the main components:

1. Cost of Raw Material at Plant:

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[20] The bonus to producers was considered an extraordinary expense. It was price improvement but it was normally paid out during the last month. Its size was dependent partly on the financial status of the co-operative.

a) Produce: This was the amount paid out to the producers for the raw product (i.e. cream, eggs, etc.).

b) Procurement Expense: This was the cost incurred by the creamery in hauling the produce from the farm to the plant.

c) Total Cost at Plant: This represented the cost of the farm produce delivered to the plant.

2. Manufacturing Expense:

a) Materials used: Items such as the cost of salt, butter boxes, wrappers, and other plant supplies used directly in the manufacture of the product were included here.

b) General Expenses and Allowances: The cost of fuel, property tax, insurance premiums, the allowance for depreciation on property and other general expenses were included here.

c) Wages and Salaries: This contained the wages for the butter maker and helpers, grading expenses, workmen's compensation, unemployment insurance and pension fund contributions.

d) Total Manufacturing Expense: This was the cost incurred in processing the raw product ready for sale.

3. Total Cost of Product Manufactured: This was the sum of the total cost at plant and the total manufacturing expense. It represented the cost of all products processed during the year.

CHAPTER V

PROCEDURES USED IN ANALYSIS

The main procedures of analysis are outlined in this chapter. The purpose is to indicate the underlying principles of each procedure and the levels at which the results are considered satisfactory. Although many of the methods are interrelated and are combined in the analysis they are separated here for purposes of description. The objective of the procedures used is to illustrate the specific characteristics of each creamery and show the changes that occurred over the ten year period.

The financial statement data used in this study are presented in absolute form as this represented the actual state of affairs at each co-operative. All subsequent analysis, such as percentages, ratios and trends, are merely used to illustrate more clearly the relationship that exist in the original statements. To facilitate comparison among creameries and among years the tables containing the financial data in absolute and relative form are included in Appendix A.

In the analysis, various standards of performance are used as a guide to the interpretation of results. These standards are available mainly for the more popular ratios. They are used in this study as a rough approximation for there are a number of factors to consider in addition to those reflected by each ratio.

A. Comparative Annual Statements: The comparative annual statements were presented for ten years 1941 to 1950. By presenting the basic data in this form it was possible to compare the actual values of the various components within each statement and between statements.

The comparative annual statements set up for each creamery were:

1. The comparative balance sheet statements,
2. The comparative operating statements, and
3. The comparative cost of manufacture statements.

The components included in each of these statements were described in Chapter IV. The data were transferred direct from the original co-operative statements to the comparative statements as the first step in the analysis. In this form they were available for further analysis.[1]

B. Summary of Balance Sheet Changes: Basically, the summary of balance sheet changes indicate where the funds have come from and where they have gone.[2] It is similar to the comparative balance sheets in that it deals with actual figures but differs to the extent that it brings out the changes into greater relief. As an example, changes in solvency can be more readily detected with the use of this type of table. Cole points

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[1]Although the figures presented in this study are rounded to the nearest $100 most of the analysis was carried out before rounding.

[2]Harry G. Guthman, The Analysis of Financial Statements (New York: Prentice-Hall, Inc., 1946), p. 151. He points out that the basic principle behind this procedure is that, "When an asset is disposed of, it either brings some other value into the balance sheet or results in a cancellation of some item on the liability side. The same result may be obtained by assuming a liability. For this reason, decreases in the asset side and increases in the liability side, indicating the source of funds or values used by the concern, are entered in the 'Where Got' column. The resultant increases in asset accounts or reduction of liability, indicating where the values acquired by the business are bestowed, are entered in the 'Where Gone' column".

out that "a summary table showing the changes indicates whether good assets are exchanged for less good, and whether troublesome liabilities are exchanged for those that are less exacting".[3]

1. Years Summarized: This table was set up to show the changes that occurred between 1941 and 1950; 1941 and 1946; 1946 and 1950. The objective was to determine what had occurred over the ten year period and then ascertain when the greater portion of the change occurred. The years 1941-46 were assumed to represent the portion of the period influenced by price controls and 1946-50 the period of adjustment immediately after the war.[4]

Guthman indicated that the use of the summary sheet changes for a number of years has an advantage in that it gives the cumulative movement for the period in such a way that the "major tendencies are clear".[5] This method of analysis is used in this study to summarize the major changes as the trend percentage data are used to illustrate the changes by year over the 10 year period.

C. Trend Percentage Analysis: The basic purposes of this procedure of analysis is to illustrate the rate of change of the various components over the ten year period. These trends indicate the changes in the characteristics of the association and reflect the ability of management[6] to

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[3] W. M. Cole, Accounts, Their Construction and Interpretation (Boston: Houghton Mifflin Company, 1915), p. 97 et. seq.

[4] The changes between 1941 and 1946 result from five years operations and that between 1946 and 1950 from four years operations.

[5] Guthman, op. cit., p. 152.

[6] Stephen Gilman, Analyzing Financial Statements (New York: The Ronald Press Company, 1939), p. 107.

adjust to changing conditions.

The trends were not used to indicate whether or not a danger point was reached. This could only be determined after due consideration was given to the actual figures.[7] "The greatest value of the trend percentage method is...its complete disregard of absolute quantities, thus focusing attention on trends only. But the trends must be interpreted in terms of relative importance".[8]

In the calculation of the trend percentage the 1941-50 average was used as the base to reduce the fluctuation of individual items that would occur from the use of 1941 as a base year.[9] In this analysis it was not assumed that the 1941-50 average represented a typical year.

1. Trends Calculated: Trends were calculated for the more important components of the balance sheet, operating and cost of manufacture statement.

2. Use of Semi-Log Paper: The main trends were charted on semi-log paper. With the use of this paper the trends were interpreted by the relative changes in the slope[10] of the various lines between years rather than relative to the base year value which equalled 100 per cent for all components.

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[7] *Ibid.*, p. 157. [8] Ibid., p. 116

[9] This was necessary especially for the two co-operatives that had started operations in 1939 and 1940.

[10] Gilman, *op. cit.*, p. 120. (The semi-logarithemic chart is spaced from top to bottom corresponding with the logarithemic division of an ordinary slide rule. Because of this rule the effect of such a chart is to show the trends by the slopes of the charted lines.)

D. Component Percentage Analysis: The original balance sheet and the summary of its changes describe the absolute dollar amounts. The purpose of the component percentage sheet is to indicate "the proportion which the various items bear to the total". Guthman further suggests that "this type of presentation is particularly valuable when the whole balance sheet is expanding or contracting, for then relative change in relation to the other items, rather than absolute change, is the more important, and less easily discovered than in a static business".[11]

The basic assumption in the component percentage analysis is that the total remains the same, that is, it equals 100. Consequently, this method is "practical for surveying relationships between items within a financial statement but at the same time...(is) inappropriate for the study of trends.[12]" Gilman pointed out that the changes in the component values from year to year only reflected the net variations.[13]

One of the most important uses of the component percentages was the presentation of the balance sheet data in this form. This illustrated clearly some of the basic characteristics in the source and use of funds.

In the operating and manufacturing statements the main concern was to illustrate the most important sources of cost. It was particularly important as it indicated the gross and net margins relative to sales.

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[11] Guthman, *op. cit.*, p. 170.

[12] Gilman, *op. cit.*, p.116. (The ratios have the same basic characteristics.)

[13] *Ibid.*, p. 69.

E. Ratio Analysis:[14] The component percentages are used to illustrate the relationship of each item to the total. The ratios are used to supplement this analysis. They illustrate the relationship between two items in the same statements or among the various statements for the same accounting period.

In most of the analysis an attempt was made to follow a pattern. With the ratios more variation was necessary to illustrate the specific characteristics of each co-operative.

1. Financial Ratios:

a) Current Ratio:[15] The ratio of the current assets to current liabilities indicates the ability of the firm to meet obligations maturing within one year. A standard value requires two dollars of current assets for every dollar of current liabilities. "The current ratio is the reflection of a static condition, of a relationship on one date between two variables."[16] As a result, the time of year at which the books

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[14]With the use of ratios certain standards of performance and are available. In the interpretation of these standards there is normally a range within which the value of the ratio is considered satisfactory or reasonable. Movement beyond this range usually indicates that further investigation should be carried out to determine the cause and proper interpretation of the situation.

[15]In the discussion of this ratio consideration was given to the net working capital position. It indicated in absolute terms the extent to which the value of the current assets exceeded current liabilities. In most cases it allowed a more accurate interpretation of the working capital position than did the current ratio.

[16]R. A. Foulke, Practical Financial Statement Analysis (New York: McGraw-Hill Book Company, Inc., 1945), p. 186.

are closed materially influence the value of this ratio.

b) Receivable to Current Assets: This indicates the relative importance of receivables. When this ratio is fairly high this suggests that considerable credit is being extended. The seriousness of the situation will depend on the soundness of the accounts and the cash requirements. O'Meara suggests that "if more than 40 per cent of the current assets (are) in receivables the co-operative is in a weak position since its ready money is being tied up and therefore unproductive".[17] The importance of this level varies considerably among types of business. At creameries high level of receivables was considered unnecessary as the bulk of the sales went to the central market where prompt payment is expected.

c) Receivables to Net Sales: This ratio indicates the portion of sales for which payment had not been received at the time the books were closed. It is an important test of receivables as they can only be in excess relative to sales volume. It is a logical ratio relationship as receivables are a direct result of sales. Both sales and receivables are current in nature and are expressed in the same general terms.

This relationship is reviewed further by calculating the number of days of sales in receivables. This indicates roughly the average collection period and is an index of collection efficiency.[18] Foulke sug-

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[17] J. E. O'Meara, "Ontario Co-operatives, 1946-47", Co-operation and Markets Branch, Ontario Department of Agriculture (Toronto, Ontario: November, 1948), p. 47.

[18] Gilman, *op. cit.* p. 60.

gests that when the number of days of sales invested in receivables are high, it may be necessary to check the age of receivables to determine if they were collectable.[19] Aging of receivables was not possible in this analysis therefore, the interpretations were based on the amount.

d) Net Sales to Fixed Assets:[20] This ratio indicates the number of dollars of sales for every dollar invested in fixed assets. Primarily, it is a test of the productivity of the fixed assets as it indicates the turnover of the business relative to the capital invested in fixed assets. The higher the sales, assuming they were profitable, the more successful the investment and the more justified are the buildings, machinery and other non-current assets. With a low ratio value, charges for depreciation, interest and cost for repairs and maintenance will make up a large share of the per unit costs of operation.

e) Capital Structure[21] to Fixed Assets: This ratio indicates the

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[19] Foulke, op. cit. p. 356.

[20] Price and time differences are present in the valuation of the two components used in this ratio. Fixed assets accumulate over a period of years and are used here at their depreciated book value. Sales are the result of one year's activities and are valued at present prices. Therefore, the effect of a price change on net sales or a variation in depreciation rates on the book value of fixed assets are important in this comparison.

[21] The term capital structure is used here to include the combined long-term investment of members and creditors. Therefore, it includes capital stock outstanding, reserves, surplus, retained dividends, and deferred liabilities to the public. The attempt here was to use a figure that represented the permanent capital of the co-operative regardless of its source. Consequently, the portion of the allocated dividends which were currently payable have been excluded from capital structure.

The need for the use of the capital structure term is pointed out by Guthman and Dougall. Although they were discussing privately owned corporations it was assumed that the situation was sufficiently comparnumber of dollars of permanent capital there are for every dollar invested in fixed assets. It is another test of over-investment in fixed assets or an under-supply of permanent capital. It can be used to verifty observations made from the ratio of net sales to fixed assets.

A high ratio value is desirable as fixed assets should be completely covered by permanent capital. Therefore, a 1:1 ratio value is the minimum considered reasonable. If the ratio is less than 1:1 a situation exists where short term capital is being used to finance fixed assets and the net working capital position will be negative. Under such conditions a co-operative is vulnerable because if business reverses are incurred, the fixed assets may have to be liquidated to meet short-term obligations.

f) Net Sales to Capital Structure: This ratio indicates whether the co-operative is over or under-capitalized relative to the volume of business that it handles.[22] It supplements the ratio net sales to fixed

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able to that which resulted when co-operatives used allocated dividends as a relatively important source of funds. "Whether the stockholders' net worth has been built up by paid-in surplus or by surplus profit left in the business, it represents an investment which should produce increased earning power and additional assets to protect the creditors. In fact, with the increased use of stock without any or with only a nominal par value, the capital stock figure in the balance sheet is frequently a relatively small figure that gives little clue to the total investment of the stockholders. In such cases, the capitalization figure is without meaning, and the capital structure figures are essential to gain an idea of the total long-term investment in the business and the respective proportions of bonded debt and stockholders' interest." Harry G. Guthman, and Herbert E. Dougall, Corporate Financial Policy (New York: Prentice Hall, Inc., 1948), p. 75.

[22] Over and undercapitalization is discussed on page 67.

assets in that it indicates the turnover on the permanent capital which has been invested in the co-operative by members and long-term investors. A high ratio value is desirable, assuming sales are profitable.[23] "If the ratio is low by comparison with standards, or if, upon internal analysis, the trend shows a decreasing turnover, there is an indication of either overcapitalization or changing market conditions."[24]

g) Net Margin to Capital Structure:[25] This ratio is, in effect, an index of the value of the net margin on operations for each dollar of permanent capital invested in the co-operative. This measure is important because it is the final net margin, "after all possible charges, that indicates, year after year, how well the funds invested in a business enterprise may have been utilized".[26] This ratio clarified whether the sales have been profitable or not. Therefore, it verifies the assumption made in using the ratio net sales to capital structure.

2. Members Equity Ratios: As indicated previously membership equity referred to the liabilities of the co-operative to the members.[27]

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[23]The net margin on operations should be at a maximum. This is not always assured by a high turnover.

[24]M. S. Heidingsfield, and A. B. Blankenship, Market and Market Analysis (New York: Henry Holt and Company, 1947), p. 43.

[25]The ratio net sales to capital structure is complementary to this ratio. This is to be expected as net savings are the residual of net sales after all expenses are deducted. When both these ratios declined in about the same proportion this usually indicated the market picture has changed. On the other hand when net sales to capital structure remained fairly constant but net savings to capital structure declined this indicated the possibility that the cost of operation were increasing.

[26]Foulke, op. cit., p. 557.

[27]See p. 34, and p. 52.

The analysis of the membership equity situation is an important part of the analysis of the co-operative. Most of the literature on co-operative financing stress the need for the accumulation of equity capital from the standpoint of financial stability and membership support and control.[28]

The following ratios were used to indicate the policies followed by the co-operatives with regard to their membership equity capital.

a) Members Equity to Total Assets: This ratio indicated the share of the funds which were supplied by members and reflected ownership. It is considered essential that the members own more than 50 per cent[29] of the assets if they are to maintain adequate control over the association. When part of the equity capital consisted of currently payable dividends this minimum was raised.

This ratio indicated whether or not the members were fulfilling their

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[28]For further discussion of equity capital see Frank Evans and E. A. Stokdyk, The Law of Agricultural Co-operative Marketing (Rochester, New York: Lawyers Co-operative Publishing Co., 1937), p. 176; E. A. Stokdyk, Financing Farmers' Co-operatives, Farm Credit Administration, Circular E-20 (Washington, D.C.: October, 1939), p. 2: E. F. Koller, "Some Aspects of the Financing of Farmers' Co-operatives", Journal of Farm Economics, 34:950, December, 1952; Harold Hedges, "Financing Farmer Co-operatives", Journal of Farm Economics, 33:922, November, 1951; H. H. Bakken and M. A. Schaars, The Economics of Co-operative Marketing (New York: McGraw Hill Book Company, Inc., 1937), Chapter XIV and XV; and V. S. Alanne, Manual for Co-operative Directors (Superior, Wisconsin: Co-operative Publishing Ass'n., 1945), p. 135.

[29]O'Meara, op. cit., p. 47; Alanne, loc. cit. suggests a 75 per cent minimum; Bakken and Schaars, op. cit., p. 357 agreed with the 75 per cent minimum but suggested (p. 382 et. seq.) that adequate financing did not mean total financing by members. The aim should be to have members supply sufficient for normal requirements and make provisions to borrow to meet peak annual requirements.

responsibilities as suppliers of capital. Members should supply a large portion of the funds for experience has shown that, when a co-operative operates on a large proportion of borrowed funds, the interest and capital payments can cause financial embarrasment when an unexpected decline in income occurs.[30]

b) Members Equity to Fixed Assets.: This ratio indicated whether or not the members had supplied sufficient funds to meet the requirements of fixed assets. As the co-operative creameries require a relatively high investment in fixed assets this is an important ratio. As the fixed assets imply immobility it is essential that only the more permanent type of funds be invested in them.

A minimum ratio value of 1:1 was considered necessary. A higher ratio value was considered desirable as it indicated that members were supplying funds in addition to those invested in fixed assets.[31]

c) Members Equity to Capital Outstanding: The co-operative creameries included here were all capital stock companies, therefore, the outstanding capital represented the paid up shares owned by the members. Based on the assumption that share capital represented the original contribution by members,[32] this ratio roughly indicated the increase in membership equity over this original contribution. In other words, it

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[30]When a revolving fund is established with a fixed date of maturity and rate of interest the same difficulties could occur.

[31]O'Meara, op. cit., p. 48.

[32]The original contribution as used here means the amount which the members originally contributed to become a member and not the contribution made by the original members.

was used as a test of equity accumulation. This ratio does not indicate the increase in the value of shares when part of the increase in equity has been allocated to members.

F. Membership Analysis: A basic principle among co-operatives is that ownership and control reside with those who receive the services from the co-operatives. The analysis of the membership data was to discover how closely the creameries conformed to this principle.[33] The following are the main factors considered.

1. Number of Members: The number of members provided a rough indication of the support given the co-operatives by farmers in an area. As suggested previously members are important as they provide the volume of business and are primarily responsible for providing the capital.[34]

When possible the number of active and non-active members were determined.[35] An increasing trend toward non-active members normally indicates that the average membership is becoming older. Under such circumstances ownership and service privileges are not being used by the same individuals. A policy in which new members are continually being recruited and older members retired is required under such conditions. This is a vital problem faced by many of the older co-operatives today.

2. Number of Patrons: The patrons are the people who are using the

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[33]Some of the membership data were not available, therefore, complete analysis was not possible for all co-operatives.

[34]Hedges, op. cit., p. 926.

[35]The active members are those who use the services of the co-operatives and the non-active members are those who do not.

services of the co-operative. They are both members and non-members.

It was considered desirable that patrons be encouraged to become members so that the non-member business would be at a minimum. Co-operatives with high non-member business were not following sound co-operative principles which require that use and control be associated with patronage.

3. Members Attending General Meetings: The basic purpose of these data were to indicate whether the active control of the co-operative was being carried by the entire membership or by a limited number of more responsible members. Attendance at these meetings is a responsibility of all members and low attendance indicates lack of interest and neglect of responsibilities. When only a small number of members are present at the meetings the true control over the co-operative is not divided among the members but is contained within those present.

4. Volume of Business or Sales Data: The volume of sales is a good indication of the active support of members and non-member patrons. When the majority of the patrons are members this indicates the active support by members. As such, changes in volume of business indicate changes in the support given by the members.

The true significance of those changes was determined more accurately by comparing the sales and production statistics with provincial production figures for the same products. With butter production the main interest was to discover if the volume of business at the co-operative fluctuated with or independent of changes in the average production per creamery for the province as a whole. In this way strictly local changes could be separated from overall changes in production which normally result from uncontrollable factors as far as the creamery was concerned. The assumption here was that when the production of an individual co-operative increased faster than the average per plant for the province, this was indicative of positive membership support. Trends in production rather than yearly difference are the important factors here.

a) Average Sales per Patron: The average sales per patron calculated for a number of years gives some idea of whether changes in volume are due to changes in the number of members or in the production per member. When available, the average ten year figure was used to indicate the characteristics of farm production in the co-operative's procurement area. Here it was assumed that the average production per patron was as much a characteristic of the type of production in the area as it was an indication of the patron's support.

5. Average Equity Per Member: This figure represents the average investment each member has in the co-operative. It is usually assumed that the amount of equity a member has in a co-operative will influence his interest and active support. That is, when the average investment per member is high support should be strong.[36]

This average value was compared with the value of the average sales per patron figure. The purpose was to indicate how equity was being built up in relation to sales. It was assumed that accumulation would be

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[36] See Bakken and Schaars, op. cit., p. 408; and O'Meara op. cit., p. 33.

slower relative to sales at a co-operative that paid out high cash dividends.

CHAPTER VI

THE DESCRIPTION AND ANALYSIS OF THE CO-OPERATIVE CREAMERIES

This chapter and the next three are primarily concerned with the detailed study of the four co-operative creameries. Each co-operative is handled separately, although where necessary, comparisons are made to illustrate specific points.

The co-operatives were organized at different times over the period from 1907 to 1940. Due to this age difference the historical treatment varies among the four co-operatives. The historical review deals mainly with the original By-laws and subsequent amendments. When possible financial and production statistics are included to show changes which occurred prior to 1941-50. The older co-operatives are handled first as they require more extensive historical treatment. In the review of each of the co-operatives the main purpose is to outline the factors which established specific co-operative, financial and operational characteristics.

THE NORTH STAR CO-OPERATIVE CREAMERY ASSOCIATION LIMITED

A. Location of Co-operative: This co-operative is located at Arborg in the Interlake Area of Manitoba. The community around Arborg was originally settled by Icelandic immigrants who realized the need and had the resourcefulness and community spirit necessary to establish and maintain this co-operative creamery. In later years, immigrants from other parts of Europe settled in the general area, and at present, they or their descendents make up an important share of the membership of the co-operative.

1. Characteristics of Procurement Area: The Interlake Area as a whole is classified as a mixed livestock-grain type of farming area. For the Bifrost municipality, in which the creamery is located, about 58 per cent[1] of the farmers' cash income was derived from the sale of livestock and livestock produce. About 17 per cent was from the sale of dairy produce.

Although livestock were relatively important in 1951 they were more so prior to that time. Much land development had occurred in the area particularly between 1941 and 1951. During these ten years the cultivated land as a per cent of the "land in farm" was increased from 30 to 55 per cent.[2] Some of this newly improved land was used for hay and pasture production thus the shift from livestock to grain was less than the acreage change would indicate. The size of farm was increased between 1941 and 1951 and the labour supply per farm was greatly reduced. The change in the labour supply had considerable influence on the number of livestock kept for milking purposes which was reflected by the downward trend in butter production.[3]

B. Historical Review of Co-operative: This co-operative was organized in 1907 to provide creamery facilities to the farmers in the Arborg dis-

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[1]Census of Canada, 1951.
[2]*Ibid.*, 1941 and 1951.
[3]See Figure 29, appendix B.

trict. Prior to 1907 these services were not available. It is one of the oldest co-operatives in the province and has continued to give satisfactory service to its farmer patrons.

1. Review of Statutory Information:

Historical:

a) The initial By-laws were drawn up in 1907. They were written in Icelandic. These early By-laws were not registered. A new set of By-laws were adopted in 1915 and another in 1926. The 1926 By-laws were the earliest ones available for review.[4] Further additions or reorganizations of the By-laws were made in 1933, 1938, 1939 and 1942. Most of these were minor changes allowing the addition of new policies or services.

b) Objectives of the Association: In the 1926 By-laws, the main objectives of the Association were "to buy, sell, manufacture and deal in milk, cream, ice cream, butter, eggs, cheese, salt feed and such other articles as may properly be handled to the interest of the shareholders and patrons of the Association.[5]" During 1942, these operational objectives were extended to provide the right to "operate and control a cold storage plant" and freeze or refrigerate produce for the members.[6]

c) Capital Situation:

(1) Authorized Capital: In 1907 the authorized capital was es-

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[4]North Star Co-operative Creamery Association Limited, By-laws, 1926. (All subsequent references to By-laws will either refer to the 1926 By-laws or amendments to these By-laws as indicated in the text. The file containing these By-laws and amendments can be reviewed at the office of the Provincial Secretary, Legislative Buildings, Winnipeg, Manitoba.)

[5]North Star By-laws, Section 3, 1926.

[6]1942 Amendment.

tablished at \$5,000. It was increased to \$10,000 in 1915. In 1926 it was again increased to \$15,000 and was comprised of 1,500 shares at \$10 each. Some one-half shares ware sold at \$5 each in 1926 but there was no provision in the By-laws for their sale.

(2) Shares: No member could purchase more than 75 shares or five per cent of the authorized capital. Shares could only be purchased on a cash basis as there was no provision made for their payment through retained dividends.

d) Membership: Each member was bound by contract to deliver to the creamery all cream or milk products produced on his farm over home or farm requirements. Although the members were bound by contract there was provision made for them to resign. If a member resigned, his shares were forfeited and he ceased to have any interest in the assets of the association.[7] In 1939, this article was amended so that members who resigned received settlement of their dues within three months.[8] Besides being able to resign from his obligation, a member could be expelled by a two-thirds vote at a general meeting. The members had the privilege[9] of using the services provided by the Association. Each member had one

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[7]By-laws, Article 11, 1926.

[8]The original forfeiture of equity by the member was presumably used to give the Association some leverage over the decision of the member. In other words, he would have to weigh his advantages between the gain from making his sales outside the Association with the loss of his equity in the Association. The 1939 amendment indicated a more lenient approach to membership resignation. No provision was made for membership contracts in this amendment.

[9]The members privileges were outlined here as allowed in the Manitoba Statute, 1925, see page 27, *et seq*.

vote he could excercise at general meetings. The members elected the Board of Directors and each member of good standing had equal rights of becoming a member of the Board.

e) Apportionment of Surplus: In the 1926 articles of Incorporation[10] provision was made for the distribution of surplus as set out in the Statutes of Manitoba 1925[11] with the exception that the word "profits" was used and no allowance was made for payment of patronage to non-members. In 1938, this Article was amended so that the rate of interest on share capital was not to exceed seven per cent as stipulated in the 1932 statutes. In 1939, the word "surplus" instead of "profits" was read into the above Article. At the same time, the reserve fund was changed to equal fifty per cent of paid up capital.

The lowered interest rate and increased reserve were both conservative moves on the part of the management. Such changes tended to give the organization increased stability. On the other hand, the increased reserves did present a problem when the older members retired and wished to take with them the value of their shares and dividends (i.e. equity capital). There was no way to give them consideration for the additional equity that they had in the Association in the form of reserves as long as shares were exchanged at a par value.[12] This difficulty would have

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[10]By-laws 1926, Article Vll.

[11]See p. 27.

[12]As a consequence of this situation, the older members were reluctant to give up membership as the annual returns on shares provided the only way they could receive consideration for their former contributions. This reluctance was expressed in 1951 when an attempt was made to estab-

been less serious had these monies been transferred to share capital rather than reserves.[13]

f) Price Improvement Payments: In 1933[14] provision was made in the By-laws to allow payment of a price improvement to cream shippers. The amount to be paid was established each year. The auditor was intructed to give a preliminary report, on the 30th of November and estimate the amount of money available for price improvement. Once the auditor made his report it was up to the Board to decide if, and how much of the amount reported available would be used. Monies could not be paid out if it reduced the surplus below 50 per cent of outstanding share capital. The price improvements were to be paid on a per pound of butterfat basis for the period between December 1st of the previous year and November 30 of the current year.[15]

C. The Educational Program: The education of members concerning activities of the co-operative was restricted mainly to the annual statements and subsequent discussion at the annual or special meetings. This was expected as the co-operative was well established as a recognized part of

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lish a revolving fund plan. Although a revolving surplus fund was established in 1952 it only applied to members. Non-members still could not accumulate equity to be applied to a share. This kept membership numbers fairly inflexible and suggested that there was not complete agreement that new patrons should become members automatically. They could of course buy a share for $10 at any time.

[13]For discussion of revolving capital funds see p. 34. et. seq.

[14]By-laws, 1933 Additions, Article XIV, Secs. I-V.

[15]The payment of a price improvement replaced the payment of patronage dividends. Consequently, this was an important change of policy as it allowed payment to all patrons rather than just to members.

the community.

The co-operative set aside a certain amount of money each year into a educational fund. These contributions averaged about \$175 per year and varied from \$85 to \$250 among years. From this education fund regular contributions were made to the Manitoba Federation of Agriculture and Co-operation.[16]

Part of the education fund and some additional donations were used to support junior and adult educational programs such as study groups, public speaking contests and boys and girls summer camp activities. The Association promoted bus trips for members to visit co-operatives in Manitoba. A library was also provided.

Apart from the general support of co-operative education there was a definite attempt to encourage the patrons to increase cream output during winter months. This was promoted with the idea that it would reduce the variation of butter manufacture and thus reduce average costs. In addition, due to higher winter prices, the gross receipts would be increased. Both would give rise to increased earnings to the patrons either through higher initial prices or price improvement.

D. Review of Production:

1. Type of Production: The manufacture of butter was the main type of production. Locker plant facilities and buttermilk drying equipment

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[16] The Manitoba Federation of Agriculture and Co-operation handled a provincial educational program for co-operatives and is associated with national co-operative organizations.

were added during the 1941-50 period.[17] The sales data for the co-operative showing the contribution of each enterprise are outlined in Figure 4, page 85.

a) Butter Production:

(1) Scale of Plant Operation or "Make": The level of butter production for this creamery is illustrated in Figure 29, Appendix B. The approximate level of operations is indicated by the average annual butter production for the 1941-50 period which was about 360,000 pounds. The yearly production varied from a high of about 460,000 to a low of 320,000 pounds during this ten year period.

(2) Utilization of Scale: With the wide range in the production pattern indicated above it was essential that the plant be able to adjust to these conditions. Although the annual production remained fairly stable from 1944 to 1950 there were sharp changes in plant utilization between 1941 and 1944. Such changes in annual output had considerable influence on the per unit costs of production.[18]

The result of a sudden change in production is illustrated in Table 2. Production dropped from 460,000 pounds in 1943 to 340,000 in 1944 due to lower farm output and the discontinuation of cream trucking services. The net result was that the operational costs were increased by 0.88 cents per pound. In interpreting the changed cost conditions it was recognized

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[17]This move towards more diversified production was fairly general among the creameries.

[18]See discussion p. 42.

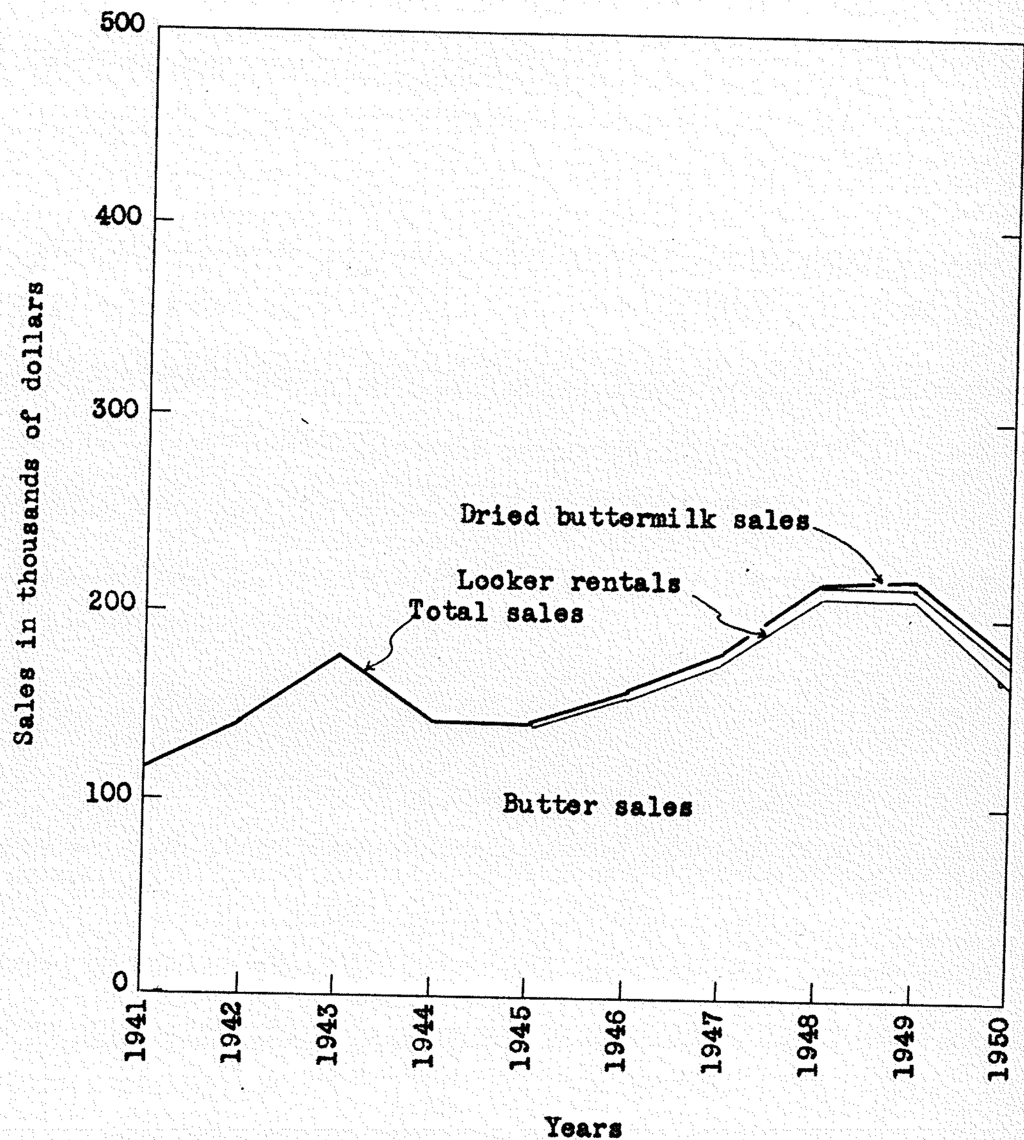

Figure 4. Total annual sales and the amount contributed by each enterprise for years 1941 to 1950: North Star Co-operative Creamery Association.

that some of the increase was due to changed prices.[19] The increase in the manufacturing costs were partially offset by a reduction of the average price to the patron. This suggested that both the creamery and the patron absorbed the increased costs.

Table 2. Average Production Costs per pound of Butter Manufactured in 1944 with Comparable Figures for 1943[1]

Items	Year 1944	Year 1943	Increase (Decrease)
	- cents -		
Cost of material used, exclusive of butterfat purchased	0.89	0.79	0.10
Wages, fuel, truck expense, etc.	3.22	2.88	0.34
Depreciation	0.60	0.43	0.17
Administrative and executive charge	0.93	0.66	0.27
Total	5.64	4.76	0.88
Cost of butterfat purchased	25.67	26.19	(-0.52)
	-dollars-		
Cost per 100 lbs of butter churned	31.31	30.95	0.36

1 Copied from Auditors Report, 1944.

The change in the trucking service between 1943 and 1944 must be considered in the interpretation of these figures. With this reduction of services total expenses should have decreased. This implied that the increase in cost per unit due to the change in volume would have been greater than the 0.88 cents shown here.

(3) Seasonal Production Pattern: This creamery had the lowest variation in monthly production for all creameries studied (Figure 30, Appendix B). The seasonal variation in production was compared with the

[19] D.B.S. The general wholesale price index went up from 127.9 in 1943 to 130.6 in 1944.

variation at other creameries using the high month-low month production ratio.[20] This co-operative creamery had an average ratio of 2.4 to 1 which was the lowest for all creameries in the province. The average for all creameries in the Interlake Area and for all creameries in Manitoba was 3.9 to 1. This suggested the creamery was favored with a relatively satisfactory seasonal production pattern.[21]

(4) Plant Equipment: (Indication of Scale:) The creamery had sufficient equipment to efficiently handle the butter manufactured. The presence of a 1,500 pound churn and two 3,400 pound pasturizing vats made it physically possible to handle two or three churnings a day without difficulty. During peak months approximately 40 churnings were necessary to turn out the butter manufactured. With daily fluctuations it would appear that machinery and labour may have been worked long hours especially during the 1941-43 period. More information of an engineering nature would be necessary before a definite estimate could be made on the optimum "make" for this plant.

(5) Efficiency of Butter Production: Butter was manufactured efficiently during most years as the average over-run was 22.5 per cent (Table 3). The range between 20.7 and 25.3 per cent was fairly wide but

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[20]The high-low ratios were calculated by dividing the high production month by the low production month. A three year average was used. Data for comparison with other creameries in Manitoba were obtained from unpublished data, Dairy Branch, ManitobaDepartment of Agriculture.

[21]Some of the difference between this creamery and the others in the area was assumed due to the success of the promotional work carried out as part of the educational program. See p. 83.

an over-run of 21 to 22 per cent is considered satisfactory.[22] The high over-run during the last four years resulted partly from a change in government regulations allowing a higher salt content in butter.

Table 3. Initial Average Prices per pound to Patrons, Price Improvement and the Estimated per cent Over-run from Butter Manufacture: North Star Co-operative Creamery Association Limited, 1941-50

Years	Average initial price	Average price improvement	Average total price	Annual average over-run
	- cents per pounds of butterfat -			- per cent -
1941	30.5	2.1	32.6	21.1
1942	35.4	2.3	37.7	20.7
1943	40.5	0.6	41.1	21.4
1944	41.6	1.2	42.8	23.1
1945	41.9	0.9	42.8	21.3
1946	46.2	1.0	47.2	21.0
1947	53.4	3.3	56.7	23.9
1948	69.0	2.9	71.9	24.6
1949	60.2	2.5	62.7	25.3
1950	54.4	2.0	56.4	24.2
Average 1941-50	46.4	1.8	48.2	22.5

b) Cold Storage Operations: From 1942 to 1946 only $300 to $400 were derived annually from locker rentals. In 1946 the income from locker rentals greatly increased and by 1950 the gross income from this source was about $10,000 (Figure 4, page 85). This represented 6.5 per cent of the 1950 butter sales.[23]

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[22]The higher the over-run within quality limits, the wider the creamery's operating margin per pound of butterfat purchased.

[23]Although the net returns from the locker rentals appeared very favorable relative to the net margin from operations it was difficult to compare the success of these two enterprises as the methods of allocating joint costs were not indicated. Excessive weighting in favour of one enterprise would unduly depress the net returns from the other. Nevertheless, the net margin on operations was much improved during the 1946-50 period over the 1941-45 period. Part of this improvement was due to the locker rentals and part from much improved price conditions. (See further discussion on page 100 and Table 45, Appendix A.

c) Buttermilk Drying Operations: During 1949 buttermilk drying equipment were installed. By 1950 gross sales from dried buttermilk reached $3,000. As this was only the second year of operations few observations could be made about the success of this enterprise. The level of output from this enterprise was limited to the supply of buttermilk available from butter manufacture.

d) Cream Trucking Operations: Cream trucking services were terminated in 1943. The annual cost attributed to hauling cream averaged about $2,200 annually for the three years 1941-43. This cost amounted to an average of 0.71 cents per pound of butter manufactured during these three years.

E. Marketing: Source and Distribution of Product or Service:

1. Procurement of Butterfat: The area from which the cream was procured was indicated in Figure 1, page 10. This map outlines roughly the territorial source of the cream although it does not show the degree of concentration of the patrons in relation to the creamery. Most of the cream was delivered by the farmers, therefore, it was assumed that the main source of butterfat was concentrated within a few miles of the creamery.

2. Distribution of Product or Service: About 93 per cent of the butter was sold to the wholesale market in 56 pound boxes. Approximately three per cent was sold to patrons and four per cent to local retail merchants. These were sold in one pound prints. The lockers were rented to the members who lived in the Arborg district. Some of the dried butter-

milk was sold to the patrons, but the bulk of it was purchased by the Manitoba Co-operative Wholesale Limited for use in livestock and poultry feeds.

F. Payment and Collection Policies:

1. Payment to Patrons: Most of the cream was paid for with cream tickets which could be cashed at the creamery or the local bank. Some of the cream was paid for by direct sale of butter to the patrons. Patrons could elect to be paid once every two weeks rather than for each can delivered. If they did this they received a special bonus. This was a good policy designed to reduce the clerical requirements and bank charges. The payment of the price improvement on cream was normally made during the month of December. It was paid by cheque.

2. Collection: As suggested above, the sales of butter to patrons were usually deducted from cream tickets. Sales to the local store were paid periodically by cheque while sales to the wholesale were paid by cheque for each shipment although occasionally payment was slow.[24]

G. Membership and Patronage:

1. Statistics: There were 99 names attached to the original "Memorandum of Association" which was accepted in 1907. Of this original group only eight were still members and two still patronized the Association in 1950.

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[24]See discussion on receivables page 113.

Table 4. Volume of Production and Sales per Member for 1928-30 and 1941-50 periods: North Star Co-operative Creamery Association Limited

Years	Total membership[a]	Sales		Butter production	
		Total	Average per member	Total	Average per member
	-number-	-thousand dollars-	-dollars-	-thousand pounds-	-pounds-
1928	240	76	317	170	708
1929	254	72	283	168	661
1930	301	78	259	182	605
1941	353	115	326	372	1,054
1942	352	153	435	424	1,205
1943	347	184	530	461	1,329
1944	349	141	404	340	974
1945	409	141	345	339	829
1946	404	156	386	344	851
1947	408	176	431	338	828
1948	411	211	513	336	818
1949	411	209	509	338	822
1950	409	166	406	316	773
Average 1941-50	385	165	429	361	938

[a]Membership numbers for years 1941 to 1944 estimated.

In 1928 there were 240 registered members (Table 4). Membership was increased to 301 by 1930. Although the figures for 1941 to 1944 were estimated they were considered reasonably accurate and they indicated that there was only a small increase between 1930 and 1941. In 1945 a special drive was made to increase membership which accounted for the increase over 1944. The number of members remained about the same until 1950 although there was a definite program to increase membership after 1950. By 1952 the number of members had been increased to 450.[25]

[25]The change in the number of members was patterned by the method of selling shares. Shares were purchased by cash and apparently patrons were

In 1950 about 80 per cent of the members were active farmers, about 18 per cent were retired farmers and two per cent were non-farmers. The non-farmer members dealt mainly with the meat-locker plant. Most of the non-patron members had left the district and, therefore, were not present at the annual meetings. These members provided share capital for which a five per cent dividend was paid each year.

The relatively high level of non-members business was a more serious problem than the non-active members although both conditions indicated a tardy policy in relation to membership. In 1950 about 27 per cent of the business was derived from non-members. It was about the same for the period 1945-50 and was higher prior to 1945. The special effort to increase membership in 1945 was made to improve the portion of the business from members. Another drive was started following 1950 and as a result, non-member business was reduced to about 15 per cent by 1952. The Association's objective was to reduce non-member business as the net margin from this source was subject to income tax. As a result of the high non-member business the Association had to pay a substantial sum of money for back income taxes in 1949.

2. Attendance at Annual Meetings: The average attendance at the

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not readily willing to invest ten dollars in the Association although they were willing to use the services provided and receive the price improvement which was regularly paid. For the patrons of this Association the decision to purchase a share was made at the time each share was purchased, whereas, at a co-operative where dividends are applied to shares the patrons make this decision when they start to patronize the association (i.e., as soon as sufficient dividends are declared a share is automatically purchased).

annual meeting was estimated at about 125 although it varied from 75 and up. Normally, a lunch was served and the meeting was considered an annual social event.

3. Level of Production and Membership Loyalty: A review of the production pattern for the creamery from 1931 to 1950[26] indicated that with the exception of two years 1941 and 1944 the change between years was very close to the change in the average production per creamery for the province. This suggested that the creamery had a loyal patronage which appeared to be particularly true for the period 1944 to 1951.[27]

a) Average Production per Member: The annual average production per member was about 650 pounds for the three years 1928-30 (Table 4, page 91). This was increased to an average of 938 pounds per member for the 1941-50 period. Part of this increase was due to the high proportion of non-member patrons and part to the general rise in production. The average production per member for the 1945-50 period was about 820 pounds which was an increase of about 170 pounds over the average for the 1928-30 period.

The loyalty of the patrons to the creamery was indicated by the high level of production per member. If about 25 per cent of the business was assumed to be non-member business for the 1945-50 period the average production per member would be about 600 pounds per year. Changes in the value of sales per member varied directly with the changes in volume and

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[26]See Figure 29, Appendix B.

[27]See discussion page 74.

(or) price (Table 4, page 91).

H. Financial Results of Operations:[28] Financial success was interpreted in terms of the ability of the co-operative to record a satisfactory net margin on operations year by year for the 1941-50 period.

1. Net Margin on Operations:[29] The average value of the net margin was \$6,600 per year for the ten years but it varied from \$2,800 to \$10,800 among years (Table 45, Appendix A). The four years 1943-46 inclusive were characterized by a low net margin of approximately \$3,400 per year whereas the average for the other six years was about \$8,800. Changing price and production conditions during the period had considerable influence on the size of the net margins.

a) Net Margin on Operations to Net Sales: The net margin on operations averaged about four cents on every dollar of net sales but varied from a low of 1.6 cents to a high of 6.3 cents per dollar of net sales (Table 46, Appendix A). This indicated a wide variation in the net margin on operations relative to net sales, although on the average it

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[28] Tables 45, 46 and 47 showing the operating and cost of manufacture data are in Appendix A. The trends are illustrated in Figure 5, page 98.

[29] The co-operative charged depreciation on the fixed assets at a rate in excess of what was allowable under the Income Tax Act. As a result the total excess in the depreciation reserve was transferred to the surplus in 1949. There was no indication of the amount of the excess charged for any particular year, therefore, it was impossible to distribute this readjustment over the 1941-48 period.

The important fact here was that as the calculations were made the excess depreciation charges reduced the gross margin as they were included in the manufacture costs. Therefore, as a consequence of this accounting procedure, the net margin on operations was lowered.

appeared satisfactory.

These results further illustrated the difference between the results of the four years 1943-46 and the other six years. The extreme difference in the values suggested that special conditions existed during the 1943-46 period.[30]

b) Net Margin Relative to Capital Structure: The net margin on operations averaged about 33 cents for every dollar of permanent capital (Table 5). A wide range in the net margin relative to permanent capital was recorded but, again, the four year period, 1943-46 appeared abnormally low. The ratio value for the four years was slightly below 18 cents per dollar whereas, it averaged around 44 cents per dollar for the other six years. The six years were assumed to represent, more closely, the normal net margin relative to permanent capital. A closer estimate would likely be around 40 cents if the net margin was adjusted for the high price conditions which occurred during 1948.

c) Net Margin on Operation Relative to Fixed Assets: The net margin on operations averaged 66 cents for every dollar invested in fixed assets and varied among years from 33 cents to $1.26 (Table 5). The

[30]Comparison of the results of the creamery with the others indicated that the low margin on operations was common for that period. This suggested that the low margin was caused by factors beyond the control of the co-operative or its management.

As the 1943-46 period was influenced by government price controls two possible reasons for the low net margin on operations relative to sales were suggested: (1) the controlled prices did not allow a satisfactory gross margin or (2) the creameries were able to operate with a lower margin due to the elimination of one of the uncertainties, the price of butter. As the co-operative returned a considerable portion of the net margin to the patrons there would be less concern over the size of the net margin with fixed price conditions. This assumed that a low net margin was offset by a high initial price for the product.

variation in the ratio value was partly caused by the changes in the book value of fixed assets. As an example the high ratio value for 1945 reflected the extremely low book value of fixed assets rather than a satisfactory net margin on operations. The lower ratio values for the two years 1949 and 1950 over those for the two years 1947 and 1948 reflect a slight drop in the net margin and a large increase in the book value of fixed assets. Such a reduction in the ratio value is normally anticipated with additions to the productive plant.

Table 5. Net Margin on Operations Relative to the Capital Structure and the Fixed Assets: North Star Co-operative Creamery Association Limited, 1941-50

Year	Net margin to capital structure	Net margin to fixed assets
	-dollars-	-dollars-
1941	0.38	1.01
1942	0.44	1.13
1943	0.16	0.46
1944	0.19	0.67
1945	0.18	1.26
1946	0.18	0.33
1947	0.43	0.85
1948	0.50	0.92
1949	0.41	0.47
1950	0.38	0.47
Average 1941-50	0.33	0.66

2. Factors Which Caused the Net Margin on Operations to Fluctuate:

One of the important considerations here was that changes in the net margin resulted from changes in operational policy as well as uncontrollable external conditions.

a) Gross Margin on Butter Sales: A low gross margin on sales almost automatically created a low net margin on operations. A comparison of the trend percentages of these two margins (Figure 5) indicated that a change in the gross margin was usually accompanied by a greater relative change in the net margin. The more sensitive nature of the net margin was caused primarily by the influence of the more rigid overhead and administrative expenses as well as with variations in other revenue.

The gross margin averaged about 5.8 cents for every dollar of sales (Table 46, Appendix A). The annual fluctuation from 3.1 to 8.9 cents per dollar of sales was considered fairly extreme. The comparatively unfavourable 1943-46 position was further illustrated by the fact that the gross margin averaged about four cents per dollar of net sales for these four years whereas the average for the other six years was 7.1 cents per dollar of net sales. The average net margins were 2.2 and 5.3 cents per dollar of net sales respectively for these two periods. This further illustrated the close relationship between the gross margin on sales and the eventual net margin on operations.

(1) Factors Which Influenced the Gross Margin on Sales: The gross margin on sales reflects the ability of management to adjust prices paid to patrons with the eventual price of the product in relation to the cost of manufacture. Thus a low gross margin indicated excessive initial prices to patrons, excessive costs or lower than anticipated sale prices. The competitive nature of cream procurement may have necessitated fairly high initial prices.

(a) Net Butter Sales: The changes in the gross margin on sales correspond closely with net butter sales as indicated in Figure 5. Due to the rigidities in production costs the changes in the gross margin

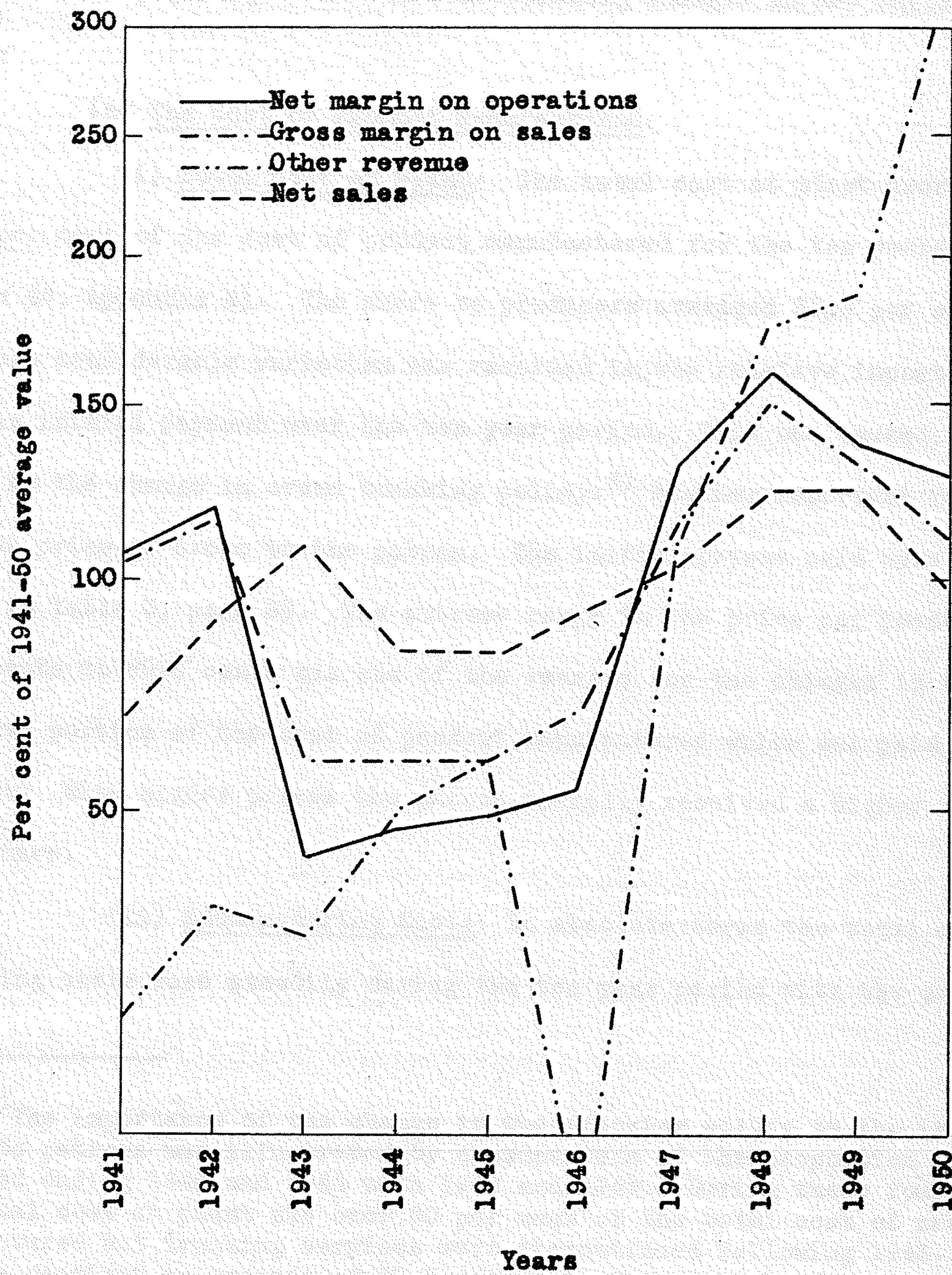

Figure 5. Trend percentages of selected operating statement components for years 1941-50 (base 1941-50 average): North Star Co-operative Creamery Association Limited.

were relatively greater than the corresponding changes in net butter sales.

(b) The Cost of Product Manufactured:

(i) Total Cost at Plant: The total cost at plant averaged 89.4 per cent of the cost of product manufactured for the ten years (Table 46, Appendix A). The share to producers averaged 88.9 per cent although considerable variation was recorded in the relative importance of this initial payment over the ten year period. This was caused, in part, by the change in cream trucking policy.[31] Another important factor was the price of cream to the patron. The initial prices paid were outlined in Table 3, page 88. The extreme range in the price per pound from 30.5 cents to 69.0 cents was one of the reasons for the changes in the relative portion of the cost of product manufactured which was paid to patrons. With higher prices the patron normally received a higher relative share.

(ii) Manufacturing Costs: In absolute terms the total manufacturing costs rose steadily during the ten year period with the exception

[31]The importance of the change in the trucking policy to the initial price to patrons was illustrated by a comparison of the proportion patrons received during 1942 and 1943 with 1948 and 1949. During these four years the total cost at plant was over 90 per cent of the total cost of produce manufactured but trucking services were discontinued following 1943. The patrons received an average of 90.3 per cent of the total cost of product manufactured for the two years 1948 and 1949 but only about 88.7 per cent during 1942 and 1943. At least part of the increase in the relative share going to patrons can be attributed to the elimination of the trucking service.

of the sharp upswing in 1948[32] (Table 45, Appendix A). The low gross margin in 1943 was apparently caused more by the increase in the cost at plant than by the increase in the manufacturing costs (Table 47, Appendix A). Following 1943 the drop in gross sales was followed closely by a relative drop in the cost of product at plant but not by the manufacturing expense. Thus it appeared that the low gross margin in 1943 was due mainly to the increase in the relative importance of the initial payments to patrons while for 1944-46 the relative increase in the cost of manufacture was more important.

b) Administrative and Overhead Expense: The administrative and overhead expense averaged about $3,700 for the ten years (Table 45, Appendix A) which amounted to an average of 2.2 cents per dollar of net sales (Table 46, Appendix A). These expenses remained close to $3,100 per year for the first seven years and then increased to about $5,000 for the last three years. This increase in the administrative and overhead expenses reduced the influence of the comparatively high gross margin for the three years 1948-50. The increase in this account between 1947 and 1948 was due to increased expenses and donations.

c) Other Revenue: Other revenue increased the net margin on operations for all but one of the ten years (Table 45, Appendix A). With this one exception the revenue from other operations increased fairly steadily from about $100 to $2,600 between 1941 and 1950 (Figure 5).

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[32]These changes in costs closely followed the changes in the General Wholesale Price Index (Figure 2, page 16).

The changes in other revenue reflected the results of the addition of two new enterprises. Up to 1948 most of the other revenue was derived from the locker plant. During 1949 and 1950 revenue from the buttermilk drying operations were added.

I. Distribution of Net Margin on Operations: This co-operative followed the policy of dividing the net margin into three portions: the bonus to patrons, the dividends on outstanding share capital and the net credit (debit) to surplus. For the ten year period there was an average net margin of $6,600 per year (Table 6). Of this an average of 83 per cent of the net margin was paid as a bonus direct to patrons, 8 per cent as a dividend direct to shareholders, and 9 per cent was transferred to surplus.

Table 6. Distribution of Net Margin on Operations during the 1941-50 period: North Star Co-operative Creamery Association Limited

	Net margin on operations	Bonus to producers		Reserve for capital dividend		Net credit to surplus	
	-dollars- -000-	dollars -000-	per cent	dollars -000-	per cent	dollars -000-	per cent
1941	7.1	6.5	92	0.5	7	0.1	1
1942	8.0	8.0	100	0.5	6	-0.5	-6
1943	2.8	3.1	108	0.5	18	-0.8	-26
1944	3.1	3.4	109	0.5	16	-0.8	-25
1945	3.4	2.8	82	0.5	16	0.1	2
1946	3.7	2.8	75	0.5	14	0.4	11
1947	8.8	8.1	92	0.5	6	0.2	2
1948	10.8	8.0	75	0.5	5	2.3	20
1949	9.3	6.7	72	0.5	6	2.1	22
1950	8.7	5.0	57	0.5	6	3.2	37
Average 1941-50	6.6	5.5	83	0.5	8	0.6	9

1. Bonus to Patrons: During the ten year period the amount of bonus paid varied less than the change in the net margin on operations (Table 47,

Appendix A). This resulted from the policy of paying a substantial bonus to the patrons even when the size of the net margin on operations made such a move appear unwarranted. This was further illustrated by the fact that the bonus to patrons varied from a low of 57 per cent to a high of 109 per cent of the net margin on operations (Table 6). Some bonus payments were paid from the surplus accumulated from previous years although the amount paid out of surplus was possibly overstated due to the practice of charging fairly high depreciation.[33]

2. Reserves for Dividend on Capital: Each year provisions were made for the payment of a five per cent dividend on outstanding share capital. There was little variation in the size of the reserve due to the stability of the share capital account. The changes in the relative importance of this reserve from five to 18 per cent of the net margin on operations was due almost entirely to the fluctuations in the net margin on operations (Table 6).

The payment of the five per cent dividend on outstanding share capital was an established policy. Apparently, this was paid without consideration of the size of the net margin on operations. Under the By-laws the interest rate could be changed year by year but there was no attempt to do so during the 1941-50 period. The principle of paying a

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[33]See footnote 29, page 94. The excessive allowance made for depreciation partially explained how the co-operative was able to pay a high bonus to producers relative to the net margin. Some of the payments which exceeded net earnings were covered by the excess depreciation reserve. The price improvement was not entirely consistant with a patronage dividend as illustrated by the fact that monies, which had resulted from previous years patronage, were distributed on the basis of the present years patronage.

dividend on capital outstanding was acceptable but it would appear that some consideration should have been given to a change in the interest rate during years when the net margin on operations was exceptionally low.

3. Net Credit (or debit) to Surplus: The net credit to surplus was residual in nature, therefore, the variation in the account not only reflected the variation in the net margin on operations but, in addition, the payments of patronage bonuses and the dividends on outstanding share capital.

In relative terms the net credit to surplus varied among years from a low of minus 26 per cent to a high of plus 36 per cent of the net margin on operations (Table 6, page 101). The surplus account was reduced for three years in a row to meet the requirements of bonus and dividend payments. The average reduction amounted to $680 for these three years. Of this, about $510 were used to pay the dividend on capital outstanding and the remainder was distributed in the bonus to patrons. This meant that during these three years part of the monies used for bonus payments had not resulted from current operations. Provision had been made in the By-laws for the use of the surplus for bonus payments when it appeared necessary, therefore, such action was within the limits established by the Association.

For the years when there was a net credit to surplus the average amounted to about $200 for the four low years and about $2,800 for the three best years. Therefore, out of the ten years between 1941 and 1950 there were seven years with either a net debit or a low net credit to surplus. It was only during the three years 1948 to 1950 that the net credit to surplus appeared fairly satisfactory relative to the need for increased equity funds. Thus the overall observation was that the co-operative policy was to pay all or a large share of the net margin on operations back to the patrons or shareholders. As a consequence there was a limited build-up of funds for expansion purposes with the exception of the last three years.

4. Net Margin: Source and Subsequent Distribution: Although the main portion of the net margin on operations was derived from the sale of butter a part was derived from other sources (Table 46, Appendix A). On a strict patronage basis some separation of the earnings as to source would be necessary. Such separation was not apparent and, in fact, during the years that the net margin was low the revenue from other sources was apparently used to bolster bonus payment made to cream shippers.

Although it was impossible to distinguish the surplus funds by source there was the possible argument that the cream shippers were paid from past surplus accumulated from creamery operations and that the net margins from other operations were used to replace these funds. The idea here was that each enterprise should contribute a share to the surplus. Unfortunately, there would be no way of knowing when each enterprise had contributed its share and was thus in a position to declare dividends.

The source of funds used to pay the dividends on outstanding share capital does not present the same problems as this capital was used by all enterprises.

J. Financial Structure of Co-operative: The main sources of capital[34] for the co-operative were; outstanding capital (38%), undivided surplus (29%), bank loans and overdrafts (24%), fixed loans (4%), business creditors (3%) and dividend reserves (2%). Outstanding share capital and undivided surplus provided the major portion of the permanent capital while the bank contributed a large share of the current requirements. The use of funds was divided between current assets (54%), other assets (10%), and fixed assets (36%).[35]

The total asset picture remained relatively stable during the ten year period compared with that of the newer co-operatives (Table 50, Appendix A). This was true despite the fact that two new enterprises were added and some replacements made. Total assets averaged $27,500 and ranged from a low of $19,000 in 1945 to a high of $38,700 in 1948. The low in 1945 culminated a period of low prices and limited replacements, whereas, the 1948 position reflected much higher prices and plant expansion.

The total assets were reduced by $1,100 between 1941 and 1946 but were increased by $7,000 between 1946 and 1950. As a result there was a net increase in total assets of about $5,900 over the 1941 to 1950 period (Table 51, Appendix A).

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[34] The percentage figures show the relative importance of each source or use averaged for the ten years 1941-50.

[35] The source and use of funds are outlined in Tables 48, 49, 50 and 51, Appendix A. The relative importance of the balance sheet components are shown in Figure 6 and 7. Some trends are illustrated in Figure 9 p. 120.

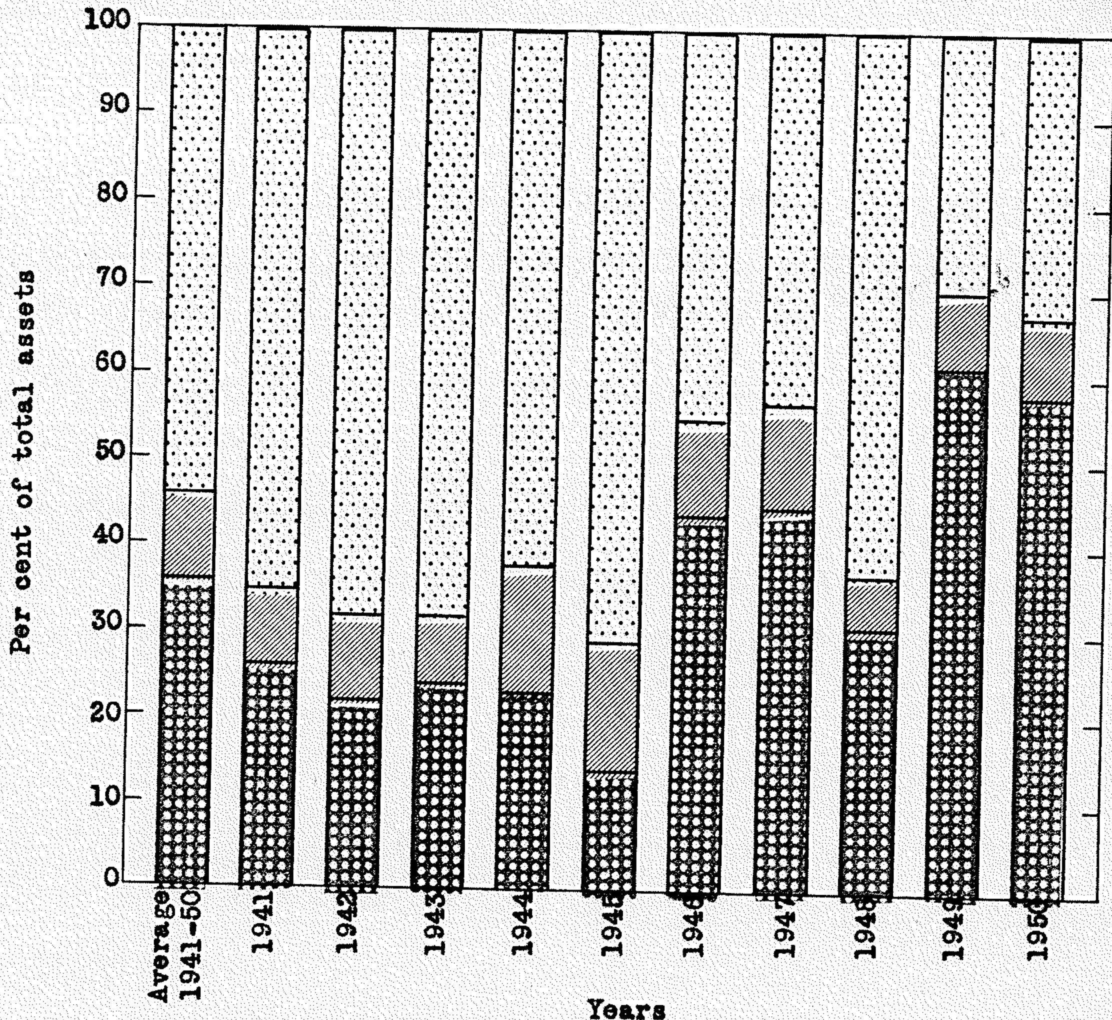


Figure 6. Assets in component percentage form for years 1941 to 1950 and 1941-50 average: North Star Co-operative Creamery Association Limited.

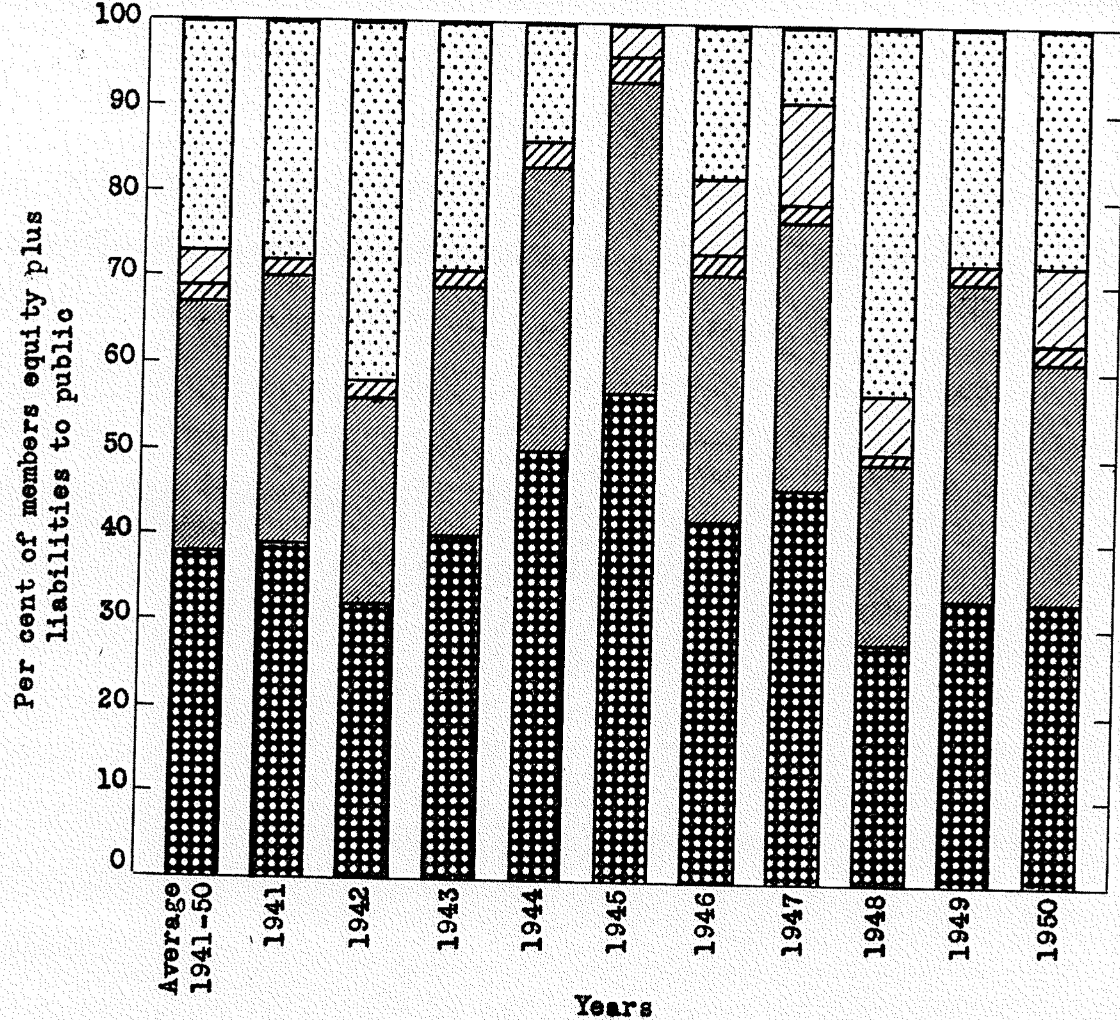
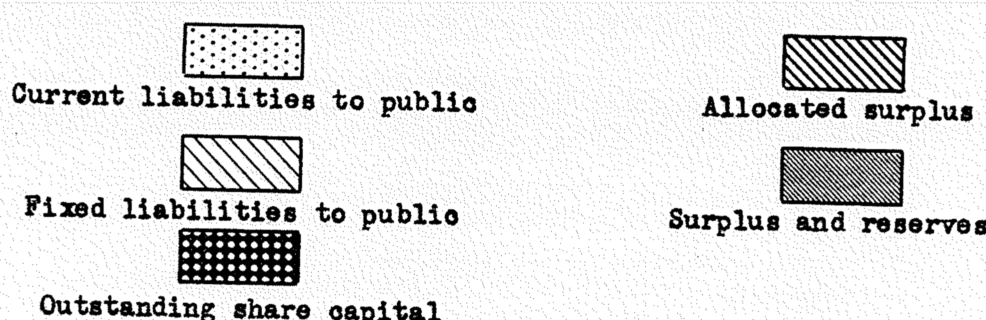


Figure 7. Liabilities and members equity in component percentage form for years 1941 to 1950 and 1941-50 average: North Star Co-operative Creamery Association Limited.



1. Working Capital Situation: The average value of the current ratio was slightly below the 2 to 1 minimum considered desirable (Table 7). This average was somewhat biased due to the high ratio value which occurred at the year end 1945. This was offset by the fact that at the end of at least four years out of the ten years the ratio value was considerably below 2 to 1 minimum desired. As illustrated in Figure 8 the net working capital position was fairly satisfactory up to and including the year ending 1948. Thus the low current ratio values for 1942 and 1948 indicated a poor situation but not necessarily serious or critical. On the other hand, the net working capital position for the years ending 1949 and 1950 was critical suggesting that the funds from current creditors had become too high relative to the investment in current assets.

The low current ratio value for 1948 resulted from a larger than normal carryover of inventory. Corresponding with this was an increased current debt, mainly at the bank. The important feature here was that net working capital only decreased by slightly more than one hundred dollars from 1947 to 1948 thus the absolute margin was about the same.

A real change in the net working capital position occurred between 1948 and 1949. It was decreased by some seven thousand dollars. Part of this decrease was caused by an extraordinary expense in terms of back income taxes resulting in an increase in current liabilities of $2,700 and a cash outlay of about $600. In addition to this extraordinary expense, there was a net outlay on fixed assets of $5,700 and a repayment of meat locker loans amounting to about $2,600. The result of these transactions

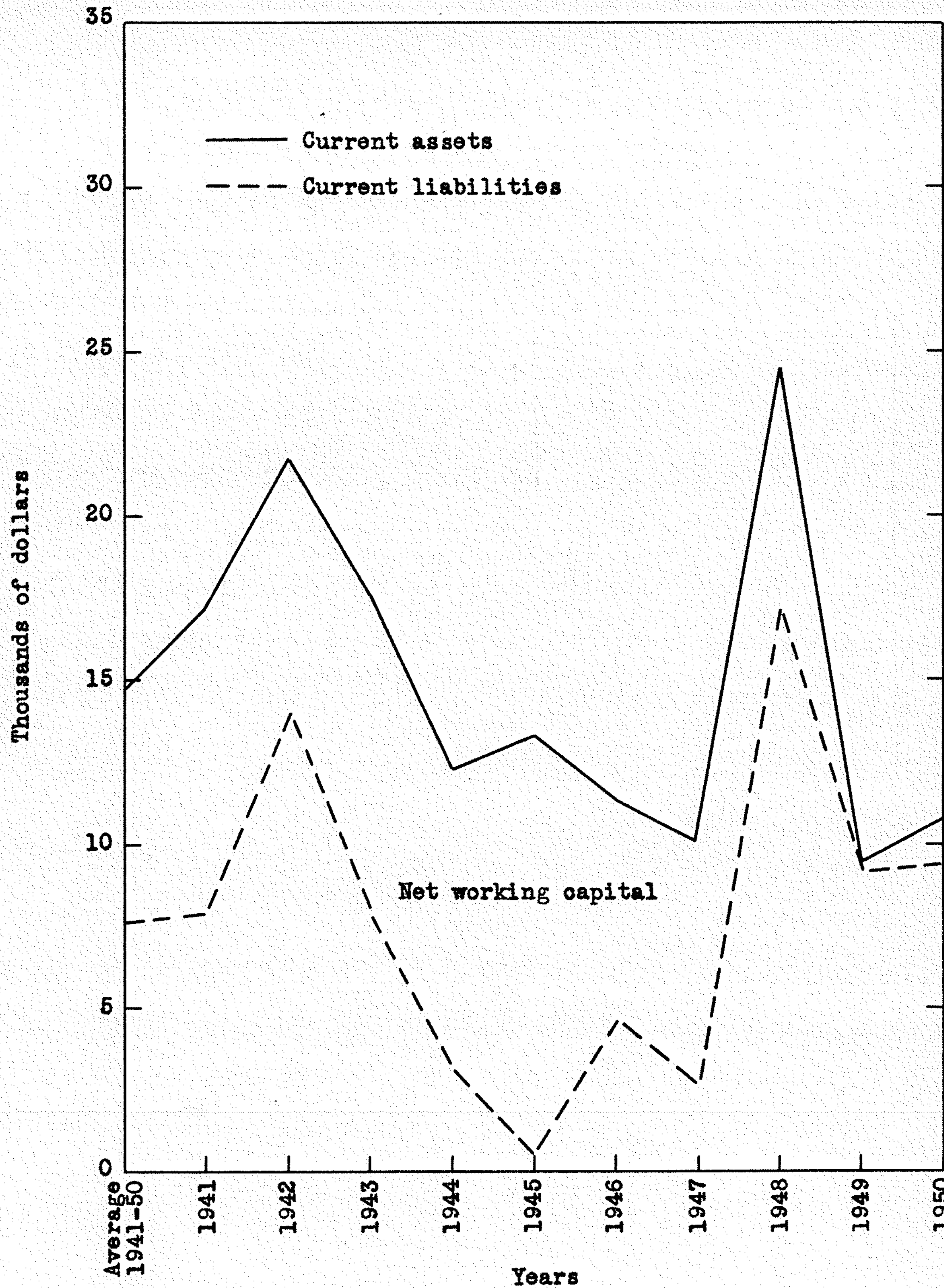


Figure 8. An illustration of the net working capital position for years 1941 to 1950 and average 1941-50: North Star Co-operative Creamery Association Limited.

were reflected in the changed net working capital position leaving a margin of about $100. Some improvement in the net working capital position was registered by 1950 but the relationship remained fairly unsatisfactory.

Table 7. Ratio Analysis Illustrating Working Capital Relationships: North Star Co-operative Creamery Association Limited, 1941-50

Year	Ratios: Current assets to current debt	Ratios: Net receivables to total net sales	Ratios: Days of sales in receivables
	-times-	-per cent-	-number-
1941	2.2	2.2	6.7
1942	1.5	3.4	10.1
1943	2.2	2.1	6.2
1944	3.7	2.0	5.9
1945	22.2	2.1	6.4
1946	2.3	1.7	5.0
1947	3.6	0.7	2.1
1948	1.4	0.6	1.8
1949	1.0	1.5	4.5
1950	1.1	1.4	4.3
Average 1941-50	1.6	1.7	5.1

The net working capital position [36] may be considered somewhat less serious than it appeared in Figure 8 due to the fact that the co-operative was well established and apparently could call on members for cash loans in times of need. On the other hand, there was considerable evidence that the co-operative had operated on a limited supply of permanent funds compared with expansion requirements (Table 10, page 118). This situation was caused partially by the policy of paying high cash bonuses to patrons

[36] As the cash bonuses to patrons were made in December this tended to reduce the cash balance or increase the liabilities at the bank which in turn influenced the net working capital position.

and dividends to shareholders rather than retaining some of these funds in allocated form to be used for expansion purposes.

The net result of this policy was that between 1941 and 1950 the current assets were decreased by $6,400 while the current liabilities increased $1,500 (Table 51, Appendix A). Both current assets and current liabilities were decreased between 1941 and 1946. There was a further decrease in current assets between 1946 and 1950 but the current liabilities to the public were increased by $4,500. As the total supply of funds were increased by $7,000 between 1946 and 1950 the increase in current liabilities made up an important share of this increase. Some of the increase in current liabilities were invested in fixed assets which is normally not a sound practice and could have been avoided by a build up of equity capital prior to expansion of plant.

a) Current Receivables:[37]

(1) Gross Receivables to Current Assets: The gross receivables averaged about 27 per cent of the average investment in current assets

[37]During the years 1941 to 1943 the gross receivables were high relative to the other years. This was due mainly to the presence of one large bad debt which had resulted from a firm going into bankruptcy prior to 1940. The actual reserve for bad debts which the co-operative carried during the three years was $5,000. Settlement was made on the bankrupt account during 1944 and about $2,200 were released from the reserve and added to surplus. To remove the influence of this extraordinary adjustment to the surplus account the reserve for bad debts was reduced to $2,800 for the three years 1941-43. As a result no adjustment of the surplus account was necessary in 1944 but the receivables and surplus accounts were increased by about $2,200 dollars for the three years. This biased the net working capital position upward over that which occurred on the original records.

(Table 8). The first three years were relatively high but even with this apparent poor position the gross receivables never reached as high as the 40 per cent of current assets suggested as the upper limit in Chapter V.[38]

(2) Net Receivables to Current Assets: The average investment in receivables was about 19 per cent of the investment in current assets (Table 8). Apparently, the normal level was about 22 to 24 per cent of current assets but the actual range was from 5 to 34 per cent. Other than for 1949 the investment in receivables appeared to be satisfactory.

Table 8. Gross Receivables, Reserve for Bad Debts, and Net Receivables of the North Star Co-operative Creamery Association Limited, 1941-50

Year	Gross receivables		Reserves	Net receivables		Current assets
	Value	Per cent of current assets		Value	Per cent of current assets	
	-dollars-	-per cent-	-dollars-	-dollars-	-per cent-	-dollars-
1941	5,320	31	2,800	2,520*	15	17,108
1942	7,889	36	2,800	5,089*	23	21,848
1943	6,568	38	2,800	3,768*	22	17,449
1944	3,277	26	500	2,777	22	12,422
1945	3,479	26	500	2,979	22	13,453
1946	2,995	26	391	2,604	23	11,440
1947	1,612	16	391	1,221	12	10,035
1948	1,678	7	391	1,287	5	24,476
1949	3,610	38	391	3,229	34	9,560
1950	2,905	27	391	2,514	24	10,660
Average 1941-50	3,935	27	1,136	2,799	19	14,845

*The reserve for bad debts was reduced and net receivables increased by $2,200 for the years 1941-43 inclusive. See footnote number 37 p. 111.

The difference between the value of this ratio and the one above reflect

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38See p. 67 (The gross receivables were shown to illustrate the influence of a large bad debt.)

the allowance made for bad debt. The unchanged position of the reserves for bad debts between 1946 and 1950 suggests that more attention should have been given to the aging of receivables.

(3) Net Receivables to Net Sales: Receivables averaged 1.7 per cent of net sales during the ten years (Table 7, page 110) and varied from 0.6 to 3.4 among years. As the books were closed during a slack season a low level of receivables was anticipated.

There was an average of about 5.1 days of sales in receivables (Table 7, page 110). This number varied from 1.8 to 10.1 days among years. As the reserves for bad debts were fairly low (with the exception of the first three years) the receivable situation appeared to be fairly satisfactory.

2. Characteristics of Permanent Capital (Capital Structure): The permanent capital consisted primarily of outstanding share capital and undivided surplus.

a) Outstanding Share Capital:[39] The members contributed an average of 38 per cent of the total supply of capital through the ownership of shares during the 1941-50 period (Table 49, Appendix A).

Apparently outstanding capital had been an important source of funds since this co-operative was organized. For the three years 1928-30[40] the average value of outstanding capital was $10,700 and for the 1941-44 per-

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[39]The high relative importance of outstanding share capital as a source of funds was an indication that the financial structure of this co-operative was similar to that of a privately owned stock company.

[40]Annual Reports of Registrar, (unpublished data 1928-30), Co-operative Services Branch, Manitoba Department of Agriculture, Winnipeg, Manitoba.

iod it averaged about $10,300. Thus between these two periods, the co-operative had reduced outstanding share capital by $400. During 1945 there was a sharp increase in the number of shares sold (Table 9). This increase resulted from a special effort made to reduce non-member business. For the period 1945-50 the average value of outstanding share capital was about $10,700 which approximated the 1928-30 level. This illustrated the stable nature of the share capital account.

This co-operative was well established. Therefore, as long as the number of members or the volume of business remained unchanged few alterations in the outstanding capital position would be anticipated. Two new enterprises were added during the ten year period and although some increase in the size of outstanding capital was recorded it was not proportional to the additional demands for permanent funds.

Table 9. The Net Change in the Outstanding Capital Position of the North Star Co-operative Creamery Association Limited, 1941-50

Year	Net increase	Net decrease	Ten dollar shares	Five dollar shares	Total value of outstanding shares
	dollars	dollars	number	number	dollars
1941		15	984*	103*	10,355
1942		5	984	102	10,350
1943		215	977	73	10,135
1944		70	975	63	10,065
1945	760		1,052	61	10,825
1946		170	1,036	59	10,655
1947		5	1,036	58	10,650
1948	10		1,037	58	10,660
1949	10		1,040	54	10,670
1950		85	1,033	51	10,585
1941-50	215				

*Figures estimated
Source: Auditors Reports 1941-50 inclusive.

(1) Sale of Shares: Although there was a net increase of sales

over redemption of 215 dollars for the ten years there was a preponderance of years showing a net decrease (Table 9). The offsetting influence was the large net increase during 1945. Without this special drive there would have been a net redemption of shares during the period. This resulted from the fact that new members had not purchased shares at the same rate that the older members had redeemed them.[41]

b) Undivided Surplus:[42] The presence of a substantial portion of the funds in the form of undivided surplus was another indication of the close resemblance of this co-operative to the corporate form of financial structure. Statutory reserves were included with the undivided surplus for this analysis.

The undivided surplus provided an average of 29 per cent of the funds for the ten years but by year it varied from a high of 37 per cent

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[41] One factor which had caused some redemption of shares was the existance of some one-half shares valued at five dollars. The sale of one-half shares was contrary to statute, therefore, the co-operative was obliged to redeem them. About 50 of these shares were outstanding in 1950 (Table 9). Another factor which influenced the size of the capital account was the value of the shares. Co-operatives have generally recognized that the par value of the share capital should be low enough to encourage all patrons to become members.

[42] Two adjustments to the surplus account had considerable influence on the results obtained here. The surplus account was increased by $2,200 for the three years 1941-43 (See footnote 37, page 111). This was done to remove the influence of the adjustment made in the original accounts during 1944 when funds were transferred from the reserve for bad debts to the surplus. The auditors adjusted the depreciation reserve in 1949 to allow for an excess which had been charged prior to that year (See footnote 29, p. 94). The amount of the excess was transferred to the surplus account. The influence of this adjustment was reduced as a large payment was required for back income taxes during 1949.

to a low of 21 per cent (Table 49, Appendix A). Much of this variation in relative importance was due to changes in the current liability situation.

More variation was recorded in the surplus account then in the outstanding capital account. The average value of the surplus account for the three years 1928-30 was about $5,300 and for the 1941-44 period about $7,500. This represented an increase of $2,200. By 1949 the value of this account reached a high of about $11,900.

The surplus account was only increased by about $1,000 between the years 1941 and 1950 (Table 51, Appendix A). Between 1941 and 1944 the surplus was reduced by about $1,500 but following 1945 it was gradually improved except during 1950. The net decrease in the surplus account between 1949 and 1950 resulted from the establishment of an employees pension plan.[43]

c) Deferred Liabilities: The deferred liabilities only provided an average of four per cent of the total supply of capital. Two sources of credit were included under this section.

(1) Loans from Members: The members loaned money to the co-operative on an interest free basis from 1945 to 1949. This money was borrowed to finance the meat locker facilities.

These loans were a good source of funds as they were interest free.

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[43]During 1950 an employees' pension plan was instituted with the co-operation of the Government of Canada Annuities Branch. This cost the Association about $5,300 for past service contributions. Of this amount $2,300 were paid in cash and $3,000 were payable within three years. Provision was made for the payment of the $3,000 by the establishment of a deferred liability.

They had two bad features. From a business point of view the money was paid back too soon leaving the co-operative in a relatively poor working capital position in 1949 and 1950. From a co-operative point of view, the money was provided by a relatively small group of the members compared with the number who would benefit from the increased facilities.

These loans were the counterpart of retained dividends used in the other co-operatives but the co-operative[44] had less control over these loans as suggested by the early repayment. They were segregated from the equity funds in the analysis as they were direct cash loans made independent of dividend payments to members.

(2) Employees Pension Fund: An employees pension plan was established during 1950 for which $3,000 were transferred from the surplus account to the liability section as a deferred liability. Of this $3,000 one thousand was due each year for the next three years. The transfer of this money to a deferred liability changed the nature of the source rather than the immediate supply of funds.

d) Total Net Sales to Capital Structure: The average turnover of permanent capital was eight times for the ten year period (Table 10). Thus the volume of sales appeared satisfactory relative to the supply of permanent funds. The turnover of permanent capital varied from 6 to 10

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[44]One difficulty which could arise from a policy of depending upon this source of funds for expansion was that money may not be readily available during a period when farmers were experiencing financial difficulties. On the other hand, this method removed the possibility of the spontaneous growth often associated with or resulting from over-zealous retention of patronage dividends.

times during the ten year period although during nine years the turnover was between 8 to 10 times.[45]

Table 10. Ratio Analysis Showing Financial and Sales Relationships: North Star Co-operative Creamery Association Limited, 1941-50

Year	:Total net sales :to fixed assets	:Net sales to :capital structure	:Capital structure :to fixed assets
	-	times	-
1941	16	6	2.7
1942	24	8	2.5
1943	30	10	2.9
1944	31	8	3.6
1945	52	8	6.8
1946	14	8	1.8
1947	17	9	2.0
1948	18	10	1.8
1949	11	9	1.1
1950	9	8	1.2
Average 1941-50	17	8	2.0

3. Characteristics of Fixed Assets: The importance of the fixed assets relative to the total investment in assets was illustrated in Figure 6, page 106. For the ten years the average investment in fixed assets was about $9,900 (Table 48, Appendix A). representing about 37 per cent of all assets. The relative importance of fixed assets varied from a low of 14 per cent to a high of 61 per cent of total assets (Table 49, Appendix A).

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[45]The increase in prices during the latter part of the period had considerable influence on the results of this ratio as it more than offset the decrease in production. As a result most of the increased value of sales after 1944 were caused by price increases. A small portion of the increase was due to the inclusion of sales from the meat locker rentals and dried buttermilk sales. Total net sales were used in the calculation of the ratio so that the influence of the new enterprises would be included.

a) Book Value of Fixed Assets: The book value of the fixed assets were low particularly from 1941 to 1945. Apparently most of the machinery and plant were relatively old and therefore, had a low depreciated value. In addition, prices of replacements which were made prior to 1941 were relatively low. Thus the use value of the fixed assets exceeded the book value.

b) Changes in Fixed Assets: About $32,000 were spent on fixed assets during the 1941-50 period. During the same period the depreciation reserve was increased by some $20,000 which resulted in a net increase of about $12,000. As illustrated in Figure 9 the book value of the fixed assets decreased from 1941 to 1945 but increased considerably by 1950. The main increases occurred during 1946 and 1949. The 1946 increase was caused by the addition of the meat locker, whereas, the 1949 increase resulted particularly from the addition of the buttermilk drying equipment and partially from the reduction of the depreciation reserve.[46]

The fluctuation in the value of fixed assets from a low of 27 per cent to a high of 200 per cent of the ten year average suggested an extreme change as a result of the additions of the two new enterprises

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[46]As suggested previously the reserve for depreciation was in excess of what the Income Tax Act allowed. This was adjusted in 1949 by the transfer of approximately $5,400 from the depreciation reserve to the surplus account. The high depreciation allowance lowered the book value of fixed assets and the surplus account for years prior to 1949. The adjustment raised the book values of these two accounts although physical conditions remained unchanged.

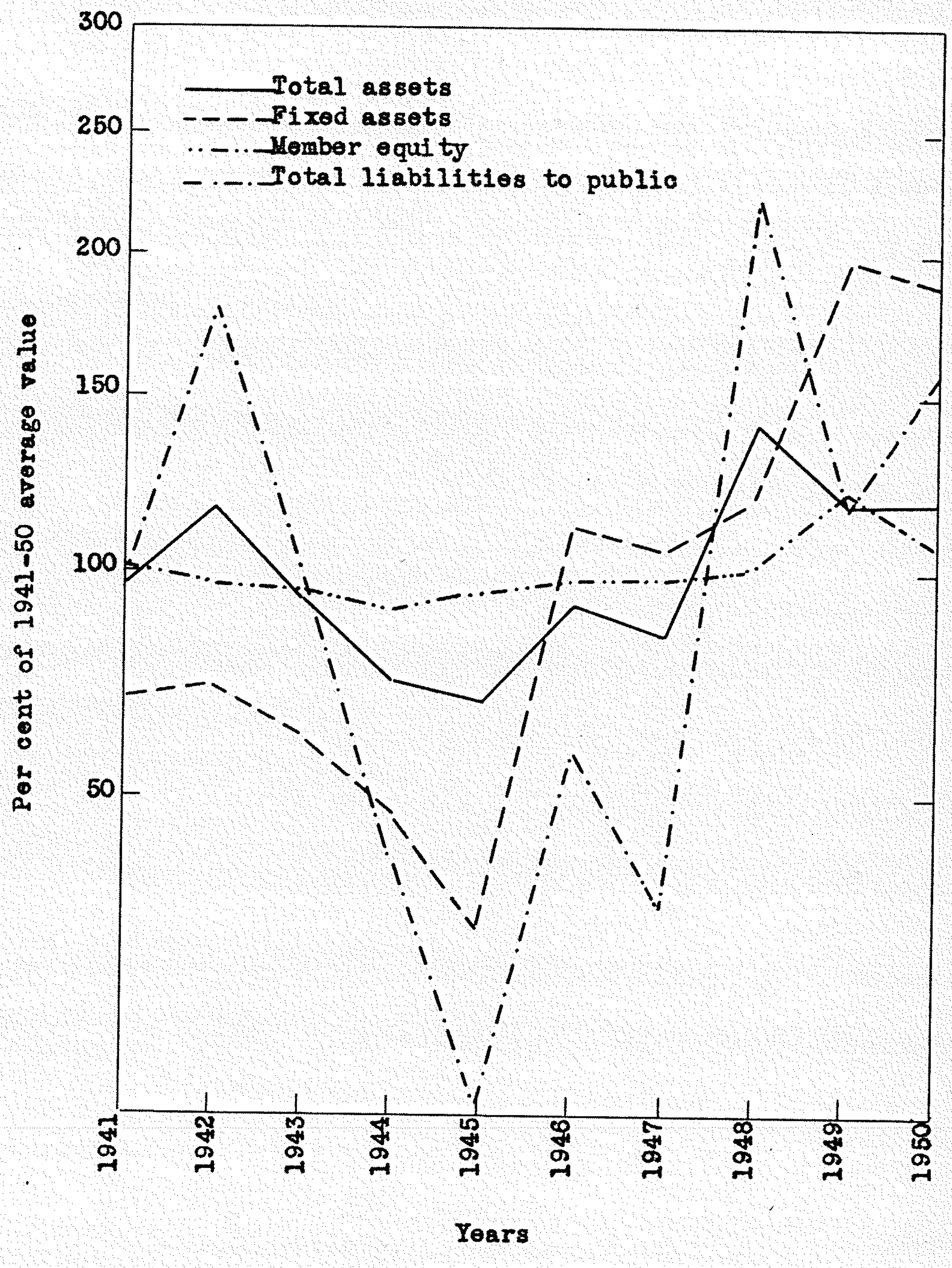

Figure 9. Trend percentages of selected balance sheet components for the years 1941 to 1950 (base 1941-50 average): North Star Co-operative Creamery Association Limited.

(Table 50, Appendix A). But due to the low initial value of the fixed assets the relative change was much in excess of the actual physical change of plant. Thus, although the two new enterprises had greatly increased the book value of the fixed assets, the creamery plant and equipment still represented the major part of the business.

c) Net Sales to Fixed Assets: The average turnover of fixed assets was about 17 times but extreme variation in the value of this ratio was experienced (Table 10). This was caused mainly by the variation in the value of fixed assets. The relatively high average turnover was due partly to the low average value of fixed assets.

For the first five years the average turnover of fixed assets was 26.7 times whereas during the last five years it averaged 13.0 times. Although this suggested a trend towards a lower turnover of fixed assets the average value of sales was about $40,000 more for the last five than for the first five years. Again the influence of the book values of fixed assets had to be considered.

4. Relationship Between Fixed Assets and Capital Structure: On the average there was $2.00 of permanent capital for every dollar invested in fixed assets (Table 10, page 118). The value of the ratio appeared fairly sound with the exception of the two years 1949 and 1950. For these two years the supply of permanent funds was only slightly above the amount invested in fixed assets. There was an apparent shortage of permanent funds. The main cause of the shortage appeared to be the repayment of the loans to members before the new enterprises had become sufficiently

well established so that the surplus funds could be accumulated to replace the loans.[47]

K. Equity Capital: Members equity capital did not change greatly over the ten year period although the trend percentage figures showed a gradual downward and then upward trend (Figure 9). The net increase between 1941 and 1950 was about $1,400 (Table 51, Appendix A). Although there was an increase in the total equity between the 1928-30 and 1941-50 periods this increase was more than offset by the general increase in prices.[48]

1. Characteristics of Equity Capital: Capital in the form of outstanding share capital and undivided surplus made up an average of over 97 per cent of the total supply of membership equity capital. The reserve for the five per cent dividend on outstanding share capital was the only other item of any significance in the equity capital group. This reserve remained fairly constant from year to year as the interest rate remained the same.[49]

2. Equity Capital Relationship:

a) Members Equity to Total Assets: For the ten year period the members owned an average of 69 per cent of the total assets (Table 11). The variation from year to year was fairly extreme and as a result the

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[47]See pp. 116-7 for discussion on loans.

[48]D.B.S., The general wholesale price index was about 113 in 1930 and 211 in 1950.

[49]The five per cent return on outstanding share capital appeared to be a substantial return on investment but the value of the shares remain fixed removing the possibility of capital gain unless the assets of the co-operative were liquidated.

relationship was not as satisfactory as the average conditions would make it appear. For example, the equity capital made up as much as 95 per cent of the requirements in 1945 just before the expansion period and reached a low of 50 per cent in 1948. The changes in the relative importance of equity capital were due primarily to changes in the liabilities to the public as the absolute value of equity capital remained comparatively stable. This suggested that the source of equity funds was fairly inflexible but the situation was offset somewhat by loans from members. The trend relationships between total assets and equity capital are illustrated in Figure 9, page 120.

Table 11. Membership Equity Relationships: North Star Co-operative Creamery Association Limited, 1941-50

Years	Ratios		
	Members equity to total assets	Members equity to fixed assets	Members equity to capital outstanding
	-per cent-	-dollars-	-dollars-
1941	72	2.73	1.84
1942	58	2.61	1.78
1943	71	3.00	1.80
1944	86	3.76	1.71
1945	95	6.70	1.68
1946	73	1.68	1.74
1947	79	1.75	1.72
1948	50	1.64	1.80
1949	72	1.18	2.17
1950	63	1.09	1.93
Average 1941-50	69	1.93	1.82

b) Members Equity to Fixed Assets: The membership equity and permanent capital were almost synonymous with this co-operative thus the results of this ratio were similar to the ratio of permanent capital to fixed assets.

There was an average of $1.93 of equity capital for every dollar invested in fixed assets (Table 11). For the years 1941 to 1945 the increase in the value of the ratio reflected the drop in the book value of fixed assets and a slight increase in the equity capital. Following 1945 the increase in equity was much smaller than the increase of the book value of fixed assets. By 1949 and 1950 the value of this ratio was not satisfactory and it reflected the low contribution of members equity to the expansion program.

The ratio value did not drop below the 1:1 minimum although it was only 1.09:1 in 1950. As the co-operative had operated successfully over a long period the low equity position appeared unnecessary. The reason for this position was illustrated by the fact that in 1950 the members equity was 107 per cent of the 1941-50 average value whereas the fixed assets were some 188 per cent of the 1941-50 average value (Table 50, Appendix A). This further illustrated that the method of financing was not as satisfactory as it might be in terms of equity accumulation.

c) Members Equity to Capital Outstanding: Outstanding capital was the original contribution made by the members to the permanent capital of the co-operative. The remainder of the equity capital was accumulated as a result of operations. To the extent that this increased equity was made up almost entirely of undivided surplus the ratio reflected the increase in the real value of the share.[50]

There was an average of $1.82 of equity capital for every dollar of

[50]Shares were considered here as an indication of ownership.

outstanding capital (Table 11). The ratio value reached a low of $1.68 in 1945 and a high of $2.17 in 1949. As the outstanding capital position remained fairly constant the change in the ratio value reflected changes in the level of undivided surplus. The increase between 1945 and 1949 indicated some accumulation of equity funds to meet increased requirements but the large increase in 1949 over 1948 was due, in part, to the release of funds from the depreciation reserve. The drop between 1949 and 1950 was caused by the establishment of the pension fund for employees. This lowered the surplus account.

Outstanding capital did not vary more than four per cent from the average value for the ten years (Table 50, Appendix A). This illustrated the rigidity of this source of funds. Equity capital, on the other hand, varied from 90 to 122 per cent of its ten year average value.

d) Average Equity per Member: Although the original equity information was not available apparently the 99 members who signed the "Memorandum of Association" each purchased at least one ten dollar share. As the original By-laws only authorized $5,000 in share capital this original contribution by members represented an important source of funds.

The average equity per member had been increased to $67 by 1928 although it was reduced to about $51 in 1930 due to an increase in the number of members and reduction in equity capital. (Table 12). One of the most important characteristics of the average equity per member figure was its relative stability. This is shown by the limited change between the 1928-30 and 1941-50 periods and by the fact that this average figure only varied from $44 to $56 during the ten years 1941-50. Apparently, the equity capital had been built up prior to the 1928-30 period and it was maintained at a relatively constant level after that period.[51] This was a direct result of the policy of paying cash price improvements instead of using a revolving surplus fund or similar method of building up equity capital. The gain to the patron was immediate but it limited the source of funds for expansion.

Table 12. Number of Members, Total Equity and Average Equity per Member for the 1928-30 and 1941-50 periods, North Star Co-operative Creamery Association Limited

Year	Total membership*	Total equity	Average equity per member
	-number-	-dollars-	-dollars-
1928	240	16,039	67
1929	254	16,560	65
1930	301	15,455	51
1941	353	19,079	54
1942	352	18,523	53
1943	347	18,155	52
1944	349	17,283	50
1945	409	18,132	44
1946	404	18,555	46
1947	408	18,248	45
1948	411	19,343	47
1949	411	23,235	56
1950	409	20,439	50
Average 1941-50	385	19,099	50

*Membership estimated for years 1941 to 1944.

L. <u>Summary</u>: From all indications the creamery operations were carried on efficiently with the result that a satisfactory net margin on operations was achieved. This was a direct benefit to patrons as they received an

[51]The changes in the level of prices were important here. See footnote 48, p. 122.

average of 1.8 cents per pound of butterfat above the initial price paid. The overall membership situation was unsatisfactory as there was a large number of non-member patrons. This was more serious prior to 1945 as a number of new members were obtained during that year. Although this reduced non-member business reflecting an improved membership situation, it apparently resulted more from the desire to reduce income taxes than to improve the membership situation.

As a large portion of the members equity was held as net worth this co-operative resembled a private type of corporation in its financial structure. This similarity is attributed to the fact that this was the type of structure allowed when the co-operative was originally formed and that members have failed to adopt more recent co-operative policies. As a result of the policies followed by this co-operative difficulties were apparent due to low equity accumulation prior to expansion and due to the fact that members did not receive an equitable share of their contribution upon retirement.

During the ten year period the investment in total assets was increased by $5,900 (Table 51, Appendix A). This resulted from an increase of $11,700 in fixed assets, $600 in other assets and a decrease of $6,400 in current assets. This change from current to fixed assets suggested a loss of mobility. As there was a net increase in current liabilities of $1,500 during the ten years there was a substantial decrease in the net working capital position. This suggested that the current assets should have been built up prior to the expansion of plant thereby creating a more satisfactory financial position. The low working capital position that occurred during the latter part of the 1941-50 period was a direct result of the high bonus payments to producers and the consequent lack of equity accumulation.

During the ten year period funds were supplied for the increased investment in assets by a net increase of about $1,500 in current liabilities, $3,000 in deferred liabilities to the public and $1,400 in members equity. The amount supplied by members in terms of equity funds was about 24 per cent of the total increase. Between 1941 and 1946 the total liabilities to public were increased and members equity decreased. From 1946 to 1950 both the liabilities to the public and members equity increased but the former contributed the larger share. Of the $7,600 increase in fixed assets between 1946-50 about $4,500 was supplied by increased current liabilities, $600 by increased deferred liabilities, $1,900 by increased equity funds and $600 by decreased current assets. This emphasized that the method of financing at this co-operative was not conducive to a satisfactory build-up in equity capital. The seriousness of the situation was recognized and in 1952 a revolving fund plan was established to provide an increased supply of equity capital.

CHAPTER VII

THE DESCRIPTION AND ANALYSIS OF THE CO-OPERATIVE CREAMERIES (Continued): THE RIVERTON CO-OPERATIVE CREAMERY ASSOCIATION LIMITED

A. Location of Co-operative: This Association established its headquarters and plant at Riverton which was about 13 miles north-east of Arborg (Figure 1, page 10). The original settlement of the area followed the same pattern as described for Arborg.[1]

1. Characteristic of Procurement Area: Riverton is located in the Municipality of Bifrost, therefore, the statistics outlined for Arborg was applicable to this area.[2] Actually the area was weighted towards more livestock and lower grain production than for the area immediately around Arborg. At the same time the general productivity of the area was lower which was directly reflected in the low output of the creamery (Figure 29, Appendix B).

B. Historical Review of Co-operative: The co-operative was organized as a creamery in 1925. About 1936 active trading in store merchandise was started. Apparently, a creamery was started in the area at the turn of the century but due to the low volume of production it was unsuccessful. By 1925 there had been considerable development in the area and cream production was much in excess of local requirements. The excess cream was either shipped out of the area by train or manufactured into butter

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[1]See page 77.

[2]Ibid.

at the farm level. Several farmers, backed by a few of the local merchants, decided to start their own creamery. With the North Star Co-operative Creamery Association Limited as an example the Association was established along co-operative lines. Apparently, there was a desire on the part of the farmers for the added service and on the part of the merchants for the increased business that the creamery plant would bring to the town. Cream production in the area was increased considerably following the establishment of the creamery.

1. Review of Statutory Information:[3]

a) Historical: This Association was incorporated in 1925 under "The Co-operative Associations Act". Many of the original By-laws were patterned after those established in the 1925 legislation.[4] These By-laws were amended in 1933, 1941 and 1947.

b) Objectives of Association: The objectives of the Association as set out in the original By-laws were identical to those adopted by the North Star Co-operative in 1926.[5] Due to the scope of these original objectives they did not have to be altered when the store enterprise was added in 1936.

c) Capital Situation:

(1) Authorized Capital: The authorized capital was established

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[3]The information pertaining to the original By-laws was obtained from a copy of file at the headquarters of the Association. Information on subsequent amendments were obtained from a review of data on file at the office of the Provincial Secretary, Legislative Building, Winnipeg, Manitoba (All subsequent references to the By-laws will refer to these two sources).

[4]See Review of Manitoba Statutes, p. 27.

[5]See p. 79, et seq. This indicated the influence of the standard set of By-laws made available by the Registrar of Co-operatives.)

at $15,000 composed of 1,500 shares at $10 each. The value of the shares were reduced to one dollar each about 1952.

(2) Shares: Each member had to own at least one share but could not own more than five per cent of the total authorized share capital. There was no indication in the 1925 By-laws, that the Association would redeem the shares of any member. This was allowed at a later date but the Association has restricted the redemption of shares mainly to the settlement of estates.

d) Membership Regulations: There was no provision for a contract with members or for the termination of membership in the 1925 By-laws. Membership was limited to farmer producers dealing with the Association.[6] Each member had one vote which could be exercised at all general meetings. No proxies were allowed. The members had the privilege of dealing with the Association and all benefits were to accrue to them on the basis of patronage.

e) Board of Directors: The original board consisted of 12 members. Apparently, a new board was elected each year. In 1947 the number was changed to seven members with each member serving a two year term.

f) Apportionment of Surplus: The apportionment of surplus was set out as allowed by the "Co-operative Associations Act",[7] with the exception that seven per cent was established as the maximum rate of interest pay-

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[6]Although this rule was apparently not changed until after 1950 some town people had become members prior to that date as a result of patronage at the store.

[7]See p. 27.

able on share capital instead of eight per cent.[8]

The policy of retaining dividends provided an important source of funds for the co-operative. Apparently, the By-laws were amended so that dividends allocated to members as well as non-members could be retained, payment being made at a time set by the Directors. This amendment was not found among the available By-laws.

In 1947 the revolving surplus fund was accepted which established a definite policy in the handling of dividends.[9] The 1947 amendment was as follows:

> "In consideration of the Association promising to repay to each member without interest, and as soon as monies become available for that purpose in the revolving fund heretofore established by it, such sums as the association may borrow hereunder from year to year, each member of the Association agrees to lend to the Association this year, and in each year thereafter upon said terms, a sum equal to the amount of the patronage dividends credited to him by the Association, or such part as the Association may desire to borrow, and the Association is by virtue thereof authorized to apply the said dividends of each member on the said loans during such times as he remains a member of the association."[10]

Although there was no time limit in the 1947 amendment a maximum of ten years was established later. Apparently, these retained funds were

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[8]By-laws, Article VII, 1925.

[9]Prior to 1947 these funds were handled as retained dividends which did not allow the association the degree of security allowed by the revolving surplus fund. The provision to allocate dividends to non-members was removed by this amendment but the Association failed to comply with this change until several years later.

[10]By-laws, 1947 amendment. (This By-law was amended again in 1954 to allow a portion of the dividends to be applied directly to share capital)

non-callable up to ten years after they had been allocated but became callable after that date. The manager indicated that the ten year limit was reasonable and felt that the amount which would remain to be paid after ten years would not seriously incumber the Association. This was an estimate as no check had been made to discover the actual amount which would be payable. The revolving fund was established so that store and creamery dividends were separated. Payments were made separately on the basis of these two funds.

C. The Educational Program: Few details were available for the educational program but from all indications it was almost non-existant. The co-operative made the annual statements available to members at the annual meeting and distributed a calendar each year. In addition, the Association supported local activities such as the agricultural fair, curling bonspiels and other similar events.

D. Review of Production and Sales:[11] Both production and sales information were included here due to the presence of the store.[12]

1. Butter Production: The creamery was operated continuously from

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[11]The sales data for the creamery and store are outlined in Figure 10.

[12]This Association consisted of a creamery and a store department and therefore, was a combination producer-consumer type co-operative. Such combinations are normally not considered desirable due to the basic difference in the objectives of each. Fortunately only butter was transferred from the producer part to the consumer part and as a result little conflict arose over the inter-departmental pricing of products. The possibility of conflict was further reduced by the fact that most of the members patronized both the store and the creamery.

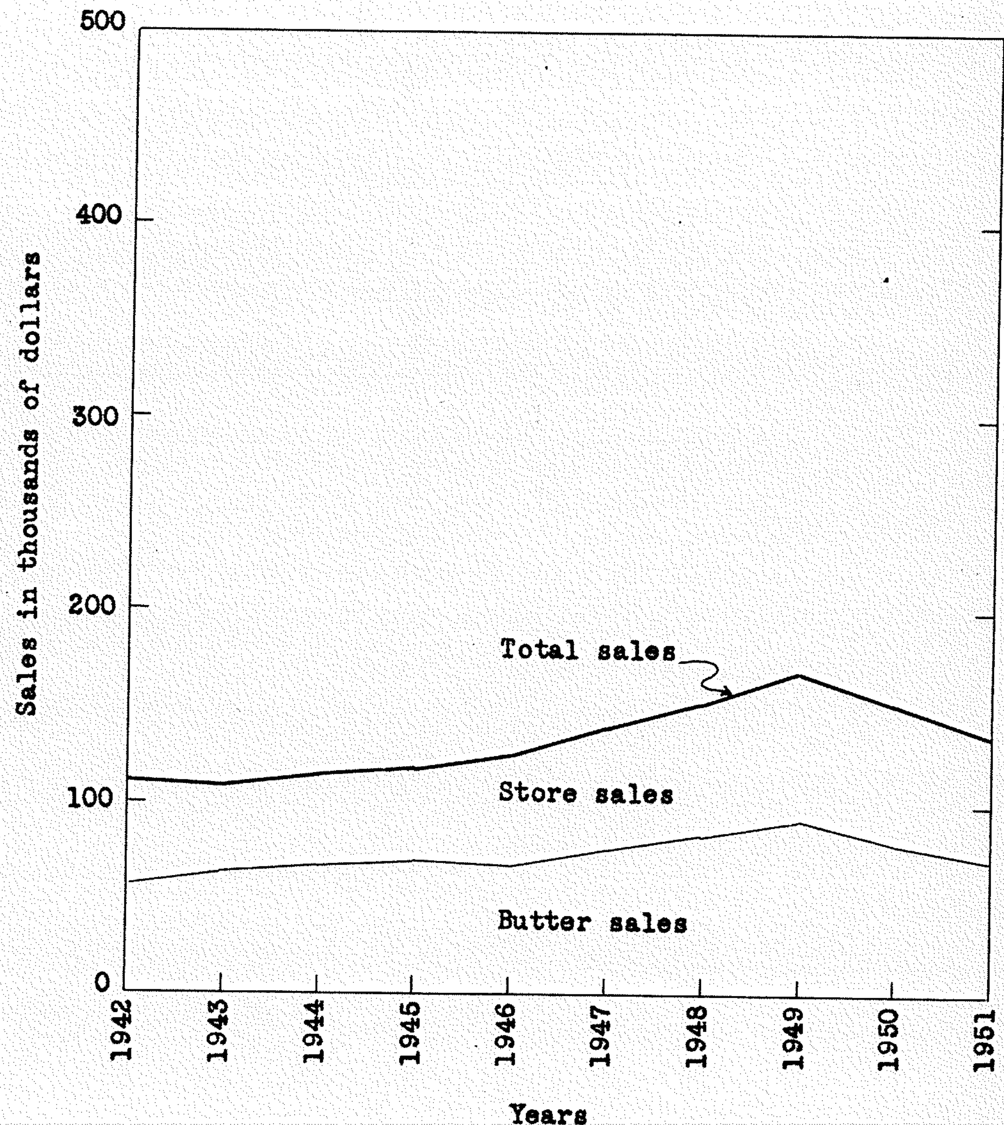

Figure 10. Total annual sales and the amount contributed by each enterprise for years 1942 to 1951: Riverton Co-operative Creamery Association Limited.

the time it was started in 1925. Cream trucking was provided for a period through contract with the owner of a public service vehicle truck.

a) Scale of Plant Operations: Butter production increased from 53,000 pounds in 1925 to 207,000 pounds in 1938.[13] After 1938 output was gradually decreased to a low of 130,000 pounds in 1951 (Figure 29, Appendix B).[14]

The production at this plant was much lower than for the other three creameries studied. The approximate scale of plant was indicated by the fact that the average production for the ten years was 170,000 pounds. The yearly average varied from 142,000 to 192,000 pounds during the ten years. This low level of production reduced the possibilities of economies of scale.[15]

b) Utilization of Scale: There was limited variation between one year and the next but the level of production was on a downward trend during the 1942-51 period. Production was at about 105 per cent of the 1935-39 average in 1940-41 and had dropped to 78 per cent by 1950-51 (Figure 28, page 274). Although there was limited adjustment required among years the gradual drop in production had a definite influence on

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[13]Unpublished data, Dairy Branch, Manitoba Department of Agriculture, Winnipeg, Manitoba. (This gradual rise suggested that the dairy output on the farms waa gradually increasing during this period.)

[14]Apparently, there was a shift from dairy to beef production during this latter period. There was also a general movement of farmers from the area. The drop in production from 1943 to 1951 was typical of the province as a whole.

[15]See footnote 6, p. 42.

the utilization of scale and consequently on the cost per unit of production.

c) Seasonal Production Pattern: The seasonal pattern of production was not too serious. There was about 2.9 times as much butter produced during the peak months as during the low months. This was considerably better than the 3.9 to one average for the Province. The fairly low seasonal variation and limited changes in production between years were factors which partially compensated the low level of production.

d) Plant Equipment: There was only one churn and a vat used in the creamery. Both were replaced during the 1942-51 period. Between 20 and 25 churnings were necessary to produce the butter during the peak months of the year. This implied that one churning a day was required. However, due to the variation in the daily cream receipts some over-time was apparently necessary, especially during the earlier years when production was higher.

e) Efficiency of Butter Production: The average annual over-run for the ten years was about 23.1 per cent but varied from 21.5 to 24.1 during the ten year period (Table 13). This represented a relatively high over-run and suggested that it was necessary that the creamery operations be carried out close to the margins allowed in order to recover all costs of operations. The high over-run during the last four years resulted partly from a change in government regulations allowing a higher salt content in butter.

2. Cream Trucking Operations: The creamery provided trucking services

during the ten year period. All trucking costs were paid by the creamery. Trucking was found to be too costly and it was discontinued after 1952, which resulted in an improved net margin on operations.

Table 13. Initial Average Price, Patronage Dividend, Total Payment Per Pound and Estimated per cent Over-run from Butter Manufacture: Riverton Co-operative Creamery Association Limited, 1942-51

Year	Average initial price[a]	Declared patronage dividend	Average total return	Annual average over-run
	-cents per pound of butterfat-			-per cent-
1942	30.7	1.0	31.7	23.9
1943	37.4	1.0	38.4	21.5
1944	40.7	(-0.5)	40.2	23.0
1945	41.2	1.5	42.7	23.8
1946	41.4	0.6	42.0	22.8
1947	46.8	1.1	47.9	22.2
1948	54.4	1.7	56.1	21.8
1949	68.2	0.7	68.9	24.1
1950	57.5	(-1.2)	56.3	23.8
1951	54.0	2.2	56.2	24.0
Average 1942-51	46.4	0.9	47.3	23.1

aThe average initial price was adjusted to allow for the subsidy paid by the government between 1942 and 1947.

3. Store Operations: The store was started in 1936. Prior to 1936 some produce were purchased in bulk lots for members. After 1936 the store business was gradually built up. By 1939 the volume of business reached $40,000. Ten years later the annual volume was close to $80,000 although much of this increase was due to the change in prices. The volume of trade was not large but the business showed some signs of growth during the period from 1936 to 1951.

E. Marketing and Retailing: Source and Distribution of Product:

1. Creamery:

a) Procurement of Butterfat: The area from which cream was procured is outlined in Figure 1, page 10. This indicated the approximate boundaries but the level of procurement varied considerably for districts within this area. Some cream was procured from Hecla Island in Lake Winnipeg.

(1) Method of Procurement: During the 1942-51 period about one-half of the cream was procured by truck and almost all of the remainder was delivered by the farmers. Train shipments were almost non-existant during the 1942-51 period as a satisfactory train service was not available.

(2) Distribution of the Product: About 21 per cent of the butter manufactured was sold in prints to patrons or retail storekeepers in the area. The other 79 per cent was sold in bulk boxes to the Winnipeg wholesale market.

2. Store: The store purchased most of the merchandise from the Manitoba Co-operative Wholesale Limited but special lines were obtained elsewhere. Most of the sales were made to patrons, of which, the majority were farmers. A few customers lived in Riverton.

F. Payment and Collection Policies:

1. Payment to Patrons: Cream was paid by cream cheques which could be cashed at the bank or store. Some of this money was applied to the purchase of goods. When dividends were declared payable they were paid by cheque or applied to the members account at the store.

2. Collection: Butter sales to the broker were paid promptly by cheque. About 50 per cent of the sales to local stores were paid in cash

and the remainder were paid periodically, usually once a month. Therefore, most of the creamery accounts receivable were from local stores.

Store sales were paid in cash or on credit. One of the big problems associated with the co-operative store was the credit extended to customers. Apparently, there was a well established practice in the area that the merchants gave fairly liberal credit especially during off seasons. As a result, it was necessary for the store to follow the same practice to obtain the trade.[16]

G. Membership and Patronage:

1. Statistics: Only a limited amount of information was available concerning membership. The number were recorded for the years 1928 to 1930 and 1949 to 1951 (Table 14).

The manager indicated that a number of the members were inactive. They had left the district or had passed away but their shares had not been redeemed, partly as a result of a shortage of capital and partly due to the fact that they had not been presented for redemption. Out of the estimated 405 members in 1951 about 290 were actually patrons of the Association. This meant that there were about 115 non-active members who still had money invested in the Association. They made up 28 per cent of

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[16]Although this suggested that members were concerned with their own immediate advantages rather than the long-run advantage of operating a successful store, this observation had to be modified by the fact that many of the people of this area relied on very seasonal output such as farming and fishing. In addition, the productivity of the area was not extremely high.

the total membership. These non-active members were seldom present at the annual meeting and following 1943 they received no returns from their investment.

About 268 members were cream shippers and the other 22 active members dealt exclusively with the store. An estimated five per cent of the business was transacted with non-members.

2. Meeting Attendance: The number of members attending the annual meetings varied considerable due to weather and road conditions. The attendance was estimated at between 50 and 75 for the ten year period 1942-51.

Table 14. Production, Sales and Membership Statistics: Riverton Co-operative Creamery Association Limited, 1928-30 and 1949-51

Years ending (March)	Total membership	Sales: Butter: Total	Sales: Butter: Per Member	Sales: Butter and store: Total	Sales: Butter and store: Per Member	Butter production: Total	Butter production: Average per member
	-number-	-thousand dollars-	-dollars-	-thousand dollars-	-dollars-	-thousand pounds-	-pounds-
1928	153	45.2	295	45.2	295	108.9	712
1929	171	43.2	253	43.2	253	108.6	635
1930	178	38.8	218	38.8	218	91.2	512
1949	380	96.1	253	174.6	459	149.4	393
1950	390	83.9	215	159.1	408	146.0	374
1951	405	76.3	188	144.4	356	142.0	351

3. Level of Production and Membership Loyalty: The production of butter was reduced by about 50,000 pounds between 1942 and 1951, (Figure 29, Appendix B). Most of this reduction was assumed to reflect changed farm output as there was limited competition for cream in this area.

The production per member for the six years 1928-30 and 1949-51 was shown in Table 14. The influence of the store patrons and the heavy non-active membership during the latter period were made apparent by the comparison of these two periods. This was further illustrated by the fact that the average production per member was 351 pounds and per shipper 530 pounds for the 1950-51 production year. Even the 530 pounds per shipper was lower than the production per member for the 1928-30 period. This occurred despite the fact that the total output of butter was doubled which suggested that the 1928-30 figures were biased heavily by non-member business.

The total value of butter sales was increased considerably between the 1928-30 and 1949-51 periods but part of this increase was due to the general rise in prices. Including store sales, the value of sales were more than tripled and the average sales per member doubled between 1928-30 and 1949-51. By excluding non-active members from the calculation, the value of sales per member was increased by about $140 over the $356 reported in Table 14 for the 1950-51 year.

The volume of production at the store and the creamery were both relatively low. The low production at the creamery could hardly be blamed on poor membership support as this was a low production area. In addition, the roads were generally poor which restricted the distance that cream could be hauled. The low volume at the store was partly due to the fact that patrons could obtain less credit here than at other stores in town.[17]

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[17] This does not imply that the store should extend credit to meet this competition.

H. <u>Financial Results of Operations</u>: The presence of the two enterprises posed special problems in analysis. Some analysis were necessary to show the relative importance of each enterprise although the basic analysis had to be carried out from the point of view of the Association. In the operating and manufacture statements the main concern was with butter manufacture and sales although summary information was presented for the store.[18]

The Association operated on the accounting year ending on the 31st of March. As a result the years were listed from 1942 to 1951 on the tables but the basic period covered was the 1941-50 period. Due to price changes and the level of production at the time the books were closed some of the data were not directly comparable with the other co-operatives.

1. <u>Net Margin on Operations</u>: For the creamery and the store combined there was an average net margin of about $2,500 per year for the 1942-51 period (Table 15). The total net margin varied from -$200 to $3,800 among years. For creamery operations there was an average net margin of $1,300 per year. The net margin on creamery operations varied from -$1,400 to $2,500 among years with losses recorded for the years ending 1944 and 1950. There was an average net margin on store operations of $1,200 for the ten years. This margin varied from -$1,000 to $2,300 among years. The year ending 1951 was the only year that a loss was recorded on store operations.

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[18]The cost of manufacture and operating statements are shown for the ten years in Tables 52 to 54 in Appendix A. Some trends are illustrated in Figure 11, p. 148. These are for the creamery. The statistics for the store are included in the text.

a) <u>Source of Total Net Margin</u>: For the ten years about 52 per cent of the net margin was derived from the creamery and 48 per cent from the store. The data in Table 15 illustrate that there was a much greater variation of the net margins for each enterprise over the ten years than for the combined net margin. With the exception of the year ending 1950 the net margin from the one enterprise compensated the other. As a result there was increased stability in the net margin due to the combination of these two enterprises.

Table 15. Source of Total Net Margin on Operations for the Years 1942 to 1951 and 1942-51 average: Riverton Co-operative Creamery Association Limited

Year ending	Net margin on operations				
	Total	From creamery		From store	
		Net margin	Per cent of total	Net margin	Per cent of total
	-dollars-	-dollars-	-per cent-	-dollars-	-per cent-
1942	3,700	2,400	65	1,300	35
1943	3,400	2,100	60	1,300	40
1944	1,500	(-800)	(-51)	2,300	151
1945	2,400	2,200	92	200	8
1946	2,100	900	42	1,200	58
1947	3,800	1,700	43	2,100	57
1948	3,700	2,500	68	1,200	32
1949	3,000	1,000	33	2,000	67
1950	(-200)	(-1,400	(-908)	1,200	808
1951	1,400	2,400	166	(-1,000)	(-66)
Average 1942-51	2,500	1,300	52	1,200	48

b) <u>Net Margin on Operations to Net Sales</u>: The combined net margin on operations averaged about 1.9 cents per dollar of sales over the ten year period (Table 16). It varied from slightly less than zero to 3.4 cents per dollar of sales. This low net margin on sales was attributed to the low volume of sales at both the store and the creamery.

The net margin on creamery operations averaged 1.7 cents per dollar of creamery sales (Table 53, Appendix A). This was below the average return per dollar of sales recorded for the other three creameries.[19] The net margin per dollar of sales varied from -1.6 to 3.8 cents among years.

Table 16. Sales Statistics and the Importance of the Total Net Margin Relative to Total Sales: Riverton Co-operative Creamery Association Limited, 1942-51

Year ending	Total sales	Creamery sales: Value	Creamery sales: Per cent of total sales	Store sales: Value $	Store sales: Per cent of total sales	Total net margin to total sales
	-thousand dollars-		-per cent-	-thousands-	- per cent -	
1942	108.8	56.7	52	52.1	48	3.4
1943	106.2	64.6	56	51.6	44	3.0
1944	112.7	66.8	59	45.9	41	1.3
1945	116.6	69.6	60	47.0	40	2.0
1946	123.2	66.5	54	56.7	46	1.7
1947	139.7	77.8	56	61.9	44	2.7
1948	153.4	85.6	56	67.8	44	2.4
1949	170.0	91.5	54	78.5	46	1.7
1950	153.2	80.0	52	73.2	48	(-0.0)
1951	139.2	71.1	51	68.1	49	1.0
Average 1942-51	133.3	73.0	55	60.3	45	1.9

The net margin on store operations averaged 2.0 cents per dollar of store sales[20] during the ten years (Table 17). This varied from -1.4 to 5.0 cents per dollar of sales among years. The rate of return per dollar

[19] For the other three creameries the average net margins were 2.4, 3.1, and 4.0 cents per dollar of sales for Vita, Winkler and North Star respectively.

[20] Although the store recorded a higher rate of return on sales some consideration would have to be given to the allocation of overhead and general expenses before a definite observation could be made concerning the relative success of the two departments.

of sales averaged 2.5 cents during the first five years and about 1.6 cents per dollar of sales during the last five years. This implied that store operations had become less efficient particularly during 1950-51. Comparison of the data in Table 16 and Table 17 further illustrate the relationship between the volume of sales for each department and the net margin. An average of 55 per cent of the sales were from the creamery department from which 52 per cent of the total net margin was obtained. The store handled 45 per cent of the sales and contributed 48 per cent of the net margin. This was reflected in the higher net margin per dollar of sales obtained by the store.

Table 17. Operating and Sales Statistics for the Store Department: Riverton Co-operative Creamery Association Limited, 1942-51

Year ending		Gross margin on sales		Expenses		Net margin on operations[a]	
	Sales	Value	Per cent	Value	Per cent	Value	Per cent
	-000 dollars-			-000 dollars-		-000 dollars-	
1942	52.1	6.0	11.6	4.8	9.3	1.3	2.5
1943	51.6	6.2	12.0	4.9	9.5	1.4	2.6
1944	45.9	5.9	12.8	3.6	7.8	2.3	5.0
1945	47.0	4.9	10.5	4.8	10.1	0.2	0.4
1946	56.7	6.7	11.8	5.6	9.8	1.2	2.0
1947	61.9	8.1	13.1	6.1	9.7	2.2	3.4
1948	67.8	7.1	10.5	6.2	9.0	1.2	1.5
1949	78.5	8.2	10.5	6.4	8.2	2.0	2.5
1950	73.2	8.0	11.0	7.1	9.6	1.2	1.7
1951	68.1	4.8	7.1	6.1	8.9	(-1.0)	(-1.4)
Average 1942-51	60.3	6.6	11.0	5.6	9.2	1.2	2.0

[a]Other revenue was included in the net margin on operations.

c) <u>Net Margin on Operations Relative to Capital Structure:</u> The net margin on operations averaged 11 cents for every dollar of permanent capital (Table 18). The rate of return varied from minus one to 23 cents per dollar of permenanet capital. The low ratio values recorded for 1950 and 1951 resulted from the low net margin on operations and increased supply of permanent capital.

d) Net Margin on Operations to Fixed Assets: The net margin on operations averaged about 32 cents for every dollar invested in fixed assets during the ten years[21] (Table 18). It varied from 85 to minus two cents per dollar invested in fixed assets among years. The high ratio values for the first two years reflected a low investment in fixed assets and a satisfactory net margin, whereas, the low ratio value for the last two years reflected a higher investment and a much reduced net margin on operations. This implied a reduction in the earning capacity of the monies invested in these assets. Actually the equipment was in poor shape during the first two years as indicated by the fact that the equipment in the creamery plant had been completely depreciated by 1943.

Table 18. Net Margin on Operations Relative to Capital Structure and Fixed Assets: Riverton Co-operative Creamery Association Limited, 1942-51

Year	Net margin to capital structure	Net margin to fixed assets
	-dollars-	-dollars-
1942	0.23	0.77
1943	0.20	0.85
1944	0.09	0.22
1945	0.13	0.34
1946	0.11	0.25
1947	0.17	0.48
1948	0.14	0.37
1949	0.11	0.30
1950	(-0.01)	(-0.02)
1951	0.05	0.12
Average 1942-51	0.11	0.32

[21]This rate of return compared with that recorded for the Winkler Creamery but the level of investment in fixed assets relative to total assets was much lower at the Riverton Creamery. See p. 236.

During the six years 1944 to 1949 the net margin on operations averaged 35 cents per dollar invested in fixed assets. This represented a fairly satisfactory return for this size of business although there was a comparatively low investment in fixed assets relative to total assets due to the influence of the store.

2. Factors Which Caused the Net Margin to Fluctuate:

a) Gross Margin on Net Sales: The gross margin on creamery sales averaged about $4,000 for the ten years (Table 52, Appendix A). This was about 5.2 per cent of the value of net sales (Table 53, Appendix A). The gross margin varied between 9.0 and 2.1 per cent of net sales among years. Because of the relationship between the two components all changes in the size of the gross margin were accompanied by greater relative changes in the net margin. This relationship is illustrated in Figure 11.

The gross margin on store sales averaged $6,600 for the ten years (Table 17, page 145). This represented about 11 per cent of sales. The gross margin varied from 13.1 to 7.1 per cent among years. The low gross margin of 7.1 per cent automatically resulted in an operating loss.[22]

(1) Factors Which Influenced the Gross Margin on Sales:

(a) Volume of Net Sales: The volume of sales were comparatively low for both the creamery and the store. As a result, the costs per unit of output tended to be high. Someeconomies in overhead costs

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[22] The gross margin at the store represented the average markup of the goods purchased, whereas, in the creamery the gross margin represented the spread which remained after the product was manufactured.

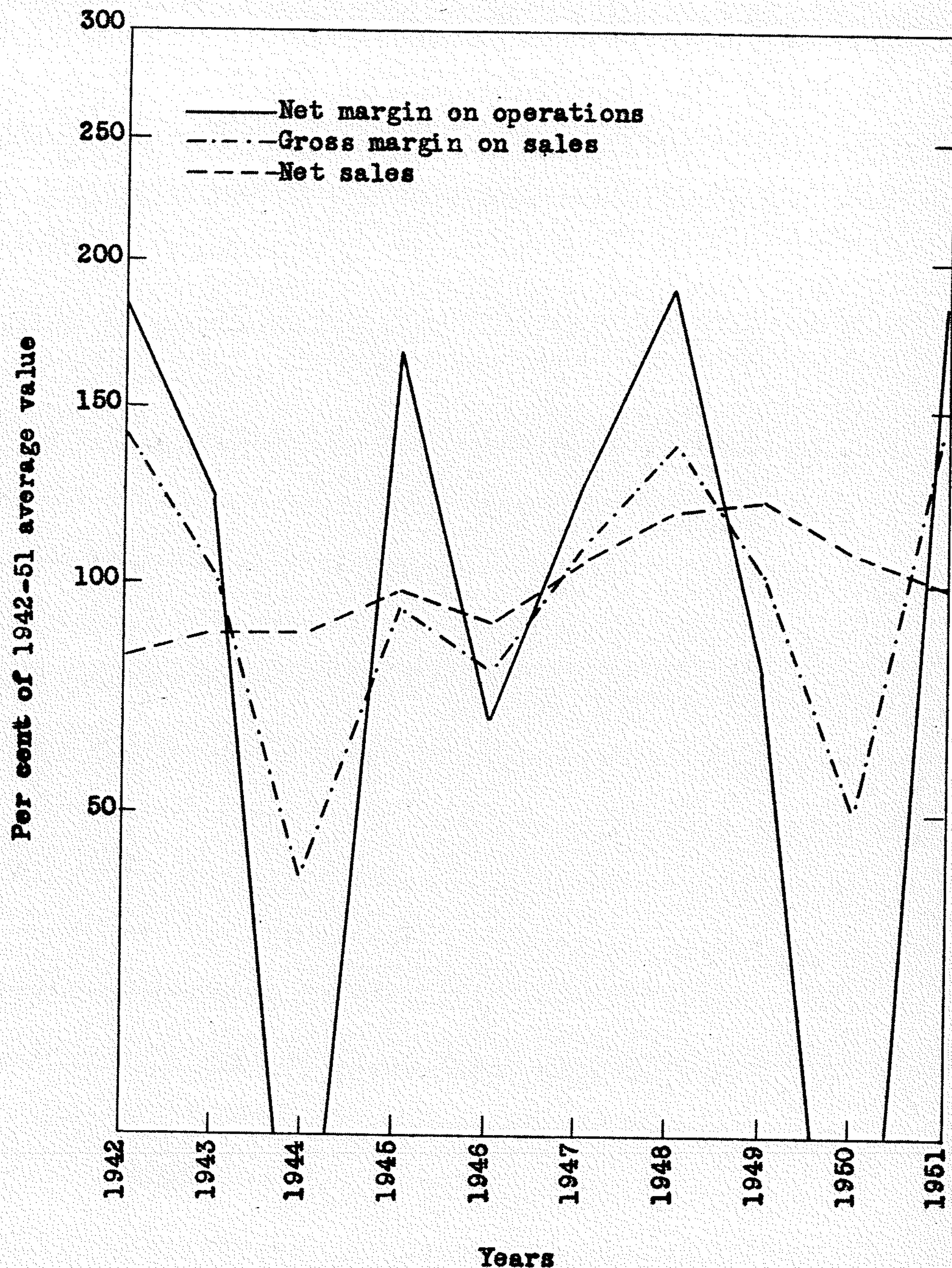

Figure 11. Trend percentages of selected operating statement components for years 1942 to 1951 (base 1942-51 average): Riverton Co-operative Creamery Association Limited.

were present due to the existance of the two enterprises but the lack of homogeneity between the basic purposes of both increased the problem of administration.

(b) Cost of Product Manufactured: When a change in the volume of sales was not reflected by a corresponding change in the gross margin on sales this indicated a change in the relative importance of cost of product manufactured.

The average manufacturing expense was $7,000 per year which represented 9.6 per cent of the average cost of product manufactured (Table 52 and 53, Appendix A). This expense varied from 8.3 to 11.8 per cent of the cost of product manufactured among years. The high relative importance of this cost during the year ending 1950 contributed to the negative net margin on operation. This resulted from a drop in the value of the product sold and an increase in the manufacturing expense over the year previous.

The total cost at plant for cream averaged 90.4 per cent of the cost of product manufactured. The amount paid to patrons made up 86.4 per cent and trucking costs four per cent. The relative share going to patrons varied from 84.3 to 88.3 per cent among years. Part of the variation was due to the changes in the initial prices to patrons[23] (Table 13, page 137)

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[23]As the initial prices paid to patrons corresponded closely to those paid by the other creameries this suggested that the pricing was competitive and the smaller creamery could not regulate the margin to suit changing manufacturing costs. (Compare Table 13, p. 137 with Table 3, p. 88 Table 24, p. 181 and Table 32, p. 228.

and part to changes in manufacturing expense mentioned above.

b) Administrative and General Expenses: For the creamery the administrative and general expenses averaged about \$2,800 for the ten years (Table 52, Appendix A). There was a variation in these expenses from \$2,000 to \$3,600 among years. This expense was subject to proper allocation between the two departments. Apparently, the high expense in 1941-42 was caused by the application of a larger share of the administrative expense to the creamery. Following that date most of the expenses were divided in one-half. The high relative importance of these expenses in 1950 and 1951 were caused by increased expenses and reduced sales.

For the store the administrative, operating and general expenses were included together. These expenses averaged about \$5,600 for the ten years which represented 9.2 per cent of average sales (Table 17, page 145). These expenses varied from \$3,600 to \$7,100 among years. They were highest for the year ending 1950. There was a drop in these expenses between the 1950 and 1951 but it was not sufficient to compensate for the drop of over \$3,000 in the gross margin on sales. As a result a substantial loss was recorded on operations for that year. Apparently, in the store business this reflected improper markup as well as excessive expenses.

I. Distribution of Net Margin on Operations: The Association paid out dividends during years ending 1942, 1943, 1944 and 1949. For the first three years dividends were declared on store sales, butterfat receipts and paid-up share capital. In 1948-49 the dividends were paid in favour of butterfat receipts delivered in 1940. All money was paid out for 1940 or earlier, and were subject to deductions for the purchase of the first share by non-member patrons. About $8,400 were paid out during the first three years and $1,400 during the 1948-49 year. In addition, a small amount was paid out in favour of the redemption of shares during the ten year period.

There was no record of any cash dividends paid that resulted from patronage during the 1942-51 period. Therefore, the net margin was used to increase members equity or replace the equity capital paid out in favour of earlier years. Although reserves were set up during some years almost all the equity funds were eventually retained in allocated form as part of the revolving surplus fund or share capital.

Table 19. Net Distribution of the Net Margin on Operations From April 1, 1941 to March 31, 1951: Riverton Co-operative Creamery Association Limited

Net distribution	Amount distributed	
	Dollars	Per cent
	-thousands-	
Capital outstanding	0.7	2.8
Undivided surplus and reserves	-5.2	-20.9
Revolving surplus fund	17.2	69.1
Dividends payable	0.3	1.2
Total to equity	13.0	52.2
Reserve for bad debts	1.0	4.0
Bad debts written off	1.0	4.0
Paid in cash to patrons	9.9	39.8
Total net margin	24.9	100.0

As indicated in Table 19 there was about $13,000 allocated to increased member equity between March 1941 to March 1951. This represented 52.2 per cent of the net margin for the ten years. The decrease in the reserve and undivided surplus account resulted from the transfer of funds to the revolving surplus fund. There was only a slight increase in the share capital account which indicated that it was relatively inactive.

The reserve for bad debts and bad debts written off were mainly in favour of the store accounts receivable. Apparently, there was no adjustment made back to the year that the bad debts were acquired as these were deducted from the current net margin. This implied a transfer of the net margin between years due to this accounting policy although it was considered impossible to handle these bad debt otherwise. The bad debt situation was the direct result of the policy of extending credit to patrons in rather large amounts.

1. Source and Distribution of Net Margin: Separate revolving funds were maintained for each enterprise so that dividends could be allocated independently. Originally, the creamery dividends were based on butterfat receipts but in 1948 this was changed to a dollar basis. The latter method was more equitable as the quality of the product was taken into consideration. Store dividends were allocated on the basis of sales.

The actual distribution of the net margin on operations appeared equitable but this was subject to investigation of the methods used in allocating overhead and general expenses. Direct costs and depreciation charges were not a problem here as they occupied separate buildings. Thus the main joint costs were in the managerial and clerical operations. Apparently, some of these costs were divided in one-half which implied that the allocation was arbitrary. At the same time it was realized that both enterprises stood to gain by the spread of these expenses over a wider base than would be available for either individually.

J. <u>Financial Structure of Co-operative:</u>[24] The financial structure of the co-operative underwent considerable change during the period due to increased investment and changed financial policies. The co-operative had operated about 15 years by 1941, therefore, it had passed the stage when financial problems are normally most difficult.

Although records were not available to indicate the original sources of funds, apparently, some loans were made by members supplemented by loans from local business men. At the same time, most of the original members purchased at least one ten dollar share. By 1928 the outstanding share capital had been built up to $4,338 which implied that the members had purchased a substantial number of shares at the start or shortly thereafter.[25] The Association allocated dividends to share capital therefore, some money could have accumulated from this source. During the 1925-28 period the reserves were increased by $3,388 which indicated that the original loans were being replaced by equity funds.

In the Auditor's statement for 1950-51 it was suggested that the original investment was $5,000. The investment in the Association was

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[24]The comparative financial statements for the ten years are outlined in Tables 55, 56, 57 and 58, Appendix A. The relative importance of the components are shown in Figure 12 and 13. The trends are illustrated in Figure 14, p. 158.

[25]Annual Report of Registrar. (Unpublished data). Co-operative Services Branch, Manitoba Department of Agriculture, Winnipeg, Manitoba, 1928-30).

increased to $41,600 by 1951. This represented an average increase of about $1,500 per year between 1925 and 1951.

For the ten year period the source of funds were:[26] outstanding capital (22%) reserves and undivided surplus (13%) allocated surplus (33%) current loans from members (6%) fixed loans from members (1%) bank (11%) and current business creditors (14%). Equity capital contributed an average of 68 per cent of the supply of capital.

The use of funds for the ten years was divided among fixed assets (24%), current assets (70%), and other assets (6%). The important feature about the use of funds was that they were invested in two enterprises. About 37 per cent of the average investment was in creamery assets and 63 per cent in the store (Table 56, Appendix A).

The value of total assets averaged $31,600 for the ten years (Table 55, Appendix A). They were increased from $19,400 in 1942 to $41,600 in 1951. This was a net increase of about $22,200 of which $14,400 were added during the 1942-47 period and $7,800 during the 1947-51 period (Table 58, Appendix A). About $16,400 of the total increased investment was invested in store assets and $5,800 in the creamery. The increase in the value of assets at the creamery was mainly due to the replacement of equipment, whereas, at the store the main increase was in inventories and receivables.

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[26] The percentage figures represent the average relative importance of these items for the ten years.

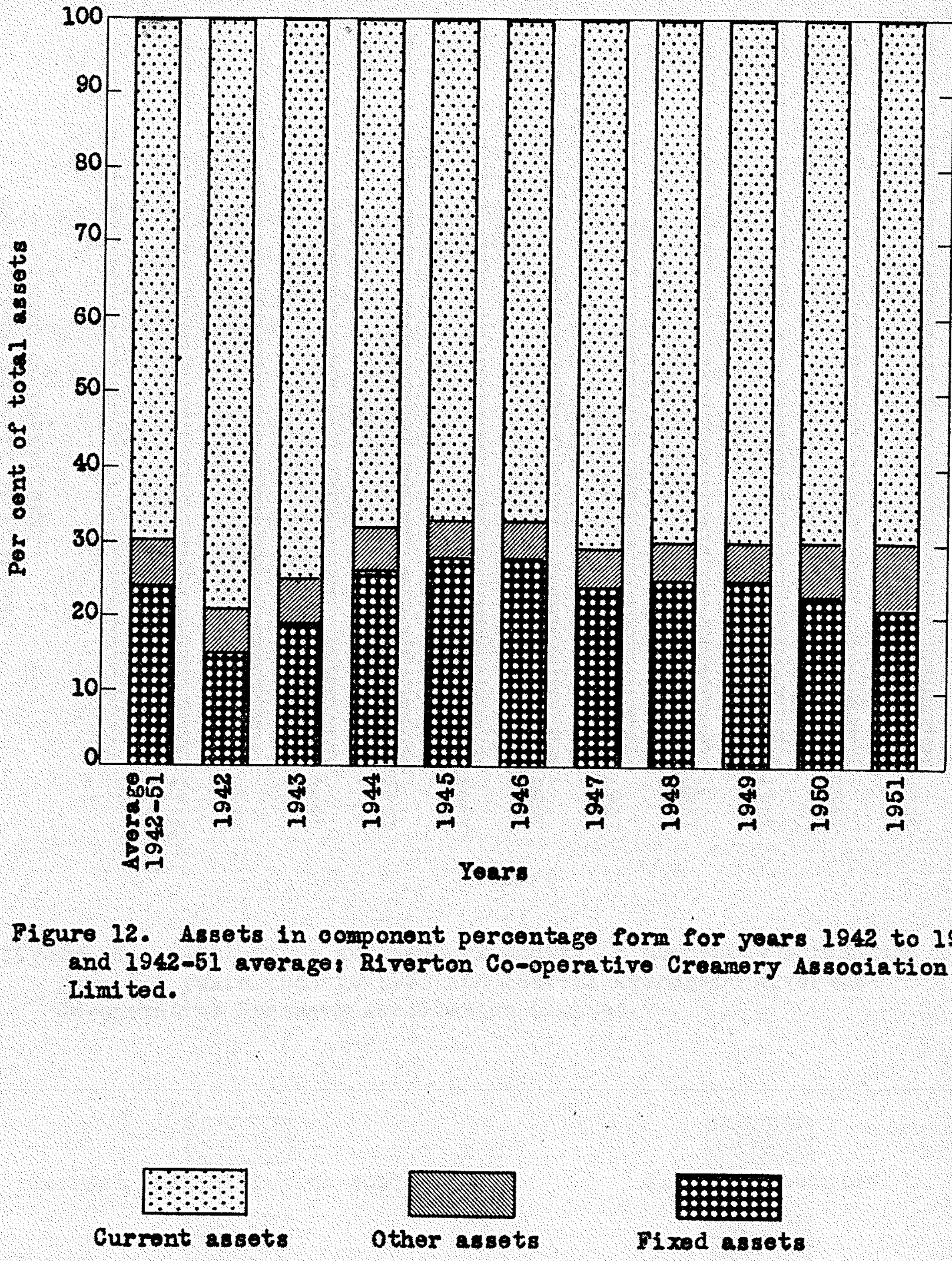

Figure 12. Assets in component percentage form for years 1942 to 1951 and 1942-51 average: Riverton Co-operative Creamery Association Limited.

1. Working Capital Position:[27] The investment in current assets averaged $22,000 (Table 55, Appendix A) which represented 70 per cent of the average investment in assets for the ten years (Table 56, Appendix A). The influence of the store was illustrated by the fact that $17,600 of current assets were from the store which made up 56 per cent of the total investment in assets. This 56 per cent was made up of 38 per cent in inventories and 16 per cent in receivables. There was an average of $1,300 invested in cash and government bonds. This was relatively low compared with the investment in current assets.

The current creditors supplied an average of $10,000 for the ten years which made up about 31 per cent of the total supply of capital (Table 56, Appendix A). About two thirds of the current liabilities resulted from store activities although it was difficult to divide these liabilities properly. About six of the 31 per cent consisted of current loans from members and another ten per cent was made up of a produce loan from the bank. The former was considered a liability to the store and the latter a liability to the creamery.

a) Current Ratio: The value of the current ratio averaged 2.2:1 for the ten years (Table 20). With the exception of the first two years the ratio value remained very close to the 2:1 minimum considered necessary.

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[27]The working capital position of this Association was not directly comparable with the other Associations due to the influence of the relatively high level of inventories and receivables at the store.

Based on the assumption that the current assets and liabilities had been properly allocated between the creamery and the store the current ratio was calculated for the average condition of both. The average current ratio for the store department was 2.8:1 and for the creamery about 1.1:1. The store normally required a high current ratio, due to the high investment in inventories and slow turnover of goods. Consequently, both ratio values suggested an unsatisfactory current position.

b) Net Working Capital Position: As outlined in Figure 14 the net working capital situation showed a gradual improvement over the ten years. As the books were closed in March the net working capital position was assumed to be better than during peak production periods.

Current assets were increased by $15,400 during the period while current liabilities were increased $11,200 (Table 58, Appendix A). This indicated that long-term funds were being used for the increased investment in current assets which was considered a conservative method of financing. Due to the increased investment in store inventories and receivables there was a substantial drop in the cash position. Cash plus government bonds were decreased by $700 between 1942 and 1951. This indicated that the current assets had become less liquid which was an unsatisfactory situation. There was an increase of about $4,500 in loans from the bank and $2,700 in short term loans from the members. Thus a large part of the increased funds invested in current assets were supplied from non-equity sources.

c) Current Receivable Position: For the ten years there was an

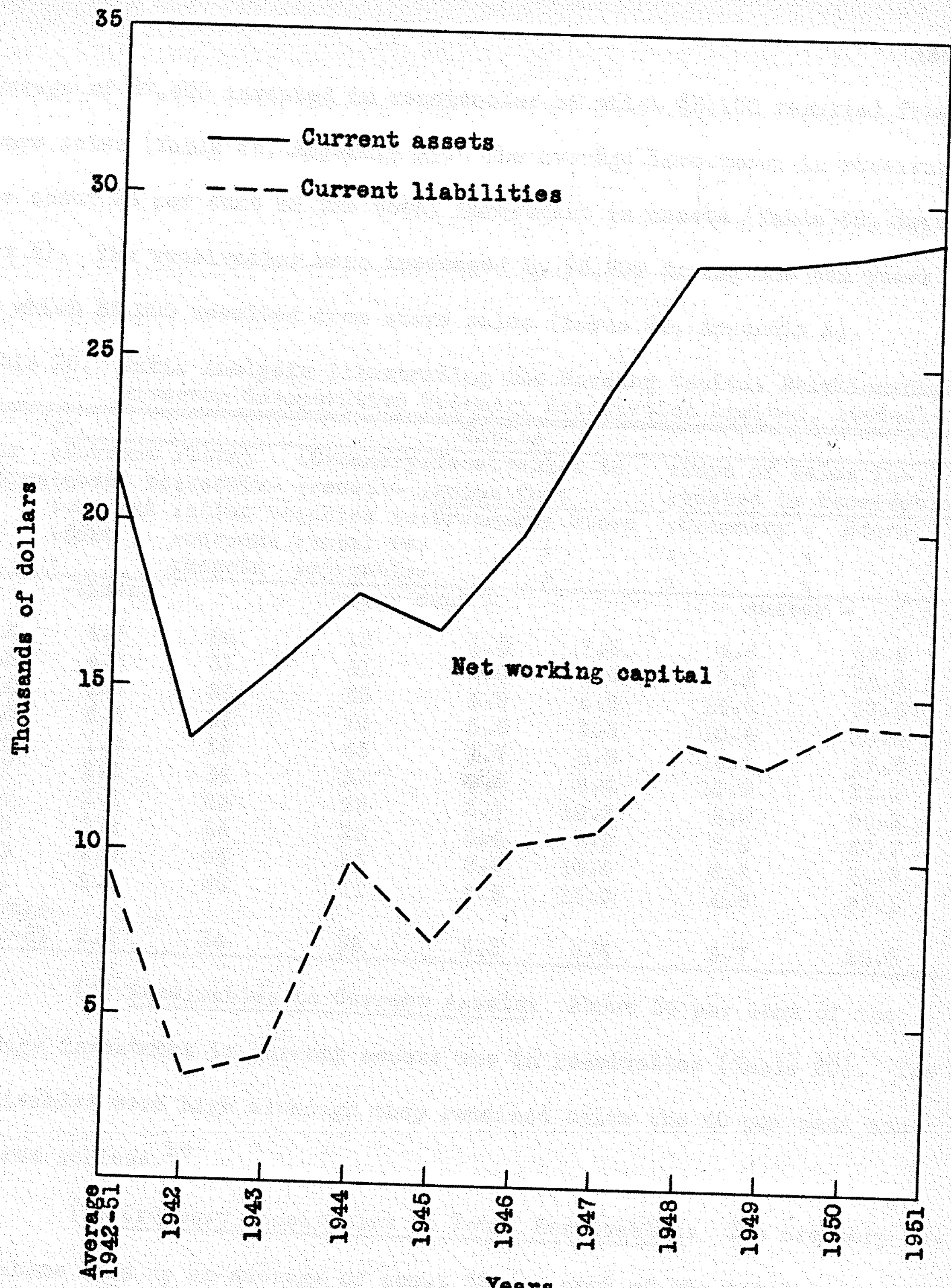

Figure 14. An illustration of net working capital position for years 1942 to 1951 and average 1942-51: Riverton Co-operative Creamery Association Limited.

average of $7,400 invested in receivables of which $5,100 resulted from store sales (Table 55, Appendix A). The average investment in receivables was about 24 per cent of the total investment in assets (Table 56, Appendix A). The receivables were increased by $5,200 during the ten years of which $5,000 resulted from store sales (Table 58, Appendix A).

Table 20. Ratio Analysis Illustrating the Working Capital Relationships: Riverton Co-operative Creamery Association Limited, 1942-51

Year ending	Ratios						
	Current asset to current debt	Total receivables to current assets	Creamery receivables to total receivable	Receivables to sales for: Creamery	Receivables to sales for: Store	Days of sales invested in receivables: Creamery	Days of sales invested in receivables: Store
	-times-	- per cent -				- number -	
1942	4.3	36	18	1.5	7.5	4.6	22.6
1943	4.2	31	41	3.0	5.5	9.2	16.4
1944	1.9	33	55	4.9	5.8	14.6	17.5
1945	2.3	33	70	5.5	3.5	16.4	10.6
1946	1.9	35	45	4.7	6.6	14.1	19.9
1947	2.3	34	37	4.0	8.4	11.9	25.1
1948	2.1	33	25	2.7	10.3	8.0	30.8
1949	2.2	34	23	2.4	9.2	7.2	27.7
1950	2.0	34	19	2.2	10.6	6.6	31.8
1951	2.1	35	11	1.5	13.0	4.6	39.1
Average 1942-51	2.2	34	32	3.2	8.4	9.7	25.3

(1) Receivables to Current Assets: About 34 per cent of the average investment in current assets was in receivables (Table 20). The receivables were high although they remained below the 40 per cent considered serious.[28]

(2) Creamery Receivables to Total Receivables: The creamery receivables made up an average of about 32 per cent of the total in receiv-

[28] See discussion p. 67.

ables and varied from 11 to 70 per cent among years. (Table 20). The creamery receivables were less important relative to the total during the latter part of the ten year period.

(3) Receivables to Net Sales:

(a) Creamery: The investment in creamery receivables averaged 3.2 cents per dollar of creamery sales for the ten years and varied from 1.5 to 5.5 cents among years (Table 20). There was an average of 9.7 days of sales invested in receivables for the ten year period. There was an average of 14 days of sales invested in receivables during the four years 1944 to 1947 and 6.6 days of sales invested in receivables during 1948-51 which reflected an improved condition at the creamery.

(b) Store: An average of 8.4 cents per dollar of sales was invested in store receivables (Table 20). The value of the ratio varied from 3.5 to 13 cents per dollar among years. There was a gradual increase in the level of store receivables relative to sales over the ten year periods which was illustrated by the change in the number of days of sales invested in receivables. This implied that the rate of collection had dropped or the policy of credit extension had been altered. As there were 39.1 days of sales invested in receivables in 1951 this suggested that the situation was somewhat out of hand.

2. Characteristics of Permanent Capital (Capital Structure): The sources of funds included here were: Outstanding share capital, reserves and undivided surplus, revolving surplus fund and fixed loans from members. The capital structure averaged $21,700 for the ten years of which $21,600 were equity capital (Table 55, Appendix A).

a) Outstanding Share Capital: About 22 per cent of the average investment in total assets was supplied through paid-up share capital (Table 56, Appendix A). The absolute value of this source of funds did not vary greatly over the ten years and as a result this source supplied 32 per cent of the funds in 1942 and 16 per cent in 1951. This account was built up prior to 1941 and with the changed policy most of the monies were allocated to the revolving surplus fund. As the revolving surplus fund was considered a less stable source of funds than outstanding share capital the drop in the relative importance of the latter decreased the financial stability of the firm.[29]

There was a special reserve at credit of patrons for the purchase of shares which was included with the share capital account. As the reserve was carried for a number of years this indicated that there were a large number of patrons who had not done sufficient business to accumulate the value of a share in dividends.[30]

b) Reserves and Undivided Surplus: The reserves and undivided surplus averaged $4,200 for the ten years which represented 13 per cent of the total supply of funds. The relative importance of these sources of funds were decreased over the period as the surplus was allocated to the revolving surplus fund. After 1946 the only monies which were included

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[29]This co-operative had made provision for the handling of a revolving surplus fund. Consequently, a decrease in stability would result from the fact that these loans would come due at some later date.

[30]As most of these retained dividends had been held on the books for more than four years the co-operative could have transferred these to a permanent reserve.

in this account were from the net margin on operations for the current year. Consequently, this account was negative for the year ending 1950 which suggested an impaired capital position.[31] For the year ending 1942 this source of funds supplied 40 per cent of the invested capital which indicated the change in the financial structure over the ten year period. In absolute terms these accounts were decreased by about $6,200 during the ten years (Table 58, Appendix A). Most of this decrease occurred during the 1947-1951 period.

c) Revolving Surplus Fund:[32] An average of $10,200 per year was provided by the revolving surplus fund which represented about 33 per cent of the total supply of funds (Tables 55 and 56, Appendix A). This fund was increased about $16,500 over the ten year period. Part of the increase resulted from the reduction in the reserves and undivided surplus.

When the reserves, undivided surplus and revolving surplus fund were combined they provided 46 per cent of the average supply of funds over the ten years. These sources of funds provided 52 per cent of the total investment in 1942 and 49 per cent in 1951. The increase in the supply

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[31] Due to the presence of the special reserve to be applied to share capital the capital was not impaired. The experience of the co-operative in the handling of these accounts illustrated that it was essential to have some reserves so that a negative net margin would not reduce the value of the share capital account.

[32] During the first three years the net margin was allocated to the undivided surplus and outstanding capital accounts. For these three years some monies were included with the outstanding capital account which were in reality, retained dividends. These monies were transferred to the allocated surplus for analysis. Apparently, there was no special direction given to the auditors in reference to the proper handling of these accounts.

of these funds provided less than 50 per cent of the increased investment which occurred between 1942 and 1951.

d) Fixed Loans From Members: A number of small loans were made by members which matured in ten years. These loans were a relatively unimportant source of funds as they provided about one per cent of the total supply of capital. The presence of these and the current loans from members suggested that credit from other sources was restricted. Interest was paid on these loans.

e) Total Net Sales to Capital Structure: The average turnover of permanent capital was 6.2 times for the ten years and varied from 5.1 to 6.8 times among years (Table 21, page 165. There was a trend towards a lower turnover during the ten year period. One of the factors which influenced the turnover was the gradual decrease in the volume of butter manufactured and sold. The average rate of turnover of permanent capital was lower than that recorded for the other three creameries. The average for the other three creameries was between 6.9 and 9.0 times.

3. Characteristics of Fixed Assets: The average investment in fixed assets was \$7,700 for the ten years of which \$5,900 were invested in creamery fixed assets and \$1,800 in store fixed assets (Table 55, Appendix A). The average investment in fixed assets represented 24 per cent of the total investment in assets and varied from 19 to 28 per cent among years (Table 56, Appendix A). This low level of fixed assets was due to the influence of high current assets at the store.

Approximately \$15,600 were spent on fixed assets during the ten years. At the same time, the depreciation reserve was increased \$10,400. Thus the book value of the fixed assets were increased $5,200. Most of the increase in the book value of the fixed assets occurred during the 1942-47 period (Table 58, Appendix A). This was true for both the store and the creamery. Almost all the increased investment went to replace old equipment or repair buildings. A small amount went to build a vault and increase the facilities in the store. About $12,500 were invested in the creamery and $3,100 in the store. Consequently, the facilities and equipment were improved during the ten years.

a) Total Net Sales to Fixed Assets: The average turnover of fixed assets was about 17.4 times for the ten years and varied from 28.8 to 14.8 times among years (Table 21). The high ratio values for 1942 and 1943 reflected the low depreciated value of the plant equipment. From 1944 to 1951 the variation in the value of this ratio was limited.

A more accurate estimate of the turnover of fixed assets was determined by calculating the turnover for each department separately. The average turnover of the investment in creamery fixed assets was 12.8 times and for store fixed assets 37.8 times. The average turnover of the creamery fixed assets was slightly higher than that recorded for the Winkler Co-operative Creamery Limited.[33] Winkler had a high investment in fixed assets which offset the low sales volume at this plant.

4. Relationship of Capital Structure to Fixed Assets: There was an average of $2.80 of permanent capital for every dollar invested in fixed assets for the ten years (Table 21). The value of the ratio varied from

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[33]See Table 40, p. 253.

$2.30 to $4.20 among years. Although the ratio value was fairly high suggesting ample funds to meet the requirements of fixed assets the results of the ratio were not comparable with the other co-operatives due to the low level of fixed assets.

Table 21. Ratio Analysis Showing Financial and Sales Relationships: Riverton Co-operative Creamery Association Limited, 1942-51

Year ending: March	Ratios: Total sales to fixed assets	Total sales to capital structure	Capital structure to fixed assets
	- times -		
1942	22.8	6.7	3.4
1943	28.8	6.8	4.2
1944	16.7	6.8	2.5
1945	17.0	6.7	2.5
1946	14.6	6.3	2.3
1947	17.4	6.0	2.9
1948	15.6	5.9	2.6
1949	17.0	6.2	2.7
1950	16.8	6.0	2.8
1951	15.7	5.1	3.1
Average 1942-51	17.4	6.2	2.8

K. Equity Capital Position: Equity capital was increased by $11,000 between 1942 and 1951 (Table 58, Appendix A). The change in the characteristics of equity capital was indicated by the fact that this increase resulted from a net increase in allocated surplus of $16,800 and a net decrease in Net Worth of $5,800. The decrease in the net worth resulted from a shift in policy from the use of reserves and undivided surplus to a revolving surplus fund plan. Consequently, in 1951 the revolving surplus fund and outstanding share capital were the main source of funds, of which, the revolving surplus fund was the most important. In 1942, the reserves and undivided surplus were the most important.

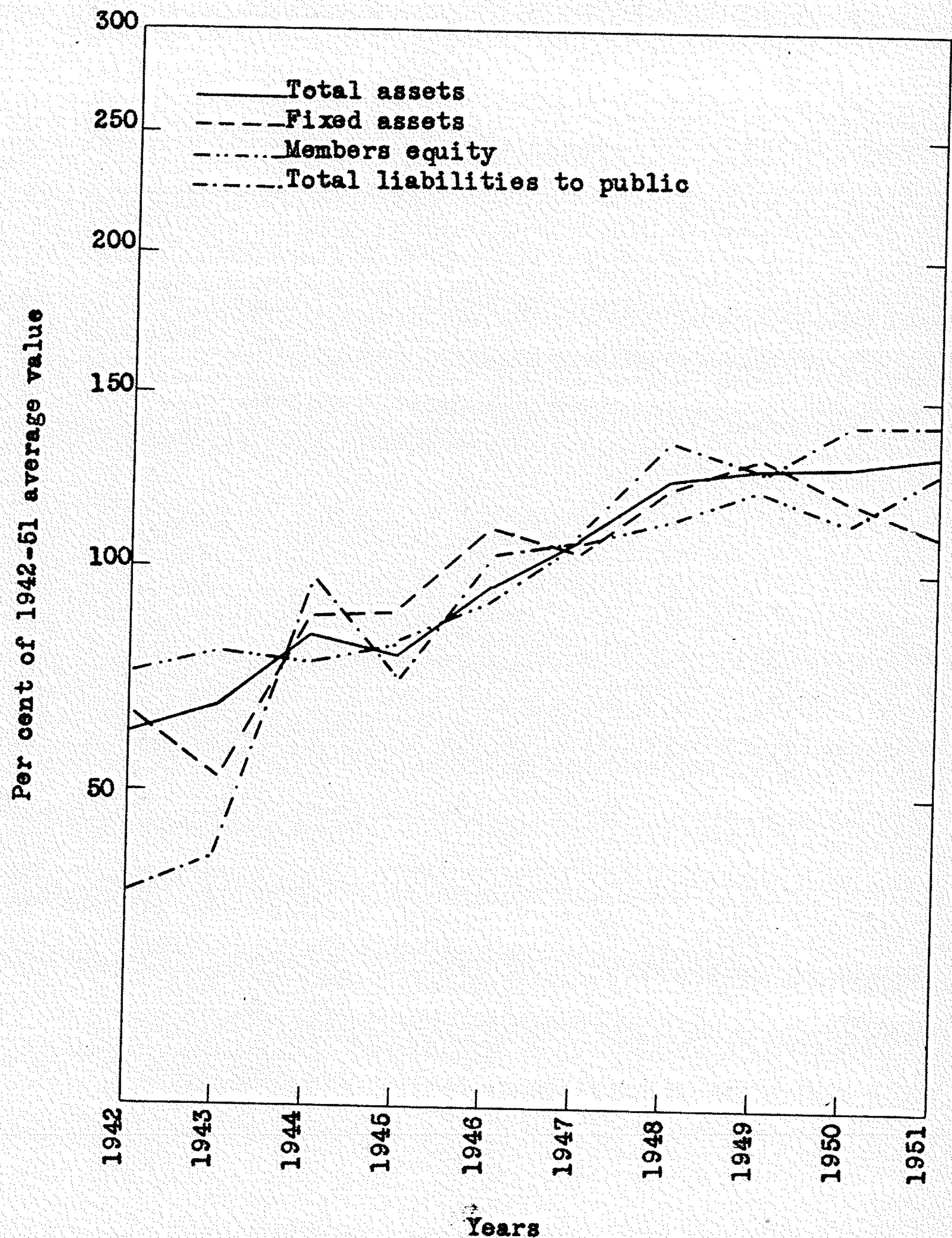

Figure 15. Trend percentage of selected balance sheet components for the years 1942 to 1951 (Base 1942-51 average): Riverton Co-operative Creamery Association Limited.

With the formal acceptance of the revolving surplus fund the monies recorded in the undivided surplus reflected the size of the net margin for the current year. Consequently, much of the drop of the net worth between 1947 and 1952 resulted from the inability of the association to return a positive net margin on operations during the year ending 1950.

1. Equity Capital Relationships:

a) Membership Equity to Total Assets: The members supplied through equity capital an average of 68 per cent of the funds invested in total assets (Table 22). Equity capital contributed 84 per cent of the total invested funds in 1942 and only 66 per cent in 1951. This occurred despite the net increase in equity capital of $11,000 between these years. With the exception of the first two years the relative importance of equity capital varied between 63 and 70 per cent. The trends of members equity and total assets are illustrated in Figure 15.

Table 22. Membership Equity Relationships: Riverton Co-operative Creamery Association Limited, 1942-51

Year	Members equity to total assets	Members equity to fixed assets	Members equity to capital outstanding
	-per cent-	- dollars -	
1942	84	3.40	2.59
1943	82	4.22	2.43
1944	63	2.45	2.21
1945	70	2.55	2.29
1946	66	2.31	2.57
1947	68	2.84	3.12
1948	65	2.62	3.78
1949	68	2.71	4.01
1950	64	2.82	3.83
1951	66	3.09	4.08
Average 1942-51	68	2.81	3.06

b) Members Equity to Fixed Assets: There was an average of $2.81

of equity capital for every dollar invested in fixed assets (Table 22). This indicated that the members had supplied sufficient capital to cover the book value of the fixed assets above which a large margin remained for investment in current or other assets. The value of the ratio varied from $4.22 to $2.31 per dollar invested in fixed assets among years.

c) Members Equity to Capital Outstanding: There was an average of $3.06 of members equity for every dollar of outstanding share capital for the ten year period (Table 22). The value of the ratio increased from $2.59 in 1942 to $4.02 in 1951. Basically this reflected the change in the policy of paying out dividends in cash to the policy of retaining dividends for a number of years. As the money was retained in allocated form there was a decrease in the value of the ratio of net worth to outstanding capital during the ten years. In 1942 the ratio value was $2.22 and in 1951 it was $1.22 per dollar of share capital.

Table 23. Total Equity and Average Equity per Member for years 1928-30 and 1949-51: Riverton Co-operative Creamery Association Limited

Year ending:	Membership	Total equity	Average equity per member
	-number-	-dollars-	
1928	153	7,780	50
1929	171	7,600	44
1930	178	7,780	43
Average 1928-30	167	7,650	46
1949	380	27,100	71
1950	390	25,680	66
1951	405	27,340	68
Average 1949-51	392	26,680	68

d) Average Equity per Member: The value of the equity per member was calculated for the two three year periods 1928-30 and 1949-51

(Table 23). The average equity per member was about $46 for the three years 1928-30 and about $68 for the 1949-51 period. The substantial increase in equity per member was due mainly to the existance of the revolving surplus fund in the latter period.

Equity capital was increased by about $19,000 between the two periods and the number of members was increased by about 225. As a large number of the members listed for the latter period were inactive the investment in equity per active member was much higher.

L. Summary: This co-operative was hampered in its operations by a low volume of business. As a result, the net margin on operations was below that obtained by the other three co-operatives. Although some economy was apparent due to the inclusion of the two departments under one management it was not sufficient to offset the influence of the low volume. The situation at this co-operative supports the recommendation that a minimum volume is essential for success. As this co-operative has operated since 1925 the low margin on operations was assumed to be unsatisfactory but not critical.

Over one-quarter of the members were inactive in 1951. This reflected an inadequate policy of equity repayment to members who had retired from farming or moved from the district. This high level of non-active members was considered unsound from the co-operative point of view. Non-member business was not a serious problem here, as the patronage dividends were applied to the purchase of shares for non-members. The lack of data on membership prior to 1949 indicated that there was limited appreciation for this type of information.

The Association lacked an adequate educational program. As a consequence, members were not provided with information about the co-operative over and above that contained in the annual financial statements.

During the ten year period the investment in total assets was increased by $22,200 (Table 58, Appendix A). About $15,400 of this increase was invested in current assets, $2,800 in other assets and $4,000 in fixed assets. As there was a net decrease of $700 in cash and government bonds during the 1942-51 period all the increased investment in current assets was tied up in increased inventory and receivables, mainly for the store. The resultant decrease in the cash position was an unfavourable indication for it implied a loss of mobility of assets. As the investment in current, other and fixed assets were all increased during the 1942-51 period the funds were supplied through increased liabilities to the public and increased equity capital.

The increase in non-equity capital provided $11,200 of which $3,000 were derived from direct loans from members. The relatively high direct borrowing from members implied that other sources of credit were restricted and that the retained dividends were not adequate to meet requirements. The increased equity capital provided $11,000 dollars of the increased investment in assets, which represented about 50 per cent of the requirements. This low level of accumulation directly reflects the low earning power of this association.

CHAPTER VIII

THE DESCRIPTION AND ANALYSIS OF THE CO-OPERATIVE CREAMERIES (Continued): THE VITA CO-OPERATIVE LIMITED

A. Location of Co-operative: The Vita Co-operative Limited established its headquarters in the town of Vita. Vita is in the municipality of Stuartburn and is approximately 75 miles south-east of Winnipeg.

1. Characteristics of Procurement Area: A large part of the area in the vicinity of Vita was originally settled by immigrants from the Ukraine. Consequently, most of the members are Ukrainian although a small percentage are descendants of Icelandic, English and French settlers.

This association was the only co-operative in the town of Vita and with the exception of a cheese factory it was the only one in a fairly wide area. Consequently, the people in this area had very limited practical experience with the co-operative way of doing business. Their only experience in the history of the area was with a store which was started sometime after 1920. It went bankrup leaving considerable resentment among those who had invested in it. This was an obstacle which had to be overcome when plans to purchase the creamery were first promoted.

The municipality of Stuartburn is located on the eastern fringe of the agricultural area in Manitoba. Most of this area was classified as submarginal for crop production due to poor drainage and sandy soils. Consequently, livestock were the farmers most important source of income. About 97 per cent of the farm income was derived from the sale of live - stock and livestock produce during 1950 on farms in the municipality of

Stuartburn. The relative importance of cream production to this area was indicated by the fact that about 36 per cent of the farm income was from dairy products.[1]

The number of farms decreased by 24 per cent between 1941 and 1951 but the average number of cattle per farm remained about the same.[2] As a result, the source of cream was more widely dispersed over the area.

The importance of cream production to this area was further illustrated by the fact that 92 per cent of the farmers in the municipality kept cows for milking purposes. The number of cows per farm was fairly high relative to the other areas in the province.[3]

B. Historical Review of Co-operative: This co-operative was established in 1939, at a time when the formation of co-operatives was very popular among the farmers of Western Canada. Prior to 1939, the creamery was operated by a Winnipeg firm and there was a feeling among the patrons that they were not receiving satisfactory service. Many began to ship elsewhere and as a result, the "make" at the Vita plant was greatly reduced. Consequently, the plant owners were willing to sell the plant as they were losing money on operations.

The original idea of owning the creamery locally was promoted by a few people who wished to establish a locally owned corporation. Apparently, most of the people did not want the control to be centred in the hands of a few, therefore, they favoured the co-operative type of organization.

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[1]Census of Canada, 1951.
[2]*Ibid.*, 1941 and 1951.
[3]*Ibid.*, 1951.

To insure that it would not get out of hand, they limited share holdings to a maximum of twenty per member.[4]

According to the manager, the co-operative was promoted with the promise that the earnings would come back to the patrons. Thus, from the beginning the members linked the Association with dividend payments. This was supported by the fact that patronage and capital dividends were declared at the end of the first year of operations. On the other hand, these monies were retained in the co-operative which implied some concern over the build up of capital, although the retention of the money was as much through necessity as desire.[5]

1. Review of Statutory Information:

a) Historical: The Vita Co-operative Limited was incorporated in 1939. Amendments were made to the by-laws in 1941 and 1948.

b) Objective of the Association: The original objectives of the Association went much beyond that required for the operation of a creamery which suggested that future expansion was anticipated.[6]

c) Capital Situation:

(1) Authorized Capital: The authorized capital was established

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[4]The provincial statutes limit share holding to a maximum of five per cent of the total amount authorized.

[5]The retaining of the dividends apparently resulted from the unwillingness of the Association to provide sufficient clerical staff to carry out the necessary calculations to make the monies available.

[6]Vita Co-operative Limited, "Letters Patent" 1939, Section II. (The "Letters Patent" and subsequent amendments are on file at the office of Provincial Secretary, Government of Manitoba, Legislative Building, Winnipeg. Subsequent reference will be made to the original by-laws or amendments as contained in this file).

at $30,000 composed of 3,000 shares at $10 each.

(2) Shares: Each member was required to own at least one share but could not own more than twenty. The Board was empowered to allot shares and control the transfer of shares, as outlined in the Statutes of Manitoba, 1932.[7]

The original shares were purchased on a cash basis. At December 31, 1939 there were only 137 shares outstanding with 80 per cent of the money paid up.[8] Most of the members who made down payments on shares paid the remainder by cash, but a few paid the remainder through retained dividends. Following this initial period, most of the shares were issued as a result of transferring funds from the retained dividend accounts. No monies were applied from these accounts to a member's share until ten dollars had accumulated.

d) Membership Regulations: There was no provision for a formal contract with members in the By-laws but active support of the co-operative was an important consideration of membership. A member could withdraw his membership from the Association or a member could be expelled. In either case, provision was made for repayment of the member's equity.

Membership was open to any patron of the Association who purchased at least one share. All members had the right to vote at annual or special meetings. Each member had one vote regardless of the number of shares

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[7] Statutes of Manitoba, 1932, Chapter 5, Part VI, p. 55.

[8] Financial Statement, Auditor's Report, December 31, 1939, p. 1.

owned. Each member of good standing had the right to hold the position of director if duly elected.

e) Appointment of Surplus: The distribution of the surplus as set out in Section 32 of the "Letters Patent" followed that allowed by the Statutes of Manitoba, 1932.[9] Provision was made for a statutory reserve, a limited return of seven per cent on outstanding share capital, the payment of patronage dividends and the retention of both capital and patronage dividends payable at a later date at the discretion of the Board.

During 1941, Section 32 was amended so that both members and non-members could receive patronage dividends. Dividends for non-members were to be applied towards the purchase of the initial share required for membership.

Section 32 was again revised in 1948. Provision was made for the rate of interest on capital to be set each year by the annual meeting but the maximum remained at seven per cent. In the distribution of patronage dividends consideration was to be given to the grade and kind of products delivered. Provision was also made for the institution of a revolving fund plan instead of the retained dividend system set out in the 1939 Letters Patent.[10] The dividends in the revolving surplus fund were classified as a loan from members.

No material change in the financial structure of the Association re-

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[9] Statutes of Manitoba, op. cit., p. 58.

[10] This was written up as outlined for the Riverton Co-operative Creamery Association Limited, p. 132.

sulted from these amendments, for, as set out in the original By-laws, the Association had the right to retain patronage dividends with the payments to be made later at the discretion of the Directors. The amendment did establish the principle of the revolving fund with the idea of clearing up the older dividends first. The Association actually established a three year revolving fund. During the first three years, 1948 to 1950, the patronage accumulated prior to 1948 was distributed.[11] One-third of this amount was paid each year. Following this, the co-operative paid the dividend which was declared three full years earlier. That is, the 1948 dividend came due in 1951. Thus, the main result of the 1948 amendment was that patrons received dividends in cash. Prior to that time, most of the dividends went to increase outstanding share capital.

C. Educational Program: The educational program was a weak feature of this Association. Only during the initial promotional period were monies spent to acquaint members with the co-operative principles. At that, the basic purpose of the committees was to sell shares but in doing so they apparently explained the methods of co-operative enterprises.

After the first few years no monies were allocated for direct educational purposes. Some monies were donated to local projects but they were limited in nature. The Association has spent some money in the advertisement of the creamery in the local papers to encourage patronization.

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[11]The amount distributed was net of transfers to share capital.

The education of members concerning the affairs of the Association was limited to the distribution of the financial statements and the reports delivered at the annual meeting.

The manager suggested that the Association received its best support from the members and patrons near Vita. Patrons on the fringe of the procurement area tended to be indifferent. He blamed this condition on the fact that little or no attempt had been made to go to these patrons with information concerning the co-operative. He suggested that, due to road conditions, members who reside at a distance from Vita seldom attended annual meetings. To increase the interest in the co-operative the manager felt that it would be necessary to hold some meetings out in the procurement area.

D. Review of Production: Creamery operations were started at Vita in 1919. It was operated under private ownership until 1939.

1. Type of Production: The procurement of cream, the manufacture and sale of butter were the main operations of the Association during the 1941-50 period. Cream trucks were considered part of the creamery operations. In 1943 a P.S.V. franchise was purchased which allowed the Association to operate a trucking service between Vita and Winnipeg.

a) Butter Production:[12] According to the annual production records, peak production was reached in 1931 and 1932.[13] In 1931, butter production was at 336,000 pounds but it was reduced to 210,000 pounds in 1935. Some

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[12] The value of butter sales are outlined in Figure 16 for the ten years, 1941-50.

[13] Unpublished data, Dairy Branch, Manitoba Department of Agriculture, Legislative Buildings, Winnipeg, Manitoba.

recovery was recorded before 1939 but it was due mainly to a general rise in production. Apparently, the drop in production was caused by the construction of creameries at Gardenton about 1933 and a few years later at Tolstoi.

There was considerable fluctuation in the annual production figures from 1931 to 1950 (Figure 29, Appendix B). Part of this was due to changed farm production conditions and part to competition. Cream production varied materially due to weather conditions as farmers produced cream mainly through the utilization of pasture. Farmers also varied their output with the price of beef relative to cream. With high beef prices they sold veal calves and some of their milk cows. This was one of the causes of the extreme drop in production between 1948 and 1950. Competition prior to 1946 was mainly from local creameries and was not too severe, following 1946 trucks from Winnipeg became very active in the area having considerable success during some years.

After 1939, the volume of production rose considerably above the 1935-39 average (Figure 28, page 274). Part of this was due to the general rise in production in the province and part to increased patronage. Thus, some of this increase in production was credited to increased patronage due to the change from private to co-operative ownership.

(1) Scale of Plant Operations: The approximate scale of plant was indicated by the fact that the average production was 375,000 pounds for the ten years 1941-50. This production figure varied from 310,000 to 435,000 pounds as illustrated in Figure 29, Appendix B.

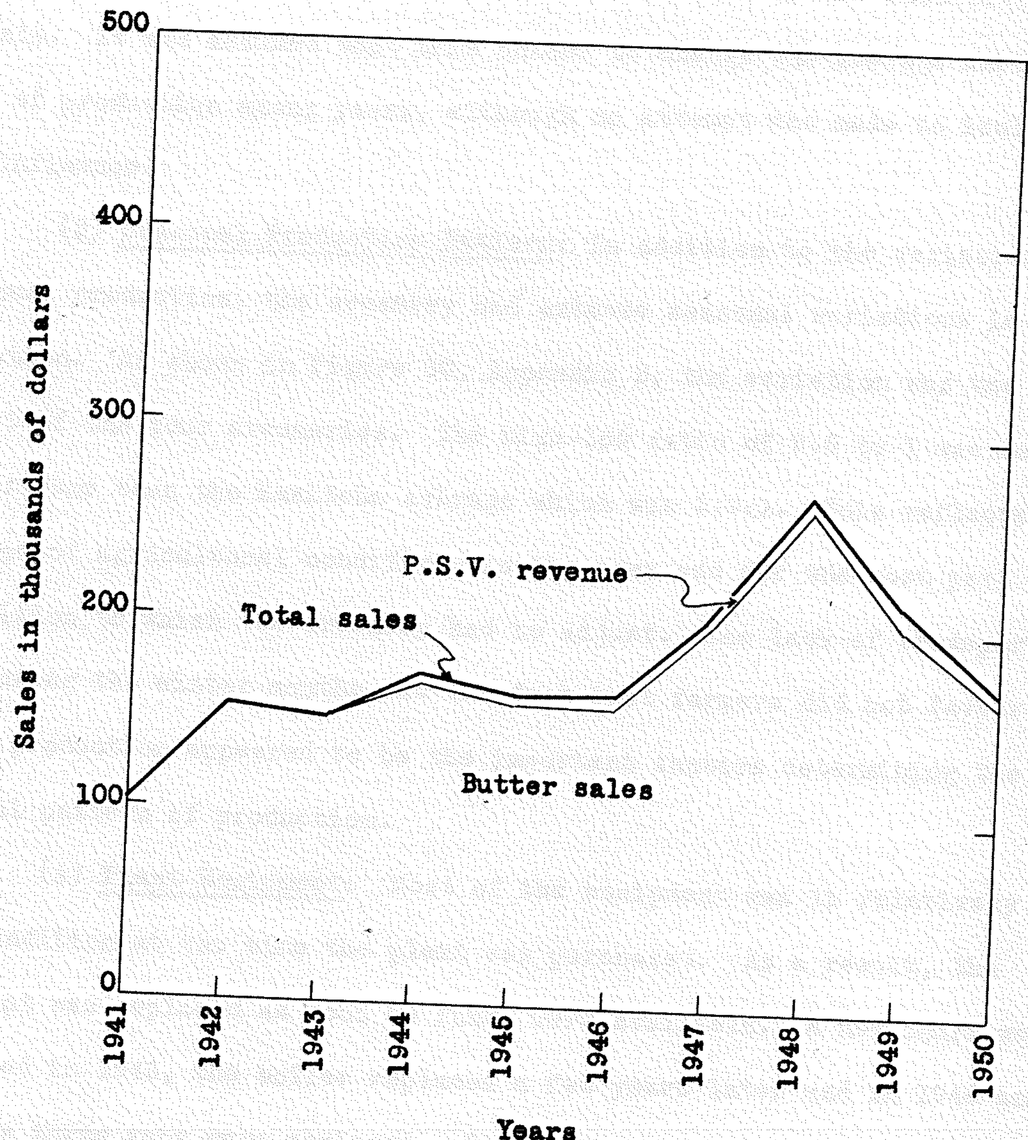

Figure 16. Total annual sales and the amount contributed by each enterprise for years 1941 to 1950: Vita Co-operative Limited.

(2) Utilization of Scale: With this continued change in the level of production there was considerable variation in the utilization of scale. It was assumed that this tended to change the average unit costs of production among years, although no attempt was made to isolate this influence.

(3) Seasonal Production Pattern: In addition to the variation in annual production, the creamery had extreme seasonal variations in production. As shown in Figure 30, Appendix B, the variation was the highest of the four creameries. The high-low ratio of 9.6 to 1 was much more extreme than the Manitoba average which was 3.9:1. This reflected the type of agricultural conditions in the area and for the most part was a condition to which the creamery had to adjust. The lack of transportation during the winter months and the fact that farmers did not favour winter production appeared to be the important factors determining the seasonal pattern of production.

(4) Plant Equipment: Most of the equipment was in relatively poor condition at the time the plant was purchased. As a result, the equipment was replaced as soon as funds were available. A new churn was purchased in 1943, the boiler replaced a few years later and in 1948 and 1950 the three vats were replaced. During the 1941-50 period, the plant had to rely on its own power which made operations much more cumbersome than with the use of electricity. Electricity was available in 1950.

The Vita creamery had one 1,200 pound churn and three vats. During years of high production, it was often necessary for the men to work overtime in the summer months. This situation was greatly relieved by a reorganization of the plant and through the introduction of electricity to this area.

(5) Efficiency of Butter Manufacture: The average over-run for the ten years was 20.9 per cent but it varied from 19.2 to 22.2 per cent over the ten years (Table 24). The average annual over-run was low which reflected inefficiency in butter manufacture and (or) liberal testing of the cream. The latter may have been necessary to meet the competition of other creameries for the patrons' cream.

Table 24. The Initial Average Price Paid to Patrons, Patronage Dividend Declared and the per cent over-run from Butter Manufacture Vita Co-operative Limited, 1941-50

Years	Average initial price	Patronage dividend declared	Total price	Annual average per cent over-run
	-cents per pound of butterfat-			-per cent-
1941	30.7	0.7	31.4	19.2
1942	35.3	1.0	36.3	21.4
1943	40.1	0.3	40.4	21.9
1944	41.2	0.3	41.5	19.3
1945	41.9	0.6	42.5	22.2
1946	46.2	0.5	46.7	21.3
1947	53.1	2.5	55.6	20.3
1948	69.0	1.9	70.9	21.4
1949	57.9	0.7	58.6	20.8
1950	51.9	0.8	52.7	21.3
Average 1941-50	46.6	0.9	47.5	20.9

b) Trucking Operations:

(1) Cream Trucking: The creamery provided cream trucking service for the patrons. Normally, there was from five to six trucks on the road during summer and one or two in the winter if the weather permitted.

(2) P.S.V. Trucking: A P.S.V. franchise was obtained in 1943

and commercial trucking between Vita and Winnipeg was initiated. The truck was used to haul cream production and supplies but also hauled considerable produce for the members. The trucking charge to members was less than that charged by other truckers, therefore, it represented a direct gain to them.

The returns from this enterprise were recorded as other revenue in Table 59, Appendix A. The net revenue from this enterprise was very low during the four years 1943-46 but was much improved during the four years 1947-50. This improvement was due to increased initial charges to members and volume of produce hauled. The total revenue varied from a low of $3,900 in 1943 to a high of $7,000 in 1948 (Figure 16, page 179).

E. Marketing: Source and Distribution of the Product:

1. Procurement of Butterfat: The area from which the cream was procured was outlined in Figure 1, page 10. Based on calculations for one year about 67 per cent of the cream was procured by truck, 30 per cent by farmer deliveries and three per cent by train.

2. Distribution of the Product or Service: About 9.5 per cent of the butter was wrapped at the creamery for sale to patrons and local retail outlets and 90.5 per cent was sold unwrapped to the Winnipeg wholesale market. Of the total sales, approximately one per cent went to the patrons and 8.5 per cent went to local retail outlets.

The P.S.V. serviced the members indirectly through hauling for the creamery and directly through hauling their livestock and other farm produce.

F. Payment and Collection Policies:

1. Payment to Patrons: The cream was paid for by cream cheque which could be cashed at the creamery or at the local stores. Some cream was paid for by direct sale of butter to patrons. When dividends were paid they were paid by cheque and mailed to the member. The majority of the patronage dividends were paid in terms of shares.

2. Collection: As suggested above, the sales to patrons were normally deducted from their cream cheques. Sales to the local retail outlets were usually paid by cheque and through cream cheques cashed at that outlet. Payment to the wholesale market were normally paid promptly for each shipment. The receivables which were shown on the books were due mainly from local retail outlets although the association extended some credit to patrons.

G. Membership and Patronage:

1. Statistics: Only a limited amount of information concerning membership was available as such information was not recorded by the Association. Most of the information used here was gathered from the original records.

The manager felt that the maximum number of members was reached around 1948 and little change occurred from then to 1950. In 1939 there were only 137 shares purchased. Some members had purchased more than one share, therefore, the initial membership was less than 137. A count was made in 1944 which indicated that there were 432 members. By 1950 membership had increased to 678. Heavy increases in membership occurred during

1943 and 1948 as most of the accumulated patronage dividends were transferred during these two years.[14]

Apparently during the period 1939-46 a large number of members were acquired at some distance from Vita. Since 1946 outside trucking has caused many of these people to change to other creameries. A large percentage of these have redeemed their shares. As a result, most of the present membership is concentrated around Vita.

Of the 678 registered shareholders in 1950, the creamery manager estimated that about 95 per cent could be considered active farmers and, about four per cent retired farmers. About one per cent were employers of the Association and local store owners. Although only 60 per cent of the shareholders were recorded as cream shippers many of these shippers represented several shareholders. That is, there was more than one shareholder in many of the families. A small percentage of the members were active farmers who did not patronize the creamery.

There were 595 cream shippers or patrons in 1950 of which 409 were members and 186 non-members. The non-members supplied 8.5 per cent of the total cream received. There was an average of 429 pounds of butterfat shipped per patron but the members shipped an average of 572 pounds each while non-members only shipped an average of 117 pounds. The difference between these two averages was due to the fact that most of the

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[14]This resulted from the fact that the Association followed the practice of bringing the dividend calculations up to date at infrequent intervals.

non-members lived further from the plant than members and thus often shipped part of their cream elsewhere. The low shipment per non-member partially explained the large number of non-members as equity accumulation was too slow to meet the $10 required to purchase a share within four years.

2. Meeting Attendance: Although there was no record kept of the attendance at annual meetings the manager estimated that the number present would vary between 100 and 200. This was considered a fairly good level of attendance.

3. Level of Production and Membership Loyalty: As suggested above there was considerable variation in the annual production of butter over the ten-year period. This variation was in excess of the average production per creamery in the province (Figure 29, Appendix B). Thus, part of the change was assumed due to changes in the patronage.

Apparently cream trucking activities of other creameries were fairly strong during 1946 to 1950 and a number of shippers sold their produce elsewhere. The severity of the competition was indicated by the fact that higher initial prices were offered. Many members placed the immediate gain above loyalty to the co-operative and possible future dividend earnings. As suggested most of the members lost to other creameries were located in outlying sections of the creamery procurement area. Part of the willingness of members to desert the Association may be blamed on the fact that the Association neglected to keep the patronage dividend payments or transfers up to date. The fact that it was necessary to keep from five to six trucks on the road to maintain patronage suggests that either the membership loyalty was not too strong or competition was excessive.

H. Financial Results of Operations:[15]

1. Net Margin on Operations: The net margin on operations average about $4,200 for the ten years 1941-50 but varied from $1,500 to $10,300 among years (Table 59, Appendix A). The low net margin for the years 1943-46 were characteristic for that period but the low 1949 and 1950 net margins resulted from a drop in production along with a drop in prices. The prices were reduced as a result of the government ceiling on the price of butter. Although the net margin on operations was low in 1950 the auditors suggested in their report that the result was "very gratifying after considering the unstable market conditions and the high price paid for butterfat and supplies."[16] The high net margin on operations in 1947 resulted partially from the lifting of the ceiling on the price of butter which allowed for the sale of butter considerably above costs. That is, with a steady increase in prices butter was sold at higher prices than were anticipated at the time the butterfat was purchased.

a) Net Margin on Operations to Net Sales: The net margin on operations averaged 2.4 cents for every dollar of net butter sales and

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[15] The information pertaining to the operating and cost of manufacture statements are outlined in Tables 59, 60 and 61, Appendix A. Some trends are illustrated in Figure 17, p. 188.

[16] Financial Statement, December 31, 1950, p. 2.

varied from 0.9 cents to 5.1 cents for the 1941-50 period (Table 60, Appendix A). This represented a relatively low net margin on operations. The four years 1943-46 were the main contributors to the low average but the net margin was also low relative to sales in 1949.

b) Net Margin on Operations Relative to the Capital Structure: The net margin on operations averaged about 22 cents for every dollar of permanent capital (Table 25). Low returns relative to the supply of permanent capital were recorded for the 1943-46 period and for 1949 and 1950. The low 1949 and 1950 values suggested that the drop in production had considerable influence on the level of returns relative to permanent capital.

Table 25. Net Margin on Operations Relative to Capital Structure and Fixed Assets: Vita Co-operative Limited, 1941-50

Year	Net margin to capital structure	Net margin to fixed assets
	- dollars -	
1941	0.26	0.39
1942	0.54	1.19
1943	0.13	0.22
1944	0.11	0.17
1945	0.16	0.26
1946	0.12	0.20
1947	0.38	0.80
1948	0.25	0.53
1949	0.10	0.21
1950	0.12	0.22
Average 1941-50	0.22	0.39

c) Net Margin on Operations to Fixed Assets: This net margin averaged 39 cents for every dollar invested in fixed assets but it varied from 17 cents to $1.19 during the 1941-50 period (Table 25). The value of the fixed assets were increased during the period due to heavy replacement but the size of the plant was not altered. Therefore, the lower ratio values during the latter years were more satisfactory than equal ratio values during the first few years.

2. Factors Which Caused the Net Margin on Operations to Fluctuate:

a) Gross Margin on Butter Sales: The gross margin on butter sales averaged about 3.9 cents for every dollar of net sales (Table 60, Appendix A). It varied from 2.6 to 6.6 cents which reflected a consistantly low gross margin. Although the gross margin was low during the 1943-46 period due to controlled prices it was also low from 1948 to 1950. This indicated that management had not allowed for a sufficient spread between purchase and sale prices to allow for operational costs.

(1) Factors Which Influenced the Gross Margin on Sales:

(a) Net Butter Sales: Changes in net butter sales were reflected in changes in the gross margin (Figure 17). High prices or production tended to make a higher gross margin possible but changes in the cost of product manufactured offset this tendency somewhat.

(b) Cost of Product Manufactured: The total cost at plant averaged 92.0 per cent of the cost of product manufactured during the ten years 1941-50 (Table 60, Appendix A). This high relative cost at plant was one of the main reasons for the low gross margin on sales. The share to the patron averaged 88.5 per cent while 3.5 per cent represented cream trucking expenses. The trucking costs were an important item for it lowered the relative returns to the patron. Apparently this high trucking

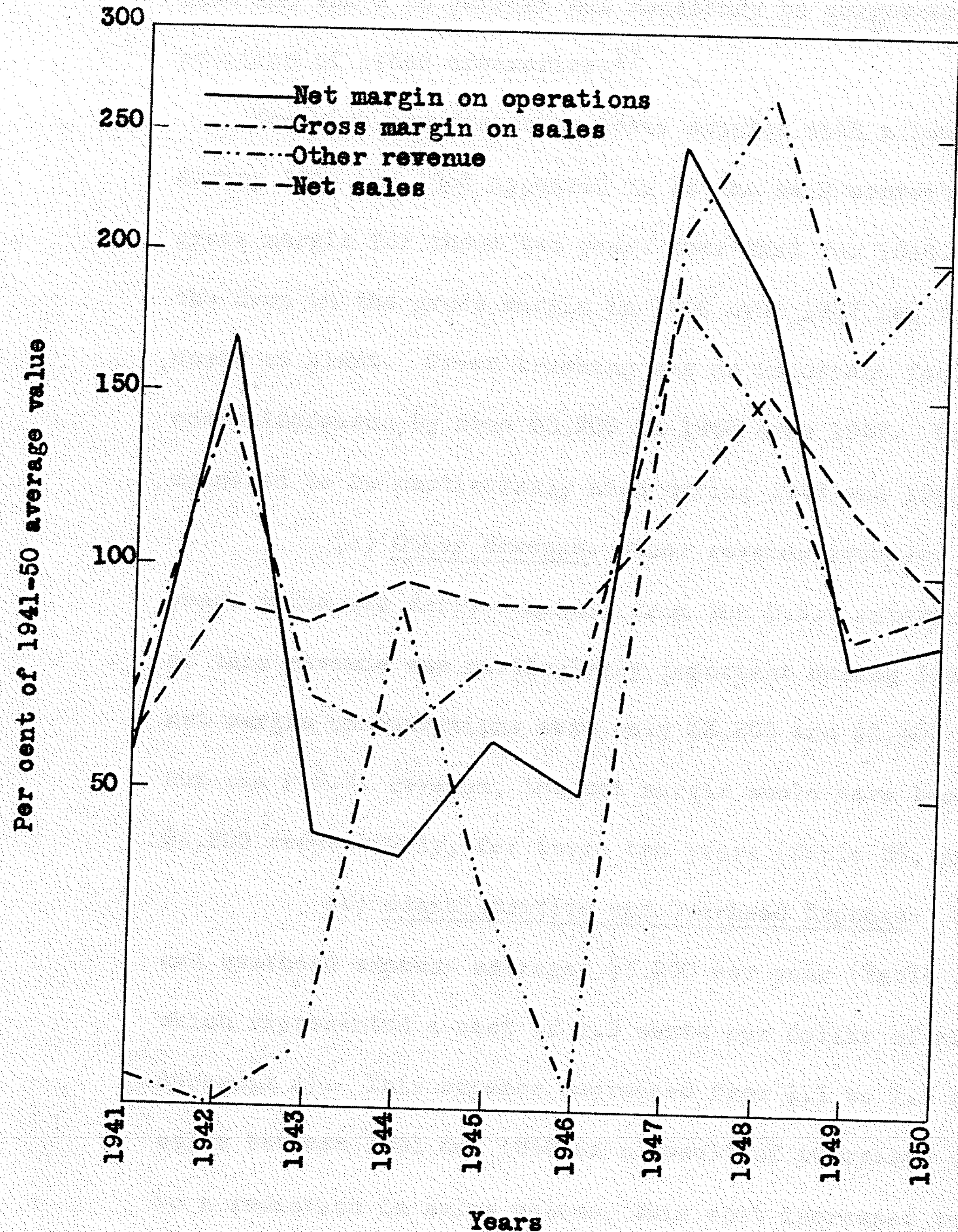

Figure 17. Trend percentages of selected operating statement components for year 1941 to 1950 (Base 1941-50 average): Vita Co-operative Limited.

cost and share to patrons was necessary to counteract the excessive competition of other creameries.[17]

The high manufacturing costs coupled with a lower volume of sales during 1949 and 1950 appeared to be the main contributors to the low gross margin for these two years over that for 1948. On the other hand, the drop in the gross margin in 1948 over 1947 was due mainly to increased costs at plant. Cream trucking was an important factor as the trucking costs increased by some $3,200 in 1948 over 1947. Trucking activities appeared to be particularly high during 1948 and 1949.

(c) Other Revenue: Other revenue averaged $700 during the ten years which was derived mainly from the P.S.V enterprise. The influence of this revenue was particularly important during 1949 and 1950 when the net margin on operations were only $3,200 and $3,500 respectively. Without the P.S.V. revenue, the net margin would have been about $2,100 and $2,200 respectively, for these two years (Table 59, Appendix A).

(d) Administrative and Overhead Expense: The administrative and overhead expense averaged $3,200 per year (Table 59, Appendix A) which represented a cost of 1.9 cents per dollar of sales (Table 60, Appendix A). This expense decreased from 2.1 to 1.5 cents per dollar of sales between 1941 and 1948 as a result of increased sales volume. Due to a reduction in sales volume, this cost increased to 2.4 cents per

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[17]As the average initial price per pound to patrons was only slightly above the ten year average paid by the three other creameries, it was assumed that the high relative share to patrons resulted partly from more liberal testing of cream. This reduced the average overrun (Table 24, p. 181.

dollar of sales by 1950.

I. Distribution of Net Margin on Operations: The average net margin for the ten years was $4,200 (Table 26). Of this, about $2,900 were allocated as a patronage dividend, $500 as dividends on capital and $800 as a credit to the statutory reserve and surplus accounts. During the ten year period the surplus account was reduced by an average of $370 per year through extraordinary expenses and income taxes. The patronage dividend account was reduced by an average of 112 dollars per year by transfers to the statutory reserves.[18] After allowing for these adjustments an average of about 66 per cent of the net margin was allocated as patronage dividends, about 12 per cent as dividends on capital, about 14 per cent as a credit to reserves and surplus and about eight per cent to extraordinary expenses and income taxes.

1. Patronage Dividend Declared: As outlined in Table 26, the patronage dividend varied from 51 to 82 per cent of the total net margin among years. This appeared relatively high, especially during the early years of development but was offset by the fact that a considerable portion of this money was transferred to share capital.[19] The payment of the patronage dividends in terms of shares was considered essential to give the

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[18]The transferred money consisted of old balances owing to non-members who had failed to accumulate sufficient dividends to purchase their first share within the required time limit of four years.

[19]This co-operative would have been seriously hampered in its early stages of development had not both the capital and patronage dividends been carried on the books for a number of years before being distributed in cash.

Association a more stable capital structure. Up to 1950 about $10,300 had been transferred from the patronage dividends to the share capital account. About $2,300 of this was from the 1940 dividend allocation.

Table 26. Distribution of the Net Margin on Operations during the 1941-50 period: Vita Co-operative Limited

Year	Net margin on operation	Declared patronage dividend[a]		Declared capital dividend[a]		Net credit to reserves or surplus[b]	
	-dollars- -000-	dollars -000-	per cent	dollars -000-	per cent	dollars -000-	per cent
1941	2.4	1.9	78	0.1	6	0.4	16
1942	7.0	3.6	51	0.3	4	3.1	45
1943	1.7	0.9	55	0.3	18	0.5	27
1944	1.5	0.9	57	0.4	30	0.2	13
1945	2.5	1.9	76	0.5	22	0.1	2
1946	2.0	1.3	66	0.7	33	-	1
1947	10.3	7.7	75	0.7	7	1.9	18
1948	7.7	6.3	82	0.8	10	0.6	8
1949	3.2	2.0	63	0.6	18	0.6	19
1950	3.5	2.1	59	0.6	17	0.8	24
Average 1941-50	4.2	2.9	68	0.5	12	0.8	20

[a]This was the amount allocated for the specific year although the allocation may not have occurred until one or more years later.
[b]The net credit to reserves and surplus was reduced by 44 per cent due to extraordinary expenses and income tax payments during the 1941-50 period.

Out of the $28,600 allocated as patronage dividends for the years 1941-50 inclusive about $8,000 were transferred to outstanding capital, about $11,500 were still on the books in allocated or unallocated form, about $1,100 were transferred back to statutory reserves and about $8,000 were paid out in cash. Most of the cash payments were made after 1948 on the revolving surplus plan.

2. Dividends on Outstanding Capital: Each year between 1940 and

1948 a seven per cent dividend on capital was allocated.[20] The amount thus allocated increased with the increase in outstanding capital up to 1949. In 1949 the rate of dividend payment was reduced to five per cent. Apparently until the special amendment was passed in 1948 the seven per cent dividend was automatic. Thus the size of the net margin had no influence on this dividend allocation. It was suggested by the manager that the high rate was considered necessary during the earlier years to make certain the outstanding capital position was improved.

During the period 1939 to 1950 there was $5,100 declared as a dividend on outstanding capital. Of this, about $3,600 had been paid in cash by 1950. Although these dividends were payable in cash they were often retained on the books for a number of years. In 1947 the Association established the policy of paying the capital dividend every two years as a means of reducing clerical work required.

3. Net Credit to Statutory Reserve and Undivided Surplus: The Association was required by statute to transfer 10 per cent of the net margin on operations to the statutory reserve until this reserve equalled 30 per cent of capital outstanding. As a result of this provision most of the money over and above dividend payments went to the reserve and only a small amount to undivided surplus. The apparent conflict of this statement with the size of the undivided surplus shown in Table 62, (Appendix A) is explained by the fact that dividends were normally not al-

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[20] The seven per cent interest rate represented a high return on investment. Such high rates are normally not considered desirable.

located until at least one year after the year in which they were earned.

The Association did not follow the practice of allocating 10 per cent of the net margin to the reserve each year even when the reserve was much less than 30 per cent of the outstanding capital. As an example, in 1948 the 10 per cent reserve for the three years 1946 to 1948 were transferred from the undivided surplus to the statutory reserve.

4. Net Margin: Source and Subsequent Distribution: In the distribution of the net margin no consideration was given to the fact that some of this money was derived through the patronage of the P.S.V. trucking service. Therefore, monies which had been earned from the P.S.V. enterprise were used to bolster the dividends to the creamery's patrons. This was not a proper allocation of funds but it was not handled separately as it would have added to the bookkeeping difficulties. In addition, the creamery was itself the biggest user of the P.S.V. service and thus part of the earnings could be considered a savings from creamery operations.

This infraction of the co-operative principle of patronage dividend allocations was only important during the last four years. Apparently, the patrons of the P.S.V. trucking service had not complained about not receiving dividends.

J. Financial Structure of Co-operative: The information on the original sources of funds were outlined in Table 27. About 47 per cent of the original funds were obtained from the former owner of the creamery. This loan was secured by a chattel mortgage. About 35 per cent of the original funds were supplied by three members who loaned $1,000 each and about four per cent were provided through small loans from other members. Only 14 per cent of the original funds were supplied through the sale of shares which represented the original equity of the members.

The low equity position plus the fact that three members supplied about 35 per cent of the capital indicated that the initial support of the co-operative was not too strong. Only a limited number of people were willing to take the financial risk necessary to establish the co-operative. This situation was not considered unusual as it was one of the biggest problems facing new co-operatives.

The loans made to the Association by the members were guaranteed at the first annual meeting of the shareholders. Thus, the risk of loss to the three main contributing members was slightly reduced. There was a seven per cent interest rate on the larger loans which suggested a fair return on money loaned. These two factors reduced the inequity somewhat.

The problem associated with these loans (as far as the co-operative was concerned) was that they were short-term and most of them came due within the next year. This meant that these monies had to be replaced soon after operations were started. The chattel mortgage was a more permanent source of funds as it was payable at $800 per year.

For the 1941-50 period the sources of capital were:[21] outstanding

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[21] The percentages indicate the relative importance of each source averaged for the ten years.

capital (31%), statutory reserves and undivided surplus (25%), allocated surplus (22%), bank (mainly cheques outstanding) (18%), business creditors (2%), and fixed loans (2%).[22] Equity capital contributed an average of 78 per cent which was a definite improvement over the 1939 situation.

Table 27. The Original Source of Funds and the Interest Rate Charged for Each: Vita Co-operative Limited, 1939

Source	Rate of interest	Value of loan	
	per cent	-dollars-	-per cent-
Chattel mortgage	6	4,000	47
Loan from members (guaranteed)	7	3,000	35
Small loans from members	5	315	4
Outstanding share capital	7	1,196	14
Total		8,511	100

The use of the funds was divided among fixed assets (42%), current assets (39%), and other assets (19%). An important item in the use of funds was the inclusion of intangible assets. About one-quarter of the assets classified as other assets were intangible assets.

The value of total assets averaged about $25,400 for the ten year period (Table 62, Appendix A). They were increased from $14,100 in 1941 to $36,600 in 1948 but were decreased to $32,600 by 1950. This represented a net increase of about $18,500 from 1941 to 1950, of which $8,500 were added during the 1941-46 period and $10,000 during the 1946-50 period (Table 65, Appendix A). Most of the increase in assets was caused by the replacement of the equipment.

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[22] The comparative financial statements are outlined in Table 62 to 65, Appendix A. The component percentages are illustrated in Figure 18 and 19. Some trends are illustrated in Figure 21, p.206.

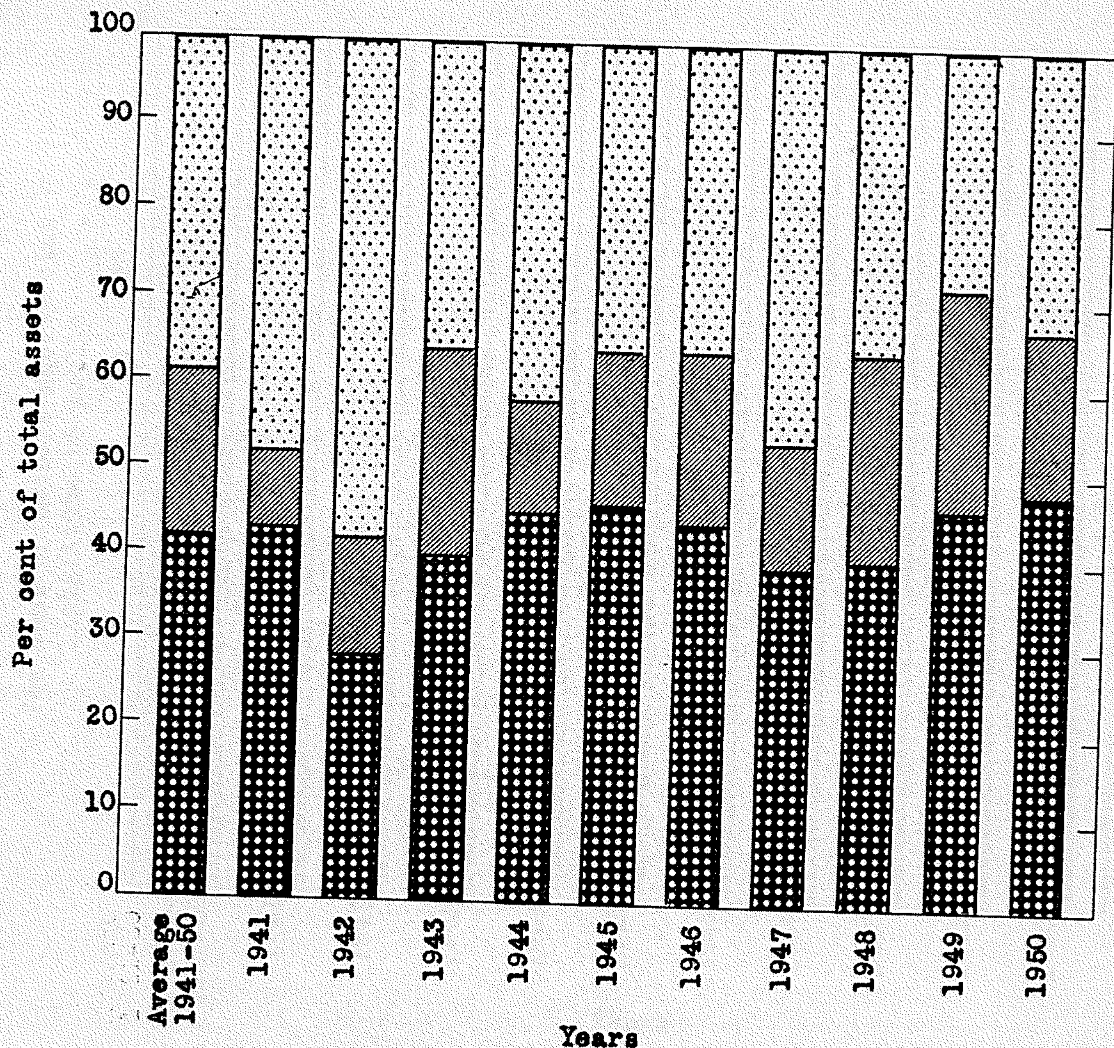
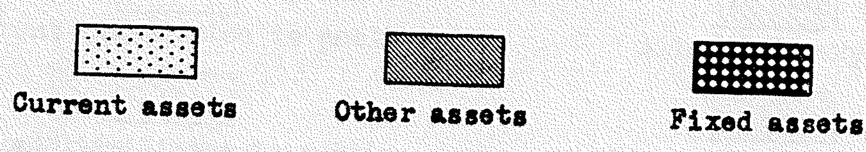


Figure 18. Assets in component percentage form for years 1941 to 1950 and 1941-50 average: Vita Co-operative Limited.



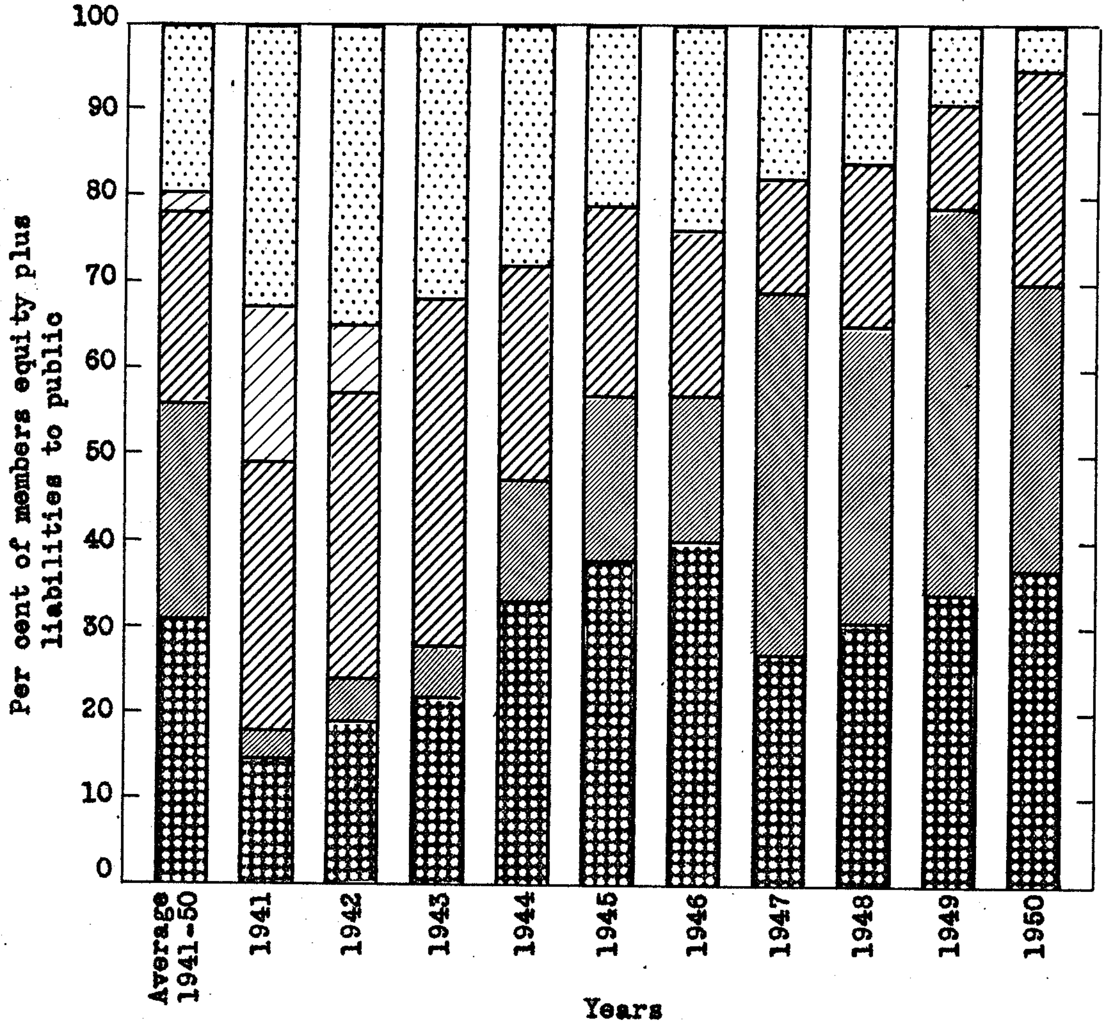


Figure 19. Liabilities and members equity in component percentage form for 1941 to 1950 and 1941-50 average: Vita Co-operative Limited.

Current liabilities to public

Allocated surplus

Fixed liabilities to public

Surplus and reserves

Outstanding share capital

1. Working Capital Position: The books were closed at a time of year when creamery operations were relatively slack, therefore, the liabilities to business creditors were low. Consequently, it was assumed that the current position would be more favourable than during periods of higher output.

a) Current Ratio: The average value of this ratio was less than the two to one minimum considered desirable (Table 28). According to the ratio values for the individual years there was a poor working capital position from 1941 to 1946 but it was improved during the four years 1947 to 1950 reflecting a more satisfactory relationship. This apparent improvement was offset somewhat by the increase in receivables (Table 28).

b) Net Working Capital Position: The net working capital position was outlined in Figure 20. With the exception of 1942 the net working capital position remained relatively poor during the first six years but was much improved from 1947 to 1950. The sudden improvement between 1946 and 1947 was caused by the fact that about $10,300 had been transferred to the undivided surplus from the net margin on operations. This was the first year other than 1942 that a fairly large net margin on operations was obtained. The change in the net working capital position between 1946 and 1947 as well as between 1941 and 1942 illustrated the importance of the net margin as a source of funds at this co-operative.

The net working capital varied from a low of $200 in 1943 to $9,200 in 1947. There was a net increase in net working capital of about $5,900 between 1941 and 1950, of which $800 were added during the 1941-46 period

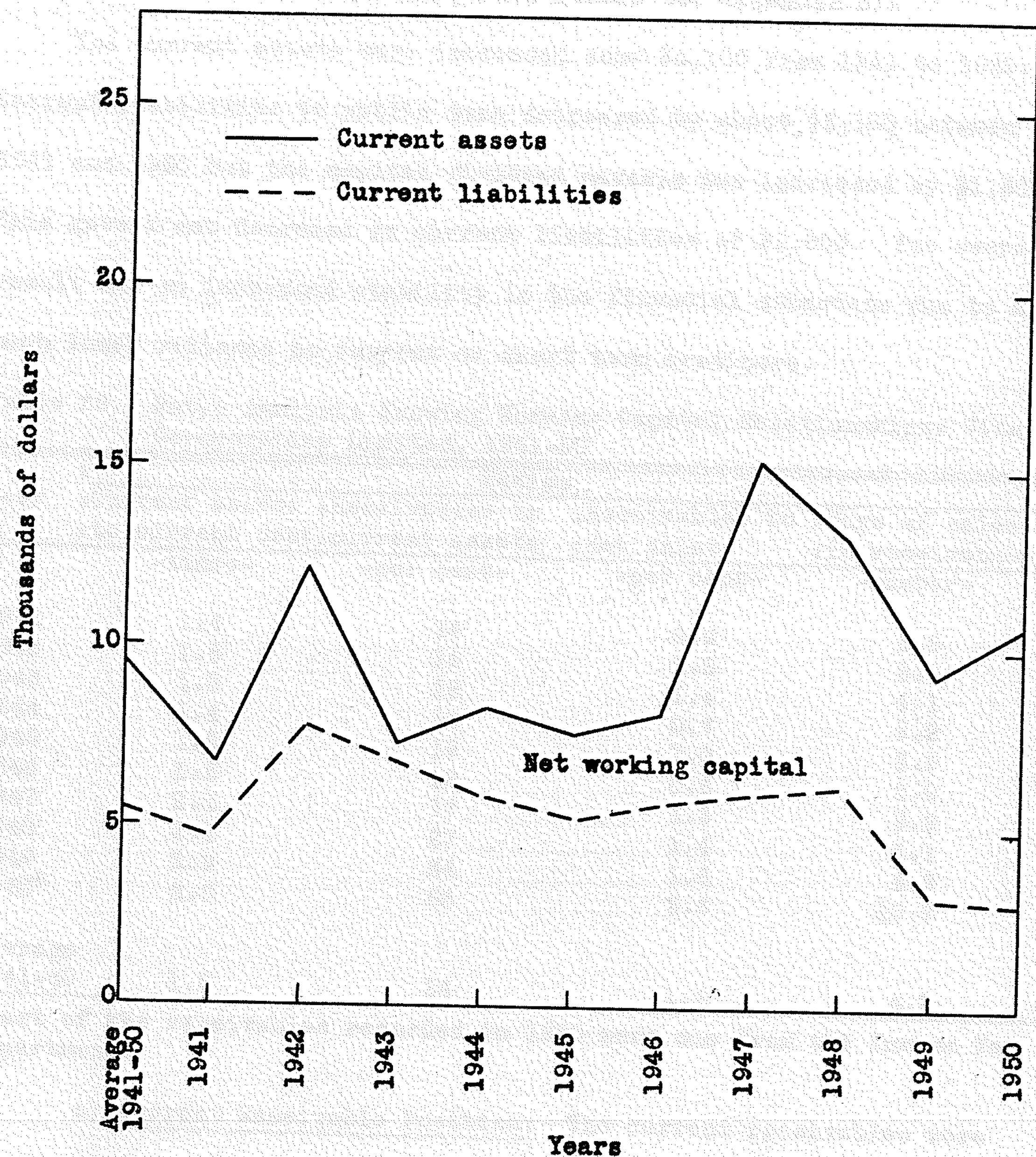


Figure 20. An illustration of net working capital position for years 1941 to 1950 and average 1941-50: Vita Co-operative Limited.

and $5.100 during the 1946-50 period (Table 65, Appendix A).

The current assets were increased some $4,100 from 1941 to 1950. Current liabilities to public were decreased by about $3,100 between 1941 and 1950 but the capital dividend payable was increased by $1,300. This gave a net decrease in current liabilities of $1,800. The overall result was an increased stability in the financial structure due to a much lower reliance on current or short term creditors.

Table 28. Ratio Analysis Showing Working Capital Relationships: Vita Co-operative Limited, 1941-50

Year	Ratios			
	Current assets to current debt	Receivables to current assets	Receivables to net sales	Days of sales in receivables
	-times-	-per cent-	-per cent-	-number-
1941	1.4	14	0.9	2.8
1942	1.5	15	1.2	3.6
1943	1.0	28	1.4	4.1
1944	1.4	14	0.7	2.2
1945	1.5	19	1.0	2.9
1946	1.5	12	0.6	2.0
1947	2.5	17	1.3	3.8
1948	2.1	27	1.4	4.1
1949	2.9	34	1.6	4.9
1950[a]	3.5	53	3.6	10.7
Average 1941-50	1.8	24	1.4	4.2

[a]Part of the receivables recorded in 1950 were due from the Income Tax Department.

c) Current Receivable Position: The current receivables were an important part of the current assets.

(1) Receivables to Current Assets: Twenty-four per cent of the average investment in current assets was tied up in receivables for the 1941-50 period (Table 28). Among years, the investment in receivables varied from 12 to 53 per cent of investment in current assets. Part of

the receivables which occurred on the 1950 balance sheet were due from the Income Tax Department and thus did not result from operations.

The receivable position was fairly high particularly during the last three years. This was explained by the fact that considerable credit was extended to local storekeepers. These same storekeepers honored the creamery's cheques thus part of these receivables were balanced by the outstanding cream cheques.

(2) Receivable to Net Sales: The investment in receivables averaged 1.4 per cent of net sales for the 1941-50 period (Table 28). Receivable varied from 0.6 to 3.6 cents per dollar of net sales over the ten year period. There was an average of 4.2 days of butter sales invested in receivables for the 1941-50 period. With the exception of the somewhat abnormal position in 1950 the number of days of sales in receivables varied from 2.0 to 4.9.

2. Characteristics of Permanent Capital (Capital Structure): The sources of funds included in permanent capital were: outstanding share capital, statutory reserves, undivided surplus, retained patronage dividends and deferred liabilities from public.

a) Outstanding Share Capital: An average of about 31 per cent of the capital funds were supplied by the members through share capital. There was an increase in this account of about $9,900 between 1941 and 1950 (Table 65, Appendix A). The outstanding share capital account was increased considerably during the two years 1943 and 1948. In these two years a special effort was made to bring the dividend account up to date. The increase in the value of the share capital account would have been much more regular had the retained dividend accounts been straightened out each year.

The relative increase in this account was indicated in the trend figures shown in Table 64, Appendix A. Relative to the average 1941-50 value this account was increased from 27 per cent in 1941 to 153 per cent in 1950. This indicated a fairly fast accumulation of outstanding share capital which resulted primarily from the policy of transferring patronage dividends to outstanding share capital.

b) Statutory Reserve: The statutory reserve was a sound source of funds. It supplied an average of nine per cent of the funds invested in assets (Table 63, Appendix A). The relative importance of this account to the total investment in assets varied from four per cent in 1941 to 16 per cent in 1950. This indicated a substantial increase in the relative importance of this account which implied increased soundness of financial structure.

c) Undivided Surplus:[23] The undivided surplus provided an average of $4,200 or 16 per cent of the total investment in assets during the 1941-50 period but varied from minus one per cent to 38 per cent among

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[23]The true value of this surplus was somewhat lower than shown here as the organizational expense was included in other assets. This was not a marketable commodity and, therefore, had no real value. During the first few years the Association followed the policy of allocating all dividends at the time the balance sheet was written up. As a result the undivided surplus remained low. After 1944 the net margin on operations were transferred to the undivided surplus to be allocated at the annual meeting. Thus, the size of the account varied with the size of the net margin on operations.

years (Table 63, Appendix A). The presence of the deficit account during 1941 and 1942 indicated that the allocation of dividends had been excessive. This was not apparent as the dividends were retained.

d) Revolving Surplus Fund (Retained Dividends):[24] The retained patronage dividends supplied an average of 20 per cent of the funds invested in assets for the 1941-50 period (Table 63, Appendix A). During the three years 1941-43 this source supplied an average of about 32 per cent of the invested funds and for the seven years 1944-50 it supplied an average of 18 per cent.

This account provided an average of $5,200 for the ten years (Table 62, Appendix A). The increase to 1943 was caused by the retention of all patronage dividends allocated prior to that time. In 1944 part of the retained patronage dividends were applied to share capital. Patronage dividends were not allocated in 1946 and 1947, therefore, the account remained the same for three years. In 1948 the back dividends were declared from the undivided surplus. After 1948 some of the retained dividends were payable in cash making part of this account a current liability

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[24]The Association made provision for a revolving surplus fund in 1948. Prior to that date, the patronage dividends were classified as a retained dividend payable at the discretion of the Board. These retained dividends were included with permanent equity capital in this study as the Association transferred most of the funds to share capital.

These dividends were classified as a current liability on the financial statements. The auditor's interpretation was based on the fact that they could be made payable. Excessive payments could leave the Association in a poor financial position and thus, jeopardize other creditors. To the extent that this could have occurred the current nature of the retained dividends was recognized.

Prior to that time, almost all retained dividends were applied to share capital and, therefore, were a good source of permanent capital.

e) Deferred Liabilities: Deferred liabilities to the public provided an average of two per cent of the total supply of capital. Although this low average figure suggested that this source of funds was relatively unimportant for the 1941-50 period it was significant for the two years 1941 and 1942. Deferred liabilities provided about 18 per cent and eight per cent respectively, of the total funds invested in assets for these two years. This source of funds was very important in the initial financial structure, as indicated in Table 27, page 195.

Table 29. Ratio Analysis Showing Financial and Sales Relationships: Vita Co-operative Limited, 1941-50

Years	Ratio		
	Net sales to fixed assets	Net sales to capital structure	Capital structure to fixed assets
	- times -		
1941	16	15	1.1
1942	26	13	1.9
1943	19	12	1.6
1944	18	12	1.6
1945	16	10	1.7
1946	16	9	1.7
1947	16	7	2.1
1948	18	9	2.1
1949	13	6	2.0
1950	10	5	1.9
Average 1941-50	16	9	1.8

f) Total Net Sales to Capital Structure: Although there was an increase in the value of sales from 1941 to 1948 the increase was not proportionate to the increase in permanent capital. As a result, the value of this ratio decreased between 1941 and 1950 (Table 29).

The average turnover of permanent capital was nine times for the 1941-1950 period. This ratio varied from a high of 15 in 1941 to five in 1950. The change in the value of the ratio reflected more the increase in the supply of permanent funds than the change in sales volume. The high ratio during 1941 to 1946 reflected a shortage of permanent capital relative to the volume of sales.

3. Characteristic of Fixed Assets: The average investment in fixed assets was about $10,700 for the ten years (Table 62, Appendix A). This represented an average of 42 per cent of the total investment in assets (Table 63, Appendix A and Figure 18, page 196). The relative importance of fixed assets varied from 28 to 48 per cent of total assets although it was between 39 and 46 per cent during eight of the ten years. The value of the fixed assets was increased[25] from $6,200 in 1941 to $15,700 in 1950.

During the ten year period there were about $22,400 spent on fixed assets. During this same period the depreciation reserve was increased by $12,800 which left a net increase in the book value of about $9,600.

The trend percentage figures illustrated the gradual increase in the investment in fixed assets from 1941 to 1950 (Figure 21). This investment, relative to the ten year average value, increased from about 57 per cent in 1941 to 147 per cent in 1950. The trend for fixed assets was

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[25] Most of the increase in the value of fixed assets resulted from the replacement of equipment, but part of the increase that occurred in 1943 resulted from the purchase of the truck for the P.S.V. operations.

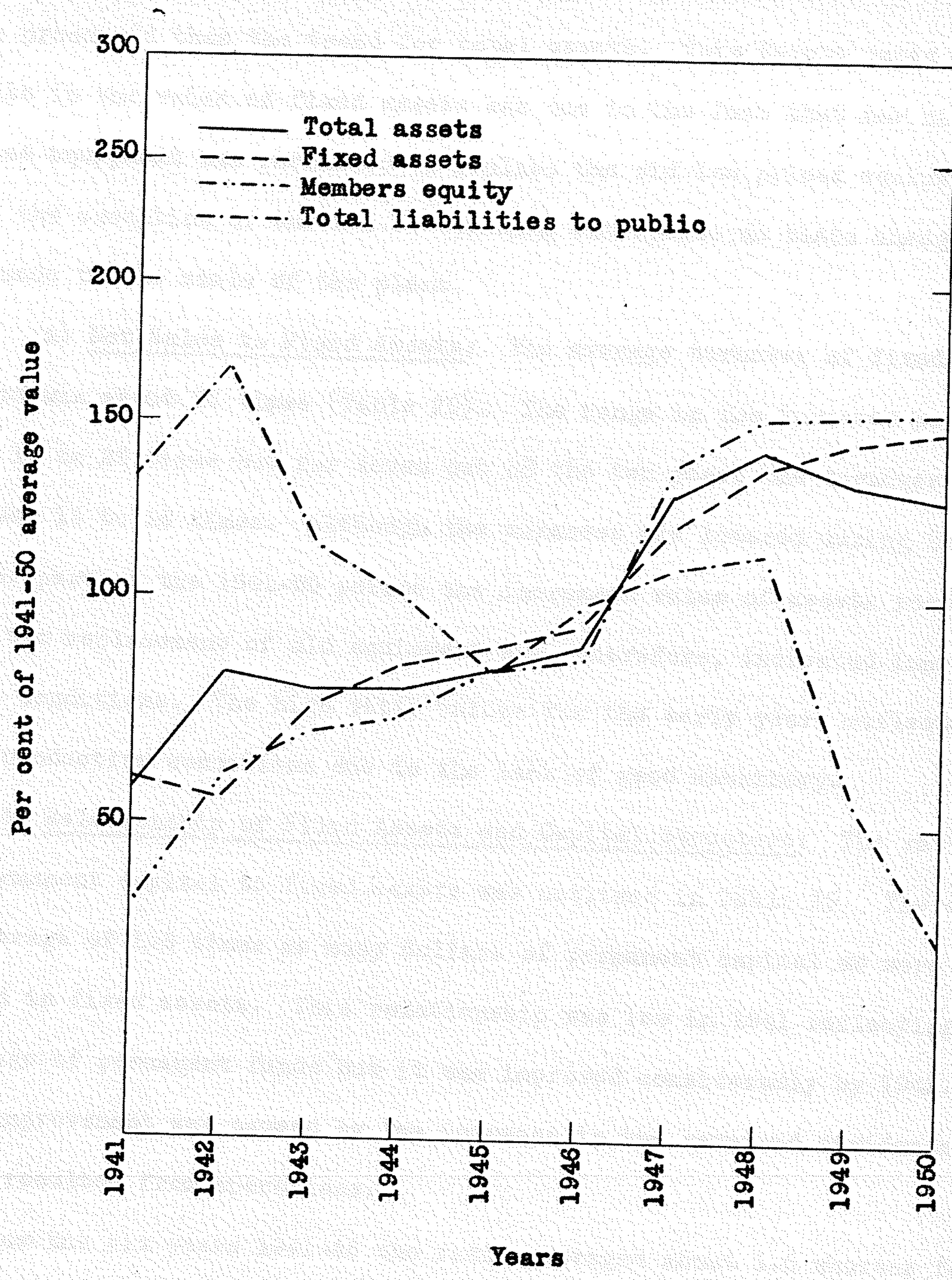

Figure 21. Trend percentages of selected balance sheet components for years 1941 to 1950 (base 1941-50 average): Vita Co-operative Limited.

more pronouned than the trend for total assets. This fairly rapid increase in the value of fixed assets was due to the fact that new high priced equipment was purchased to replace the old low priced equipment. With the exception of the P.S.V. trucking enterprise no basic change was made to the scale of the plant.

a) Net Sales to Fixed Assets: The average turnover of fixed assets was about 16 times (Table 29). The range in the turnover was from 10 to 26 times but for seven out of the ten years the turnover was between 15 to 19 times. Although the turnover was lowered during the latter part of the 1941-50 period the increased value of assets resulted from the replacement of old equipment and, therefore, indicated improved plant conditions. The high ratio values for the early years reflected poor production conditions due to the lack of good machinery.

4. Relationship of Fixed Assets and Capital Structure: The ratio of permanent capital to fixed assets was outlined in Table 29. There was an average of 1.8 times as many dollars of permanent capital as were invested in fixed assets. This relationship was low in 1941 reflecting a shortage of permanent funds but it was improved considerably by 1942. This improvement was caused by the increase in the retained dividends which resulted from operations.

For the six years 1941-46 the ratio averaged about 1.6 whereas for the four years 1947-50 it averaged 2.0. With the wider margin of permanent funds over the requirements of fixed assets during the 1947-50 period there were funds available for other uses. This was reflected in the stronger net working capital position for this latter period (Figure 18, page 196).

5. Other Assets: An average of about 20 per cent of the funds were invested in other assets. About one-quarter of this investment was made up of intangible assets.[26]

K. Equity Capital Position: The equity capital position was improved considerably from 1941 to 1950. This was the initial build-up period and as there was only a limited supply of other capital available it was both necessary and desirable that the Association increase equity capital.

The equity capital was increased by about $24,100 between 1941 and 1950 (Table 65, Appendix A). The stability of this change was indicated by the fact that $20,300 of this increase was in net worth. About three-quarters of the increase in net worth was composed of outstanding capital and statutory reserves. The equity capital was increased more between 1946 and 1950 than between 1941 and 1946 but the increase in net worth was greater during the earlier period. Net worth was the more stable source of equity capital.

Comparison of the trend percentage data for members equity and total

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[26]The Association kept the organizational expense and the cost of the P.S.V. franchise on the books as assets during the 1941-50 period. The P.S.V. franchise could be considered a saleable commodity but the organizational expense had no sale value. In normal practice organizational expenses are written off as soon as sufficient earnings are available to do so. About one-half of the intangible assets were for organizational expense.

assets indicated that there was a greater relative increase in equity capital than in total assets over the 1941-50 period (Figure 21).

1. Characteristics of Equity Capital: The equity capital consisted of net worth and liabilities to members. Outstanding capital, statutory reserves and undivided surplus made up the net worth contributing 39, 12 and 21 per cent, respectively, of the average equity capital. Declared patronage and capital dividends made up the liabilities to members contributing 26 and two per cent, respectively, of the average equity capital. An average of about 51 per cent of the equity capital was supplied as outstanding share capital and statutory reserves. These were the more permanent sources of funds.

The retained patronage and capital dividends provided an important part of the total supply of invested equity capital. The rapid increase in the relative importance of equity capital was attributed to the policy of retaining the patronage dividends and the application of a large portion of these funds on capital stock.

2. Equity Capital Relationships:

a) Members Equity to Total Assets: The members supplied an average of 78 per cent of the funds invested in total assets (Table 30). This source of funds varied from 49 per cent in 1941 to 95 per cent in 1950. Only in 1941 did the members equity fail to supply at least one-half of the amount invested in total assets. However, the 1941 condition was a considerable improvement over the original financial structure (Table 27, page 195). This ratio indicated that the equity was gradually improved between 1941 and 1950.

The net worth which was considered the more permanent part of equity capital, supplied an average of 56 per cent of the money invested in assets. This was increased from a low of 18 per cent in 1941 to 70 per cent in 1950 which represented an improvement in financial stability.

b) Members Equity to Fixed Assets: There was an average of $1.87 of equity capital for every dollar invested in fixed assets (Table 30). The supply of equity capital exceeded the investment in fixed assets by more than 60 per cent for all years between 1942 and 1950. In 1941 the margin was much smaller.

This relationship was illustrated further by the ratio of net worth to fixed assets. There was an average of $1.33 of net worth for every dollar invested in fixed assets. This further suggested the favourable relationship of the investment and the source of funds. With the intangible assets removed this ratio averaged $1.23 of net worth for every dollar invested in fixed assets.

c) Members Equity to Capital Outstanding: There was an average of about $2.56 of equity capital for every dollar of outstanding capital. The value of this ratio was high during the first few years which indicated that there was excessive none-share capital in equity. This condition was improved as monies were transferred into share capital especially during 1944.

As the allocated surplus made up about 28 per cent of the equity funds this ratio did not reflect the increase in the value of outstanding shares. This increase was indicated by the fact that there was an average of $1.83 of net worth for every dollar of outstanding capital. This ratio was improved from $1.19 in 1941 to $1.88 in 1950.

Table 30. Membership Equity Relationships: Vita Co-operative Limited, 1941-50

Year	Ratios		
	Members equity to total assets	Members equity to fixed assets	Members equity to capital outstanding
	- per cent -	- dollars -	
1941	49	1.11	3.28
1942	57	2.03	2.88
1943	69	1.73	3.14
1944	72	1.60	2.15
1945	79	1.72	2.09
1946	76	1.74	1.87
1947	82	2.11	3.06
1948	84	2.11	2.66
1949	91	1.98	2.67
1950	95	1.97	2.56
Average 1941-50	78	1.87	2.56

d) Average Equity per Member: This analysis was limited as few records were kept concerning membership numbers.

There was an estimated 120 members who were the original shareholders in 1939.[27] Therefore, there was an average equity of about $10 per member when operations got under way. In 1944 there were 432 members and the average equity was about $36 per member. By 1950 there was 678 members and the average equity had been increased to about $46 per member. This indicated that both the number of members and the average equity per member was increased considerably from 1939 to 1950. The initial equity in 1939 was all share capital, whereas reserves, undivided surplus and allocated surplus were included in 1944 and 1950. The increase in the

[27] This estimate was made from a check of the original receipt books. There were 137 shares sold but a number of the members purchased more than one share.

average equity per member from 1939 to 1950 was approximately $36. Most of this increase resulted from the policy of returning a large portion of the allocated surplus to the Association through retained patronage dividends and application of earnings on the sale of shares.

L. Summary: The Vita Co-operative recorded a low over-run from butter manufacture which suggested inefficient plant operations, liberal testing of cream or both. Of the creameries studied, this co-operative had the highest procurement costs, the most extreme seasonal variation in output and paid the highest initial prices to patrons. Consequently, the net margin on operations was somewhat lower than that obtained by North Star which handled about the same average volume.

Membership support apparently weakened after 1946 suggesting dissatisfaction or lack of understanding of the long-run advantages of the co-operative enterprise. Although increased competition was a factor here it was assumed that the loss of membership and volume of product handled reflected the lack of an educational program, inadequate control over the handling of membership records, and a reduction of enthusiasm after the initial period of development. As the co-operative received its strongest support from the farmers near Vita this suggested that the lack of direct contact with the creamery was an important factor leading to reduced support from members. It was concluded that the situation could be improved through a program of co-operative education and sound public relations. This was considered important in this area as most of the members have had limited experience with co-operative enterprise.

Although the net margin on operations was lower than anticipated and there was a reduction of membership support the co-operative did improve its financial position during the 1941-50 period. The investment in total assets was increased about $18,500 of which $4,100 was invested in current assets, $4,800 in other assets and $9,600 in fixed assets (Table 65, Appendix A). With only one-half of this increase invested in fixed assets the mobility of the assets was not greatly reduced. As there was a decrease in current liabilities of $1,800 the net working capital position was improved during the 1941-50 period.

The members equity was increased by $24,100 between 1941 and 1950. This offset the decrease in liabilities to public of $5,600 and provided funds for the increased investment in assets of $18,500. The increase in members equity was made up of an increase in net worth of $20,300 and allocated surplus of $3,800. This change between 1941 and 1950 indicated a satisfactory increase in equity capital and decrease in liabilities to the public. The improved net working capital position indicated that the supply of capital was reasonably adequate to finance the operations of the plant, particularly during the latter period.

CHAPTER IX

THE DESCRIPTION AND ANALYSIS OF THE CO-OPERATIVE CREAMERIES (Continued): THE WINKLER CO-OPERATIVE CREAMERY LIMITED

A. Location of Plant: The Winkler Co-operative Creamery Limited established its headquarters and plant at Winkler. The people in this area are of "predominantly Mennonite stock who settled in this region in 1874 and 1875".[1]

1. Characteristics of Procurement Area: The procurement area of this creamery lies entirely in the Red River Valley. It is bounded on the south by the United States Border (Figure 1, page 10). This area was classified as a mixed grain-livestock farming area with some specialty crops such as sugar beets and sunflowers. For the Municipality of Stanley where Winkler is located about 37 per cent of the farm income in 1950 was from the sale of livestock and livestock produce.[2] About one-fifth of this 37 per cent was from the sale of dairy produce. Although the percentage figure for dairy produce was low compared to that of the other areas studied[3] the average income per farmer for this municipality was much higher. The farm population remained about the same in 1951 as in 1941 which indicated there was a constant supply of labour during the 1941-50 period.

The important characteristics of this area was the small average size

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[1] R. R. Meyers, The Spirit of the Post Road, (Altona, Manitoba: D. W. Friesen and Sons, Limited, 1955), p. 1.

[2] Census of Canada, 1951.

[3] See p. 78 and p. 171.

of farm. About 55 per cent of the farmers owned from 3-7 cows,[4] consequently, cream production was high. On many of the smaller farms in the area the sale of cream was a major source of cash income.

B. Review of Co-operative: The Winkler Co-operative Creamery Limited started operations in September of 1940. Like the Vita Co-operative Limited this co-operative resulted from the wave of enthusiasm for co-operatives which followed the depression. Unlike Vita, the people in the area had previous experience with co-operatives which were successful but most of these were consumer co-operatives. "The opportunity for a co-operative society to acquire the creamery was presented when it became known that the estate of the former owner was willing to sell the business... The creamery was a much larger business than any local co-op group had as yet undertaken in Southern Manitoba without prior experience."[5]

The farmers felt that by owning the business they would be served better and at the same time receive some financial gain. The problem with the creamery was that the business was already operating therefore there was no time for experimentations on a small scale. This venture was helped by the fact that there was a general acceptance of co-operative principles and a good educational program had been under way for some time.[6]

The manager suggested that the dividend idea was stressed too

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[4]Census of Canada, 1951.
[5]Meyers, op. cit., p. 96.
[6]Ibid.

strongly at first which caused considerable resentment in later years when the dividends were retained for expansion purposes. The fact that the dividends were retained suggested that the members were not too concerned about cash payment. Although the success of the co-operative was dependent upon the support of the farmers in the area its initial operations were underwritten by a few members of the community. "Without the willingness of these enthusiastic few the co-operative would not have come into existance."[7]

1. Reasons for Starting New Enterprises: New enterprises were added both to reduce the cost of overhead and to provide increased service for the farmers in the area. The development of the new enterprises appeared to be spontaneous. The inclusion of each additional enterprise was considered when it indicated that it would add to the financial success of the plant. The items such as milk, ice cream and cheese were added mainly to increase the returns to the creamery whereas the inclusion of egg, poultry and feed sections were as much for increased service as increased returns from operations.

2. Review of Statutory Information: The original By-laws were drawn up in 1940. They followed closely the standard form provided by the Registrar of Co-operatives at that time.

a) Objectives of the Association: The main objectives of the Association were to "procure cream, make and sell butter".[8] This was to

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[7] M. J. Hamm, Manager of the Winkler Co-operative Creamery Limited, Winkler, Manitoba.

[8] The Winkler Co-operative Creamery Limited, "Letter Patent", 1940.(All

be done with the benefit of operations going to the patrons. The scope of the early statutory objectives were broader than the main objectives listed above thus the other enterprises were added without amendments to the By-laws.

b) Capital Situation:

(1) Authorized Capital: The authorized capital in 1940 was established at $10,000 comprised of 1,000 shares at $10 each. In 1945 the authorized capital was increased to $30,000 and the value of the shares reduced to one dollar each. Ten new shares were exchanged for each old share. Due to the continued growth of the Association the authorized capital was increased to $100,000 in 1952.

(2) Shares: Each member had to purchase at least one $10 share. When the value of the share was reduced the minimum requirement was established at ten shares. Shares could be purchased by cash but the majority were purchased through dividend payments.

The members could liquidate their shares if they retired from farming or moved from the area. Shares were redeemed regularly for retired members.

(a) Special Feature of Share Purchase: When dividends were declared to a new patron they were applied to the purchase of a share des-

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subsequent references to the By-laws will either refer to 1940 By-laws or amendments to these By-laws as indicated in the text. The file containing these By-laws and amendments can be reviewed at the office of the Provincial Secretary, Legislative Building, Winnipeg, Manitoba.

pite the size of the dividend. As a result the patron automatically subscribed to a $10 share before 1945 or ten one-dollar shares after that year. This caused a fairly rapid increase in the number of shares outstanding but left a large unpaid balance as indicated in Table 31. This policy made every patron a member not later than the next year after he started to patronize the firm which almost eliminated non-member business. It was not determined whether the member would have been liable for the unpaid balance had the Association gone bankrupt. This was an aspect that apparently had not concerned the Association.

Another result of this policy was that there were many members who patronized the Association infrequently but still had partly paid-up shares. In 1950 the policy was changed so that patrons with less than 25 dollars business were not included in the patronage dividend allocations. Their business was considered non-member business. This lowered the number of members and it reduced the bookkeeping requirements.

c) Membership Regulations: There was no provision for contracts with the members. Members could terminate their membership with the Association or they could be expelled by a two-thirds vote at a general meeting. In either case provision was made for the repayment of equity capital. Only farmer producers could be members of this Association but it was open to all farmers who patronized the co-operative and subscribed to ten dollars worth of shares. Apparently, membership privileges began when the member subscribed for the share rather than when it was fully paid up. Each member was allowed to come to all general meetings and had one vote.

Table 31. The Relative Importance of Subscribed Capital to Authorized Capital and Outstanding Capital to Subscribed for the years 1941-50: Winkler Co-operative Creamery Limited

Year	Authorized share capital	Subscribed share capital: Total	Subscribed share capital: As a per cent of authorized	Outstanding share capital: Total	Outstanding share capital: As a per cent of subscribed
	-dollars-	-dollars-	-per cent-	-dollars-	-per cent-
1941	10,000	3,440[a]	34	1,323	38
1942	10,000	11,650	116	1,517	13
1943	10,000	12,360	124	8,653	70
1944	10,000	14,030	140	10,332	74
1945	30,000	14,030	47	10,222	73
1946	30,000	14,030	47	9,992	71
1947	30,000	22,859	76	12,342	54
1948	30,000	23,988	80	13,563	57
1949	30,000	26,162	87	14,545	56
1950	30,000	26,158	87	14,497	55
Average 1941-50	24,000	16,871	70	9,699	57

[a]Estimated from membership number.

d) Appointment of Surplus: Provisions were made for the appointment of the surplus similar to those for the Vita Co-operative Limited[9] with the exception that the interest rate was set at five per cent rather than seven.

Although the original statutory provisions were the same, different interpretations were made from these provisions. In the first place a statutory reserve[10] was never established as all surplus monies were allocated to the retained dividend or revolving surplus fund. Secondly, interest was not paid on share capital. Thirdly, the allocation of

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[9]See p. 175.

[10]Apparently the statutory reserves were not built up as such reserves were taxable under the Federal Income Tax Act whereas monies allocated to the retained dividend or revolving surplus fund were taxable as income to members.

patronage dividends to the revolving surplus fund was subject to reduction due to the transfer of monies to outstanding share capital as part payment as well as the complete payment of shares. At Vita the retained patronage dividends had to equal the value of a share within four years or the money was not transferred to share capital. The members and non-members were treated alike in the allocation of patronage dividends although there appeared to be no statutory authority for this policy. At the same time patrons became members much more quickly than was normal for other co-operatives due to the share purchase policy described above.

During 1948, the original By-law which covered the distribution of surplus was repealed. It was substituted by the same By-law as outlined for the Riverton Co-operative Creamery Association Limited.[11] This removed the specific provision for the statutory reserve and set out the principle of the revolving surplus fund in more definite terms than in the 1940 By-law. The loans were made automatically but repayment was dependent upon the financial status of the Association as ascertained by the Directors. The Association made out a certificate of indebtedness for each member.

The revolving surplus fund was a good source of funds but there was a limited accumulation of paid up share capital. This gave the Association an unstable appearance and was not satisfactory for credit relations outside the membership. Although no action was taken to alter this situa-

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[11]See p. 132.

tion during the 1941-50 period a definite step was made in 1952 when a By-law was passed outlining that:

> "the Directors of the Association...issue and allot....shares in the following manner:
>
> (a) That twenty-five (25) per cent of the revolving surplus standing to the credit of each member shall be transferred to the capital account and used to purchase paid up capital stock for such member.
>
> (b) That twenty-five (25) per cent of the net earnings accruing due to each member in each and every year starting from January 1st, 1952, shall be transferred to capital stock and used to purchase paid up stock in the name of such member until the full seventy thousand shares shall have been paid up."[12]

This By-law was introduced to increase the paid up share capital and it corresponded with the increase of authorized share capital from $30,000 to $100,000. The need for this provision resulted mainly from the fact that reserves had not been accumulated and the entire surplus could be made payable to the members.

Payment from the revolving surplus fund was started in 1948. The fund was to be revolved about every seven years for the creamery and about every five to six years for the egg and poultry departments. Payments on the revolving fund plan were continued to 1951. By this time the dividends up to 1945 were made payable and about $24,000 had been paid out.

The revolving plan was changed from a yearly to a percentage basis in 1951. With this plan, if ten per cent of the revolving surplus was made payable during any one year this amount was deducted from the indebt-

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[12]By-laws, 1952 Amendments.

edness to each member. Prior to this change it was not possible to know exactly how much remained to be paid for any one year due to previous redemptions of equity and transfers to share capital. With the percentage method the amount of the payment was quickly determined from the total value of the revolving surplus fund. At the same time this reduced the bookkeeping work necessary and made it easier for the members to understand the amount of the payment. The most important feature of this policy was that it eliminated payment of large dividends during years of low earnings as it was always based on the total of the revolving surplus fund. As this plan eliminated the influence of time on payment to patrons it removed the revolving feature of the allocated surplus fund.

C. Educational Program: One of the most important co-operative features of this Association was its continued support of the principle of co-operative education. This support had been both direct and indirect. Directly, the Manager and the Directors have organized study groups in the area, at first, to promote the basic co-operative principles, and later, to indicate specific problem concerning the operations of the creamery. Indirectly, the Association has supported the principle of co-operative education through financial assistance to the Rhineland Agricultural Society, The Federation of Southern Manitoba Co-operatives and the Manitoba Federation of Agriculture. All three of these Associations were concerned with the extension of co-operative principles and enterprises.

The Association has made annual donations to the Hospital, Red Cross and other Welfare Institutions which indicated that it accepted its community responsibilities.

The Association has used the local paper to inform the members of special features of the co-operative. Films, books, bulletins and news-letters have been distributed among the members. There has been considerable support of adult education generally.

Due to the expanding nature of the co-operative it was necessary to go to the membership several times to present the new plans. This was normally done by going out to the local schools in the area so that a large percentage of the members had an opportunity to learn the proposed plans. This proved to be a successful way of getting new ideas accepted.

The most effective work along community lines was the support given to the promotion of dairy cattle improvement. This was started about 1945 with the idea of improving the quality of livestock and dairy production in the area. Some 500 good quality calves were brought into the area as part of this program. This was supplemented first with the use of government bulls and later with an artificial insemination program. The herd improvement program was initiated to improve the position of the farmer and to make certain that there would be a continuous supply of cream available for future plant operations. This work was carried on in co-operation with the Departments of Agriculture.

D. Review of Production: The creamery operations were started at Winkler in about 1919. It was operated under private ownership until 1940.

1. Type of Production: The initial operations were the procurement of cream, the manufacture and sale of butter. During the 1941-50 period

the egg, poultry, feed and ice cream departments were established. The sales from each of these were shown in Figure 22. The creamery is also part owner of the Winkler Co-operative Trucking Limited which operated on a restricted P.S.V. franchise between Winkler and Winnipeg.

a) Creamery Operations:

(1) Butter Production: The annual production of butter at this creamery remained relatively stable between 1925 and 1935 but improved somewhat during the 1936-40 period. Apparently, there was a shift towards more cream production on the part of the farmers. The yearly fluctuation in production between 1931 and 1950 (Figure 29, Appendix B), was much less than for the Vita Co-operative Limited. This indicated more stable agricultural conditions and less effective competition from other creameries.

The increase in butter production over the 1935-39 average production was about 146 per cent for the ten years 1941-50. This was about 30 per cent above the same figure for all creameries in the province (Figure 28, page 274). The sudden rise in production in excess of the natural increase in 1941 indicated that more farmers were patronizing the co-operative than had dealt with the creamery under private ownership.

Butter production reached a peak in 1944 and receded somewhat following that date although much less than the average for the province. Part of the drop in butter production after 1948 resulted from the use of cream for the manufacture of ice cream.

(a) Scale of Plant Operations: The average level of butter

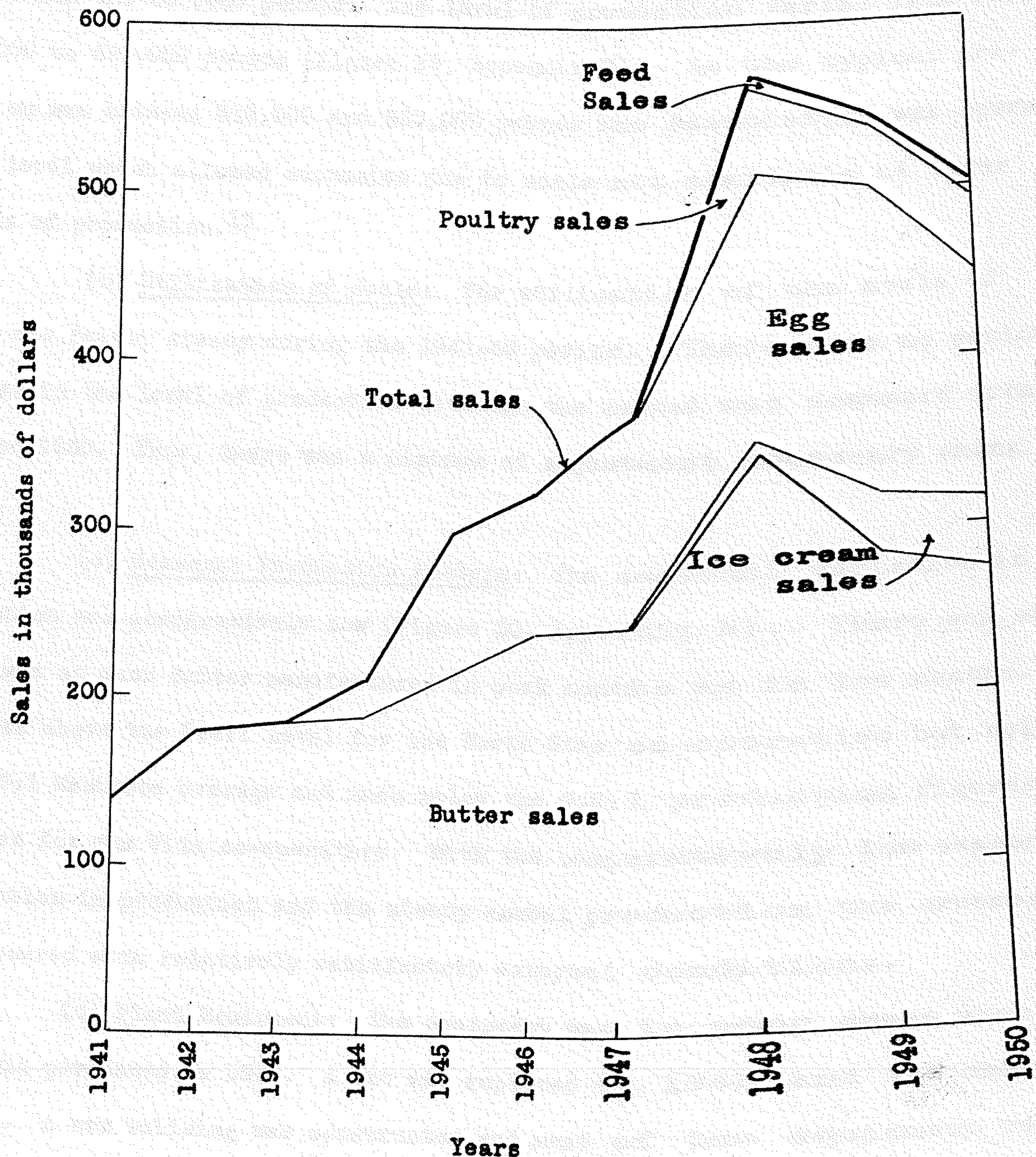

Figure 22. Total annual sales and the amount contributed by each enterprise for years 1941 to 1950: Winkler Co-operative Creamery Limited.

production was 540,000 pounds. The level of production varied from about 480,000 to 590,000 pounds (Figure 29, Appendix B). As the typical production was between 510,000 and 560,000 pounds the Association was operated at a level which allowed economies due to scale not available at lower levels of production.[13]

(b) Utilization of Scale: The utilization of the scale of plant was fairly steady during the 1941-50 period. There were no serious changes in the level of production although the trend was downward from 1944 to 1950. Thus, there was a minimum of adjustment necessary among years.

(c) Seasonal Production Pattern: The seasonal variation in production was comparatively low (Figure 30, Appendix B). There was about 2.8 times as much butter manufactured in peak months as in low months. This was above the 2.4:1 level for the North Star co-operative but below the 3.9:1 Manitoba average and much below the 9.6:1 production figures recorded for the Vita co-operative. With the comparatively low seasonal fluctuation in production and the steady annual production the creamery was favoured with relatively satisfactory external conditions.

(d) Plant Equipment: The equipment was in poor shape when the plant was purchased in 1940. A vat was replaced in 1942 and the churn in 1943. A new building was constructed and most of the equipment replaced or rebuilt during the 1941-50 period.

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[13]See footnote 6, p. 42.

The churn capacity was about 2,400 pounds but the two vats were only 2,000 and 3,000 pounds each. With the small vats production was complicated and at times part churnings were necessary. During a peak month it was necessary to churn upwards to 65 times to produce all the butter. This implied that there were from 2 to 3 churnings per day. With variation in daily production the equipment and the men were worked long hours.

(e) Efficiency in Butter Production: The average over-run for the ten years was about 22 per cent (Table 32). It varied from about 20 to 24 per cent during the ten years but on the whole appeared fairly satisfactory.

(2) Ice Cream Production: The production of ice cream was started in 1948. This enterprise was added to establish an alternative use for cream to offset the anticipated influence of margarine sales. Production was started at a fairly high level and about 30,000 gallons a year were produced in 1949 and 1950.

Although a low net margin on ice cream operation was recorded on the operating statement this appeared to have resulted in part from the method of allocation of overhead costs. As the patronage was distributed to the members on a butterfat basis there was little concern over the method of allocation between the ice cream and the butter departments.

b) Egg, Poultry and Feed Departments:

(1) Egg Department: The egg department was started in 1942 although there was no breakdown available for this department until 1944.

The volume handled by this department steadily increased after 1944 and reached about 418,000 dozen by 1950. The value of sales from this department are illustrated in Figure 22, page 225.

Table 32. Average Initial Price per Pound to Patrons, Declared Patronage Dividend, and Over-run from Butter Manufacture: Winkler Co-operative Creamery Limited, 1941-50

Years	Average initial price[a]	Declared patronage dividend	Total returns to patrons	Annual average per cent over-run
	-cents per pound of butterfat-			-per cent-
1941	29.4	2.0	31.4	21.2
1942	34.0	1.6	35.6	20.9
1943	38.1	1.8	41.8	20.3
1944	40.8	0.9	41.7	22.2
1945	41.8	1.1	42.9	22.0
1946	45.3	1.0	46.3	22.2
1947	51.3	2.1	53.4	22.6
1948	67.6	2.0	71.6	21.3
1949	59.8	1.3	61.1	23.4
1950	53.3	3.5	56.8	24.2
Average 1941-50	46.2	1.8	48.0	22.0

[a]Initial prices for years 1941-47 were adjusted to allow for the difference between the accounting year for production and expenditure.

Prior to the introduction of the egg candling facilities the farmers had no regulated outlet for their eggs and normally traded with the local storekeepers. Therefore, this enterprise represented a substantial increase in service to the members as well as increased returns in terms of patronage dividends. The net margin on operations amounted to about $2,500 to $3,000 per year from 1945 to 1950 which was mainly allocated to patrons through the revolving surplus fund on the basis of the value of sales.

(2) Poultry Department: About 1947 the Association began to handle dressed and live poultry for the patrons. This service was grad-

ually increased and by 1950 some 290,000 pounds of poultry were handled. This was a very seasonal enterprise but the net margin on operations averaged close to $1,700 for the three years 1948 to 1950. The patronage dividends were allocated directly to the revolving surplus fund and credited to the "certificates" of those patrons who sold poultry products.

(3) Feed Department: Apparently feed was sold from the time the creamery started but the net margin from this source was low. It was normally distributed as other revenue on the operating statement.

c) Cream Trucking: The creamery operated two cream trucks during the 1941-50 period to provide the patrons with ready access to the plant. These trucks were basically a service to the patrons and a safeguard against excessive competition from other creameries.

E. Marketing: Source and Distribution of Produce:

1. Procurement of Farm Produce: The area from which the farm produce was procured was outlined in Figure 1, page 10. This outlined the broad cream procurement area whereas produce such as eggs and poultry were procured from a somewhat smaller area around Winkler. Alternative outlets were available in the area for the other produce. The creamery's trucks procured about 56 per cent of the butterfat, the farmers delivered 40 per cent and four per cent was delivered by train. Most of the other produce was delivered to the plant by the farmers.

2. Distribution of Produce: During the period 1941 to 1950 about 95 per cent of the butter was sold in 56 pound butter boxes to the Winnipeg market, and about five per cent was wrapped and sold locally to patron and

retail outlets. About two per cent of the sales were made to patrons. The ice cream products were distributed to retail outlets in South-Central Manitoba. Practically all of the egg and poultry produce were sold to the Winnipeg wholesale markets.

F. Payment and Collection Policies:

1. Payment to Patrons: Patrons were paid by cash rather than by cheque. Dividends were payable in cash and had to be collected by calling at the office. Cheques were not used in the payment of dividends to avoid confusion of names.

2. Collection: Sales to patrons were normally paid through deductions from cream receipts. Local sales to retail outlets were normally carried on credit for a short period. Payments from the wholesale market were normally prompt. The books were closed in September which was a fairly high production month. It was assumed that the receivables were somewhat higher than in December.

G. Membership and Patronage:

1. Statistics: The membership numbers reported in Table 33 were obtained from miscellaneous records. They were at best only estimates but were considered sufficiently accurate to indicate the general trends over the period.

There were only 120 members when the co-operative was first organized in 1940. This was increased as soon as the creamery declared its first dividend as they were applied directly to share capital. The number of members grew fairly steadily with the exception of the 1944-46 period. No monies were transferred to share capital during that period. This was corrected in 1947 and, consequently, the increase in recorded membership was substantial between 1946 and 1947.

A large membership was built up but a number of the members did only a small amount of business with the Association annually. These would normally be non-members in other creameries. As a result of this large membership the average sales per member was only $192 for the ten years. With the exception of 1945 and 1946 for which the membership appeared to be inaccurate the sales per member gradually increased from 1942 to 1948.

Table 33. Estimated Number of Members, Total Sales per Member and Butterfat Receipts per Member: Winkler Co-operative Creamery Limited, 1941-50

Years	Estimated number of members[a]	Total sales		Butterfat receipts[b]	
		Total	Average per member	Total	Average per member
		-thousand dollars-	-dollars-	-thousand pounds-	-pounds-
1941	344	139	404	394	1,145
1942	1,165	182	156	473	406
1943	1,236	184	149	472	382
1944	1,430	212	148	486	340
1945	1,500	300	200	452	301
1946	1,600	325	203	437	273
1947	2,280	370	162	435	191
1948	2,399	568	237	449	187
1949	2,616	545	208	408	156
1950	2,692	501	186	411	153
Average 1941-50	1,726	332	192	442	256

[a]The number of members was gathered from miscellaneous records and checked against subscribed share capital.

[b]Butterfat receipts were used instead of butter production as some butterfat was used for other than butter production in 1948 to 1950.

The butterfat receipts per member showed a considerable reduction in the average per member during the 1946-50 period. This was caused partly by the increased number of small shippers and partly by the fact that some of the new members only dealt with other departments. The average receipts per member was 256 pounds which was low.

It was estimated that about 98 per cent of the members were active farmers and about two per cent retired farmers. This low percentage of non-active farmers resulted from the policy of repaying equity at the time of retirement. Non-member business was practically non-existant between 1941 and 1950 as only beginner patrons came under this heading.

2. Meeting Attendance: The number of members attending the general meetings varied from 75 to 400 during the 1941-50 period but the average was estimated around 100 members. Although this only represented at the most 15 per cent of the members it was felt that they usually made up a fair representation of the entire membership.

3. Level of Production and Membership Support: As outlined in Figure 22, page 225, the total volume of sales steadily increased. This was due to the introduction of new enterprises and the change in prices rather than a change in cream receipts. In fact, there was a slight reduction in cream receipts from 1944 to 1950.

On the whole the production pattern was steadier than the average for the province which suggests that these members had given the Association good support through the production of cream. An active cream trucking service was maintained which indicated that outside competition as well as service to the patron, was considered important.

H. Financial Results of Operations:[14] The financial results of operations were not directly comparable with the results of other creameries due to the inclusion of several enterprises other than butter manufacture. The analysis were based on the total operations supplemented by additional analysis when necessary.

1. Net Margin on Operations: There was an average net margin on operations of $10,500 for the ten years with a variation from $5,700 to 23,800 among years (Table 66, Appendix A). The years 1944 to 1946 were lower than the ten year average but were somewhat higher relative to net sales than those recorded for the other creameries. The higher return was assumed due to the greater volume at this plant.

a) Source of Net Margin: For the ten years 1941-50 about 76 per cent of the net margin was derived from the creamery department and 24 per cent from the egg, poultry and feed departments (Table 34). For the years 1944 to 1950 about 69 per cent of the net margin was derived from creamery operations. During this latter period the other departments contributed from 15 to 44 per cent of the total net margin on operations. This variation among years was due to changes in the prices as well as changes in volume of produce handled.

b) Net Margin on Operations to Net Sales: The net margin on operations averaged 3.1 cents per dollar of net sales for the ten years and varied from 1.6 to 5.8 cents among years (Table 67, Appendix A). The net

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[14] Tables 66, 67 and 68 showing the operating and cost of manufacture data are in Appendix A. The trends are illustrated in Figure 23, p. 238.

margin on operations was about one cent higher during the five years 1941-45 than for the five years 1946-50. This implied that either the creamery operations had become less efficient or the new enterprises returned lower rates.

For the years 1944-50 the average net margin was 2.9 cents per dollar of total net sales. The net margin on creamery operations was 3.0 cents per dollar of creamery sales and the comparable figure for other operations was 2.7 cents. For this same period about 66 per cent of the sales were from the creamery department which provided 69 per cent of the total net margin for that period (Table 35).

For the ten years the net margin on creamery operations was 3.4 cents per dollar of sales but varied from 1.6 to 5.8 cents among years (Table 34). The net margin for the other enterprises averaged 2.7 cents of sales from these enterprises and varied from 1.8 to 4.3 cents among years. Apparently, the additional enterprises increased the size of the net margin on operations but not in proportion to the volume of sales. At the same time, the net margin on creamery operations for the years 1944 to 1950 appeared low compared to that obtained by the other creameries, especially when the difference in the scale of operations were taken into account.

c) Net Margin on Operations Relative to Capital Structure: The net margin on operations averaged 22 cents per dollar of permanent capital (Table 36). The return on permanent capital ranged from a low of 12 cents per dollar in 1949 to a high of 46 cents per dollar in 1941. The high in 1941 reflected a shortage of permanent capital while the 1949 situation represented a low net margin on operations. The average rate of return for the ten years approximated that obtained by the Vita Co-operative Limited (Table 25, page 186).

Table 34. Net Margin on Operations; Source by Department and Relative Importance to the Net Sales of Department: Winkler Co-operative Creamery Limited, 1941-50

Years	Total net margin on operations	Net margin on creamery operations: Net margin	Per cent of total	Per cent of net sales	Net margin from egg, poultry and feed department: Net margin	Per cent of total	Per cent of net sales
	-thousand dollar-		-per cent-		-000-dollars	- per cent -	
1941	8.0	8.0	100	5.8	-	-	-
1942	7.5	7.5	100	4.1	*	*	*
1943	8.3	8.3	100	4.5	*	*	*
1944	5.7	4.9	85	2.5	0.8	15	4.3
1945	7.6	5.1	67	2.4	2.5	33	2.9
1946	6.9	4.3	63	1.8	2.6	37	3.0
1947	12.4	9.4	76	3.9	3.0	24	2.4
1948	16.4	9.0	56	2.6	6.9	44	3.2
1949	9.0	5.1	57	1.6	3.8	43	1.8
1950	23.8	18.1	76	5.8	5.7	24	3.0
Average 1941-50	10.5	8.0	76	3.4	2.5	24	2.7

*Not separated on operating statements during 1942 and 1943.

Table 35. Relative Importance of Sales by Department: Winkler Co-operative Creamery Limited, 1941-50

Year	Total net sales	Sales of creamery department	Sales of egg, poultry and feed departments
	-thousand dollars-	- per cent -	
1941	138.7	100	-
1942	181.6	100	*
1943	183.7	100	*
1944	212.0	91	9
1945	300.1	92	28
1946	325.0	73	27
1947	370.0	66	34
1948	568.2	62	38
1949	545.1	58	42
1950	501.2	62	38
Average 1941-50	332.5	72	28

*Not separated on operating statement during 1942 and 1943.

Table 36. Ratio Analysis showing the Net Margin on Operations Relative to the Capital Structure and the Fixed Assets: Winkler Co-operative Creamery Limited, 1941-50

Year	Net margin to capital structure	Net margin to fixed assets
	-dollars-	
1941	0.46	0.71
1942	0.32	0.67
1943	0.29	0.67
1944	0.16	0.19
1945	0.16	0.25
1946	0.17	0.23
1947	0.22	0.43
1948	0.24	0.30
1949	0.12	0.16
1950	0.28	0.45
Average 1941-50	0.22	0.33

d) Net Margin on Operations to Fixed Assets: The net margin on operations relative to the investment in fixed assets averaged about 33 cents for every dollar invested (Table 36). This represented a lower average rate of return than for either the Vita Co-operative Limited or the North Star Co-operative Creamery Association Limited.

The net margin on operations varied from 16 to 71 cents per dollar invested in fixed assets among years. The high ratio values for the first three years reflected a low investment in fixed assets compared to later years. Part of this low investment was due to the quality of the assets rather than the scale of operations. The low ratio values for 1944-46 were caused by increased investment in fixed assets as well as a lower net margin. With the exception of 1949 the returns relative to the investment in fixed assets were improved during the last four years over the 1944-46 period. With a fairly large investment in fixed assets a considerable portion of the earnings went into the depreciation reserve. During the three years 1948-50 this reserve was increased by about $6,600 per year.

2. Factors Which Caused the Net Margin on Operations to Fluctuate:

a) Gross Margin on Net Sales: The gross margin averaged about five cents per dollar. It varied between 7.1 and 3.1 cents per dollar of sales among years. A gross margin of four cents or lower was recorded for the three years 1944-46 and 1949 (Table 67, Appendix A).

(1) Factors Which Influenced the Gross Margin on Sales:

(a) Volume of Net Sales: The changes in the relative importance of net sales between years was usually accompanied by a greater relative change in the gross margin (Figure 23). This was particularly evident between 1948 and 1949. As the change in the volume of sales was due primarily to price changes this indicated that management had not made proper adjustment in prices paid to patrons to allow for a higher gross margin on sales.

(b) Cost of Product Manufactured: The total cost at plant averaged 88.7 per cent of the total cost of product manufactured (Table 67, Appendix A). The amount paid direct to patrons made up an average of 87.4 per cent and trucking costs 1.3 per cent.[15] The manufacturing expense averaged 11.3 per cent of the total cost of product manufactured for the

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[15] The relative importance of trucking costs was considerably lower than that recorded for the Vita co-operative due to the fact that this cost was spread over a larger business.

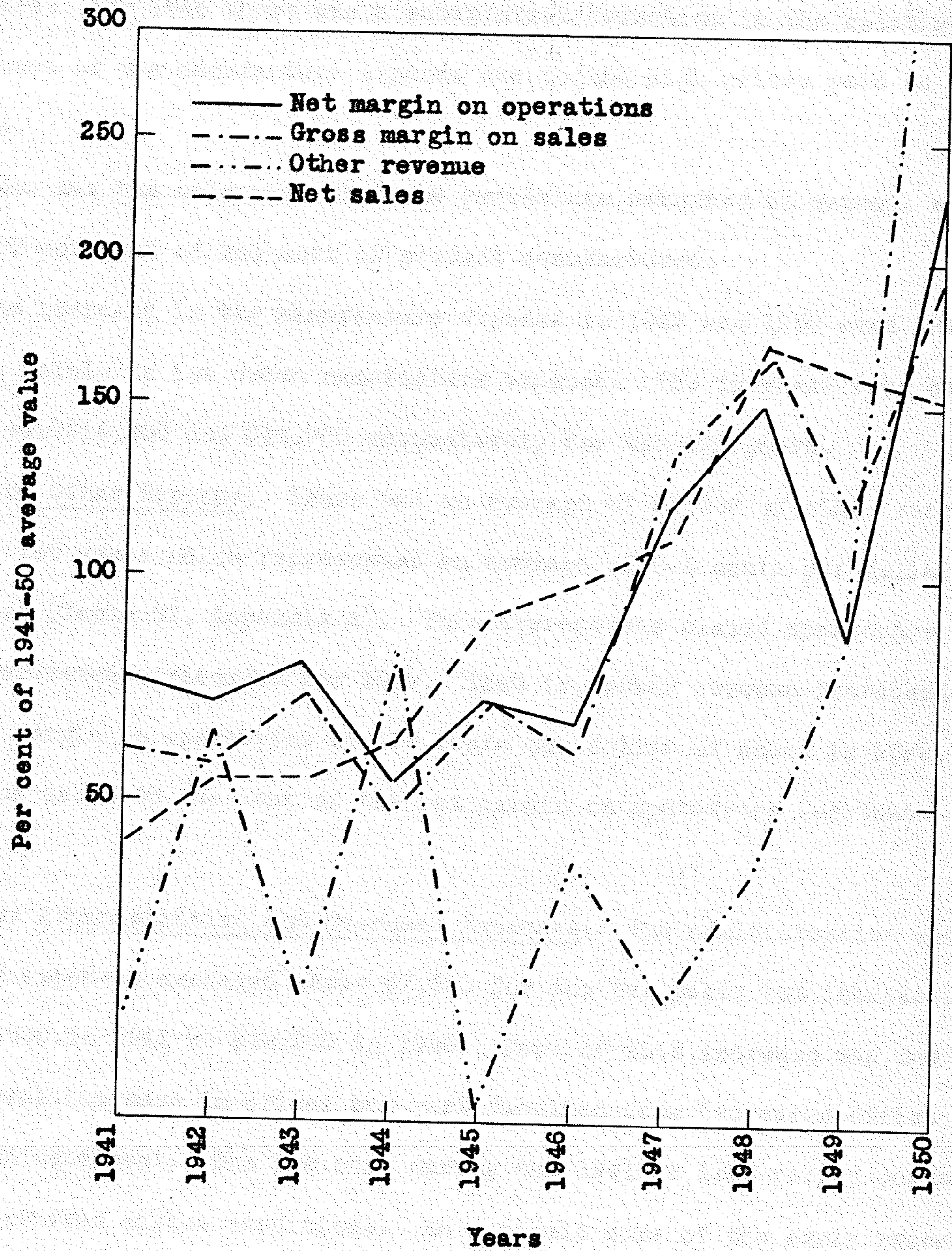

Figure 23. Trend percentages of selected operating statement components for years 1941 to 1950 (base 1941-50 average): Winkler Co-operative Creamery Limited.

ten years. For 1948 there was a substantial reduction in the relative importance of the manufacture expense due to the high prices paid to patrons.

This was the only year that the percentage returned to patrons was above 90 per cent of the cost of product manufactured.

The increase in the manufacture expense in 1949 and 1950 over 1948 was due mainly to ice cream manufacture expense. The increase from this source was $14,600 and $18,900 respectively for the two years.

b) Other Revenue: There was an average of $1,500 of other revenue for the ten years which represented an average of 0.4 cents per dollar of net sales (Table 67, Appendix A). This average was biased upward due to the other revenue recorded for 1950. That is, other revenue increased the net margin on operations by 1.9 cents per dollar of sales in 1950, which was about 40 per cent of the net margin on operations for that year.

c) Administrative and Overhead Expenses: The administrative and overhead expenses averaged about $7,500 for the ten years but increased from $2,000 in 1941 to $18,200 in 1950. Part of this increase was due to the general increase in prices but part resulted from increased office staff and equipment. The low cost during the 1941 to 1946 period reflected understaffed office conditions. As a result some of the early records were inadequate for the needs of the Association. The dividends were not applied to the purchase of shares during 1945 and 1946 because of the lack of staff to carry out this operation. The years 1941-46 represented a situation where the manager was required to do a large percentage of the clerical work which left a minimum of time for managerial activities. The high relative costs of administration and overhead expense for 1947 to 1950 reflected much more adequate record keeping facilities. This was accompanied with increased demands for records as a result of the multi-product nature of plant operations.

I. Distribution of Net Margin on Operations: The Association allocated nearly all the net margin on operations to the retained dividend or revolving surplus fund. During the first few years part of these allocated funds were set aside on the balance sheet as a statutory reserve. But due to the fact that the money had already been allocated as a patronage dividend it was not a statutory reserve in the legal sense. Some monies were transferred from the dividends payable to a special reserve as a result of non-collection by members. This reserve was included with the undivided surplus and reserves for analysis.

The net margin on operations totalled about $105,300 for the ten years. By 1950 about $78,400 had been allocated to increased member equity (Table 37). This consisted of about $13,200 in outstanding capital, $26,400 in undivided surplus and reserves, $35,100 in the revolving surplus fund and $3,700 in dividends declared payable. Of the remaining $26,900, about $2,800 had been set aside as a reserve for bad debts and about $24,100 had been paid in cash to patrons. The payment in cash resulted from payments on the revolving surplus fund plan and the redemption of equity to retired members. About $5,500 had been paid out by 1948 and

$18,600 were paid out between 1948 and 1950. Most of the money paid out prior to 1948 was for the redemption of equity capital.

1. Source and Distribution of Net Margin: The Association attempted to distribute the net margin on operations equitably among the patrons. Separate patronage records were maintained and dividends were declared for each department based on the value of butterfat, eggs and poultry received. In this way the Association recognized the quality of the product in the payment of dividends as well as in the initial price. Differentiation by quality and by product were set out in the By-laws of the Association. Although the net margin as calculated was distributed on an equitable basis some inequities could exist as a result of improper allocation of overhead expenses among departments.[16]

Table 37. Summary of the Distribution of the Net Margin on Operations Up to 1950 for the Winkler Co-operative Creamery Limited

Net distribution	Amount distributed	
	Dollars	Per cent
	-thousands-	
Capital outstanding[a]	13.2	12.5
Undivided surplus and reserves	26.4	25.1
Revolving surplus fund	35.1	33.3
Dividend declared payable	3.7	3.5
Total to equity	78.4	74.4
Reserve for bad debts	2.8	2.7
Paid in cash to patrons	24.1	22.9
Total net margin	105.3	100.0

[a]There was an error in this account as there were a few direct cash payments on share purchase.

[16]The administrative and financial expenses of the Associations were apparently allocated on the basis of sales for each department. As an example, for the years 1949 and 1950 these expenses were allocated at 2.5 and 3.4 per cent of sales respectively. It was unlikely that these expenses would bear the same relationship to sales in each department,

J. Financial Structure of the Association: The financial structure of the Association was changed materially over the period due to the influence of specific policies of operation and expansion.

The information on the original source of funds was outlined in Table 38. About 53 per cent of the original funds were obtained from the estate of the former owner. This loan was secured by Chattel and Real Property Mortgages. About 42 per cent of the funds were supplied by a few members through direct loans to the Association. Only five per cent of the original funds were supplied through the sale of shares which represented the original equity contribution of the members.

Table 38. The Original Source of Funds Used for the Purchase of the Creamery Business in 1940: Winkler Co-operative Creamery Limited

	Rate of interest	Value of loan	
		dollars	per cent
	-per cent-		
Mortgage (Chattel and Real Property)	6	5,973	53
Loans from members	5	4,664	42
Outstanding Share Capital	0	586	5
Total		11,223	100

In addition to the 42 per cent supplied by the members the directors signed notes at the bank so that the Association could have working capital. Therefore, much of the success of the Association was dependent upon an enthusiastic few.

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therefore, this suggested that some inter-department transfers were made. Before definite observations could be made about the proper allocation of these and other overhead costs much more information would be necessary than was available for this study.

For the 1941-50 period the sources of capital[17] were: outstanding capital (17%), reserves and undivided surplus (17%), allocated surplus (36%), loans from public (15%), bank (4%), and business creditors (11%), Table 70, Appendix A). Equity capital contributed 70 per cent of the supply of funds which represented a considerable improvement over the initial five per cent. The use of funds for the ten years was divided among fixed assets (55%), current assets (36%) and other assets (9%). An important item in the use of funds was the comparatively high investment in fixed assets.[18]

The value of total assets averaged $57,700 for the ten years (Table 69, Appendix A). They were increased from $18,400 in 1941 to $101,300 in 1950, which represented a net increase of $82,900, (Table 72 Appendix A). The increase in the value of assets was due to the replacement of equipment and expansion of plant facilities.

1. Working Capital Position: The working capital position of this Association was not exceedingly strong due to the existance of a number of loans owing to members. Some of these were demand loans although they were apparently carried on the books for a number of years. They were separated from the current liabilities in this analysis and actually in-

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[17]The sources and use of funds were outlined in Table 69, 70, 71 and 72 in Appendix A. These data were shown in component percentage form in Figures 24 and 25. Some trends were illustrated in Figure 27, p. 255.

[18]The percentages indicate the relative importance of the source and use of funds averaged for the ten years.

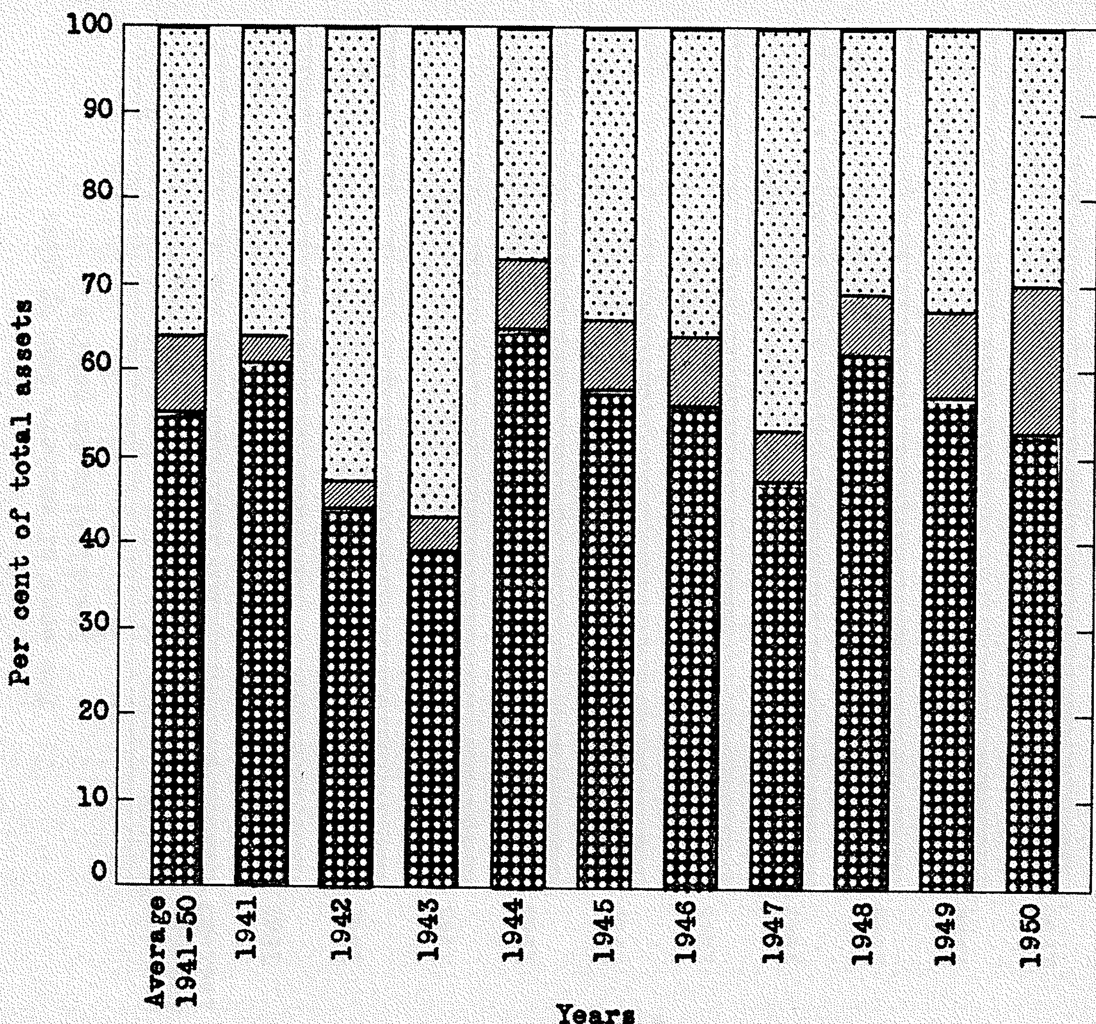
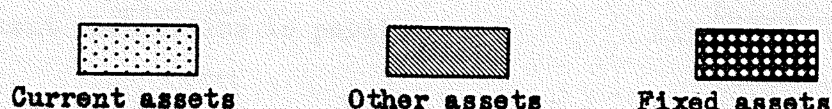


Figure 24. Assets in component percentage form for years 1941 to 1950 and 1941-50 average: Winkler Co-operative Creamery Limited.



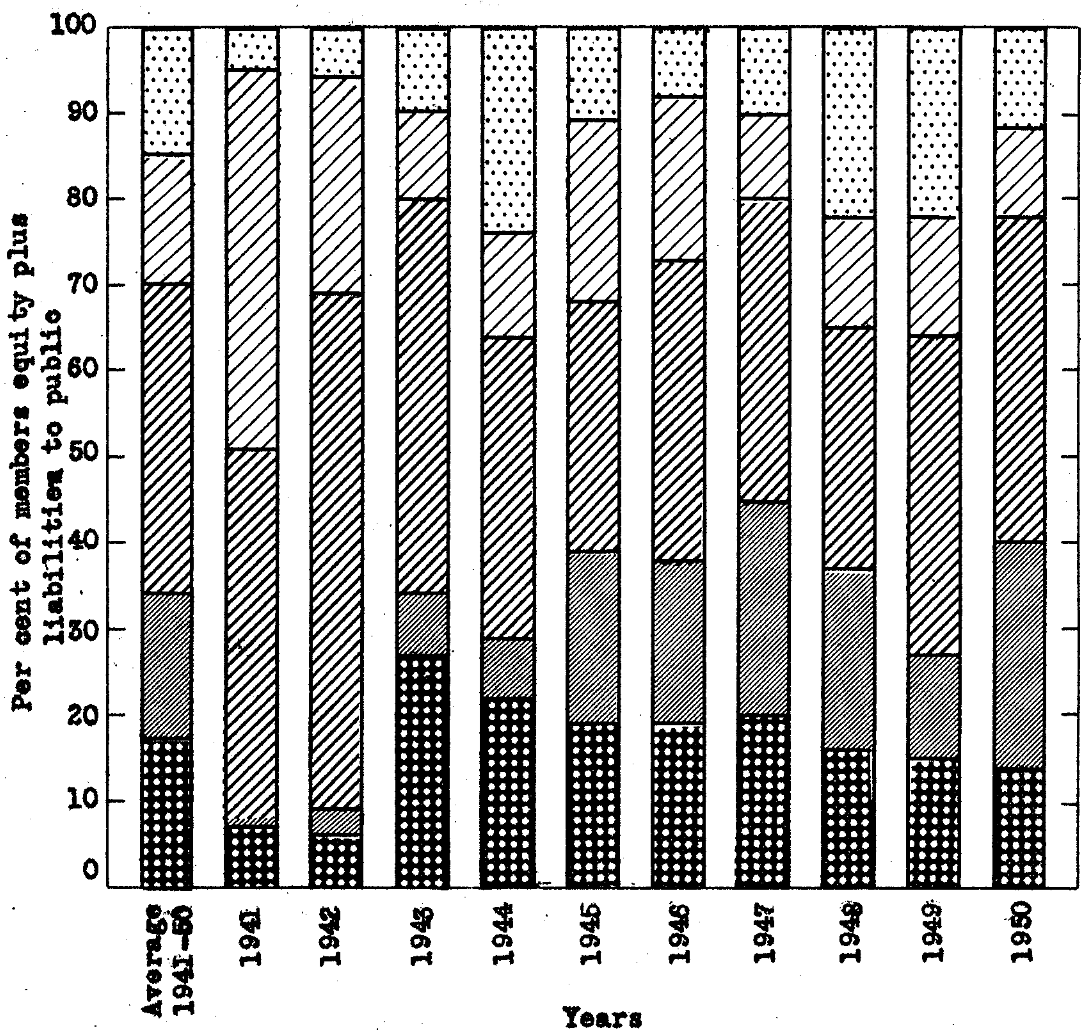
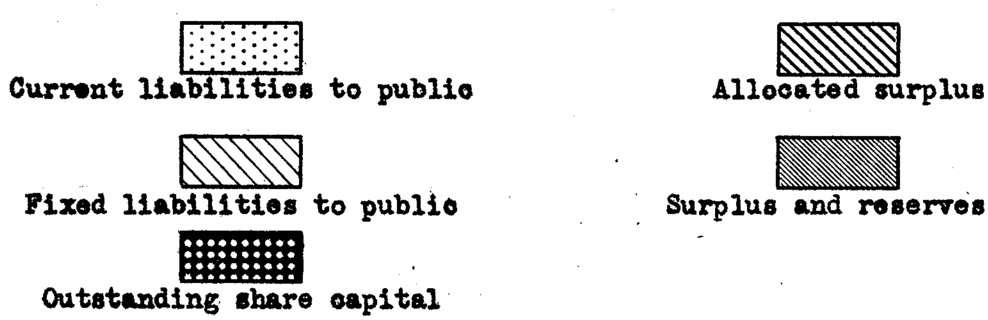


Figure 25. Liabilities and members equity in component percentage form for years 1941 to 1950 and 1941-50 average: Winkler Co-operative Creamery Association Limited.



cluded with the permanent capital. This was done primarily due to the fact that this money was used more-or-less on a long term basis.

a) Current Ratio: The average value of this ratio was 2.2:1 for the ten years (Table 39, page 249). The ratio value as calculated here was below the 2:1 minimum during the last three years and in 1944. Apparently, these low positions were caused by a transfer of funds from current to fixed assets although the last three years were biased somewhat due to the inclusion of a deferred liability in with current liabilities.

With the loans from public (which included cash loans from members) included in the current ratio the average for the ten years was 1.2:1. As some of these loans were current, it was assumed that the actual position of the co-operative was somewhere between 2.2:1 and the 1.2:1 ratio averages. This indicated a low margin of working capital.

b) Net Working Capital Position: The net working capital position was outlined in Figure 24. The net working capital position was exceptionally poor in 1944. This was improved by 1945 through increased loans from members and as a result of the transfer of the net margin on operations to the undivided surplus. The net working capital position was negative in 1944 if the loans from public were all considered current in nature.

The change in the net working capital position between 1947 and 1948 resulted from a substantial increase in the investment in fixed assets and the payment of about $10,000 to patrons. The payment to patrons was in excess of what was anticipated due to the large movement of people from

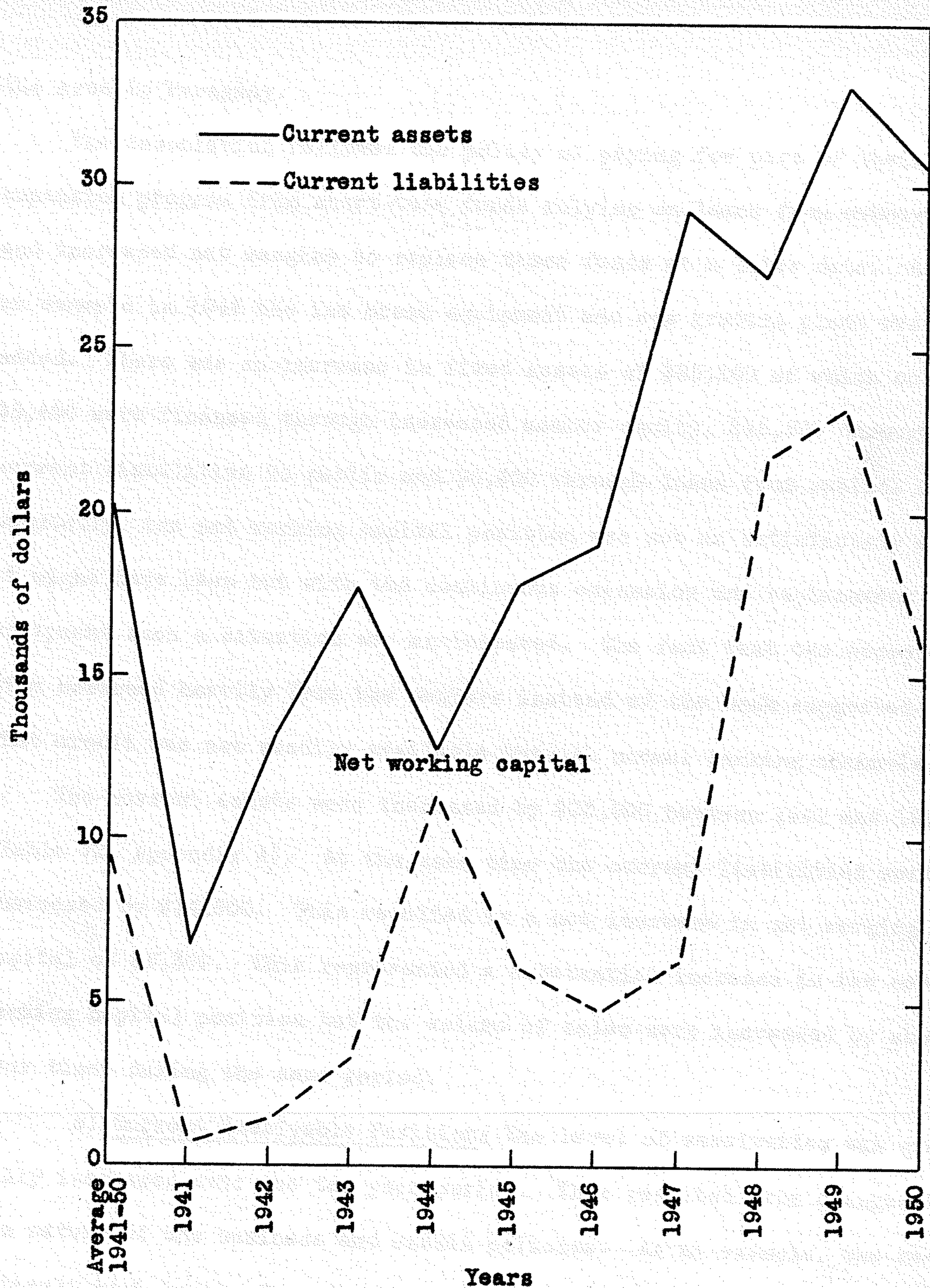


Figure 26. An illustration of the net working capital position for years 1941 to 1950 and average 1941-50: Winkler Co-operative Creamery Limited.

the area to Paraguay.

The Association followed the policy of paying for part of their expansion program from short-term funds relying on loans from members and increased net margins to replace these funds at a later date. As an example in 1948 the ice cream equipment and egg grading plant were added. There was an increase in fixed assets of $25,200 of which only $6,400 were financed through increased member equity, $12,500 through current liabilities to public and $5,300 through loans from public. Consequently, the net working capital position was not as satisfactory as it might have been but with the continuous expansion and replacement of equipment such a situation was anticipated. The fact that the Association borrowed heavily from the members instead of the bank suggested that credit was not readily available through normal banking channels.

The current assets were increased by $23,900 between 1941 and 1950 (Table 72, Appendix A). At the same time the current liabilities were increased by $14,600. This resulted in a net increase in net working capital of $9,300. This represented a substantial increase in the net working capital position but the volume of sales were increased by about four times during the same period.

c) Current Receivable Position: The level of receivables was gradually increased over the ten year period. This resulted from changes in the nature of the business and credit policies. As an example, the relatively high level of receivables in 1949 and 1950 was due mainly to the influence of ice cream sales as it was necessary to finance ice cream cabinets for retail outlets (Table 70, Appendix A).

(1) Receivables to Current Assets: Forty four per cent of the average investment in current assets were tied up in current receivables (Table 39). The investment in receivables varied from seven to 68 per cent of current assets among years. This represented a high investment in receivables especially when the critical level was placed at 40 per cent.[19] About one third of the average investment in receivables represented a government subsidy receivable and instalment accounts receivable. This did not eliminate the fact that a large portion of the investment in current assets was tied up in receivables, particularly during the last two years.

Table 39. Ratio Analysis Illustrating Working Capital Relationships: Winkler Co-operative Creamery Limited, 1941-50

Year	Current assets to current debt	Receivables to current assets	Receivables to total sales	Days of sales in receivables
	-times-	-per cent-	-per cent-	-number-
1941	7.3	33	1.6	4.6
1942	8.7	7	0.5	1.4
1943	5.7	23	2.2	6.6
1944	1.1	27	1.6	4.8
1945	3.0	33	2.0	5.9
1946	4.0	55	3.2	9.6
1947	4.6	42	3.4	10.0
1948	1.7	49	2.4	7.1
1949	1.4	56	3.4	10.2
1950	2.0	68	4.2	12.4
Average 1941-50	2.2	44	2.8	8.3

(2) Receivables to Net Sales: The investment in receivables averaged 2.8 cents per dollar of sales for the ten years (Table 39).

[19] See p. 67.

The importance of receivables to net sales was gradually increased from 1.6 per cent in 1941 to 4.2 per cent in 1950. The number of days of sales in receivables for the 1941-50 period averaged 8.3 and varied from 1.4 in 1942 to 12.4 in 1950. This represented a substantial increase in receivables as the volume of sales was greatly increased between these two dates.

2. Characteristics of Permanent Capital (Capital Structure): The sources of funds included in permanent capital were: outstanding share capital, revolving surplus fund, reserves and undivided surplus and loans from public.

a) Outstanding Share Capital: About 17 per cent of the average investment in total assets were supplied by paid up share capital (Table 70, Appendix A). In 1943 about 28 per cent of the investment in total assets were supplied by share capital but by 1950 the relative importance of this source had decreased to 14 per cent. This was illustrated in Figure 25, page 245 and indicated that the expansion of the business was much in excess of the sale of share capital.

There was an increase in the paid up share capital account of about $13,200 between 1941 and 1950 (Table 72, Appendix A). Most of the increase occurred during the 1941-46 period as a result of the large transfer of allocated patronage dividends to paid up share capital. The increase in this account provided about 25 per cent of the increased investment in assets between 1941 and 1946 but only 9 per cent of the increase between 1946 and 1950.

b) Reserves and Undivided Surplus:[20] The reserves and undivided surplus provided 17 per cent of the average investment in assets for the 1941-50 period. This source of funds varied from less than one-half of one per cent to 26 per cent of the investment in assets during the ten year period.

The reserves were the only item included in this account from 1941 to 1944. Following 1944 the reserves made up a small portion of this account. With the exception of 1950 all the reserves should have been included with the revolving surplus fund as this money had been allocated on a patronage basis to members. They were included with this account to agree with the arbitrary allotments made by the auditors during the first few years. This was done to comply with the statutory reserve requirements.

This account was increased $26,300 between 1941 and 1950 (Table 72, Appendix A). This source of funds provided 29 per cent of the increased investment between 1941 and 1946 and 34 per cent between 1946 and 1950. The relative importance of this account varied with the size of the net margin on operations. In essence this account was really part of the revolving surplus fund as most of it was subsequently allocated.

c) Revolving Surplus Fund: This fund provided 34 per cent of the

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[20]During the first four years the Association followed the policy of allocating all dividends to the revolving surplus fund prior to the date the balance sheet was drawn up. In 1945 this policy was changed and the net margin on operations remained in unallocated form until the following year.

average investment in total assets for the ten years (Table 70, Appendix A). The relative importance of this source varied from 59 to 25 per cent of the total investment in assets among years. Due to the change in the time the net margin was allocated to this fund[21] the relative importance of this source of funds was more important during the first three years than during the remainder of the period.

As used by this Association, this was considered a fairly sound source of funds as part of it was tied up in a working capital reserve. The value of this account was increased by $27,100 between 1941 and 1950 (Table 72, Appendix A).

For all practical purposes the revolving surplus fund and the reserves and undivided surplus accounts were similar sources of funds. Combined they provided for 59 per cent of the increased investment in assets between 1941 and 1946 and 68 per cent between 1946 and 1950. In addition, practically all the increase in outstanding share capital resulted from monies transferred from the revolving surplus funds. In total these three sources provided approximately 84 per cent of the increased investment in assets between 1941 and 1946 and 77 per cent between 1946 and 1950. This illustrated the importance of the net margin on operations as a source of funds.

d) Loans From Public: These were mainly direct loans from members[22]

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[21]See footnote 20.

[22]These loans were included as permanent funds due to the fact that they remained on the books for a number of years. During most years it was not possible to determine which part of this account was currently payable.

but included the Chattel and Real Property mortgages from 1941 to 1945. The presence of these loans over the entire ten year period suggested substantial support from a few members even after the initial requirements. These funds provided about 15 per cent of the amount invested in assets over the ten years (Table 70, Appendix A). They varied from 44 per cent in 1941 to nine per cent in 1947. These loans were more important at this co-operative than for the other three co-operatives.

Table 40. Ratio Analysis Showing the Financial and Sales Relationships: Winkler Co-operative Creamery Limited, 1941-50

Years	Ratios		
	Total net sales to fixed assets	Net sales to capital structure	Capital structure to fixed assets
		- times -	
1941	12.4	7.9	1.6
1942	16.2	7.7	2.1
1943	14.8	6.4	2.3
1944	6.9	5.9	1.2
1945	9.8	6.4	1.5
1946	10.8	6.7	1.6
1947	12.8	6.6	1.9
1948	10.5	8.7	1.2
1949	9.6	7.2	1.3
1950	9.4	5.8	1.6
Average 1941-50	10.4	6.9	1.5

e) Total Net Sales to Capital Structure: The average turnover of permanent capital was 6.9 for the ten years (Table 40). This ratio varied from 8.7 in 1948 to 5.8 in 1950. This indicated that there was little variation in turnover among years which reflected consistant financing. Most of the change was due to changed prices rather than changed volume. The high ratio value in 1948 resulted from a slight shortage of permanent capital as well as high prices.

3. Characteristics of Fixed Assets:[23] The average investment in fixed assets was $31,900 for the ten years (Table 69, Appendix A) which represented about 55 per cent of the total investment in assets (Table 70, Appendix A). The relative importance of fixed assets varied from 39 to 65 per cent of total assets among years. The trend percentage in fixed assets was illustrated in Figure 27. The sharp relative increases which occurred in 1944 and 1948 were evident in this illustration.

During the ten year period approximately $76,900 were invested in fixed assets. At the same time, a depreciation reserve of about $34,800 was set up which left a net increase in the book value of $42,100. The increase in investment in plant equipment exceeded the investment in buildings which indicated that the equipment was kept in good shape.

a) Net Sales to Fixed Assets: The average turnover of fixed assets was 10.4 times for the ten years (Table 40). This ranged from 16.2 to 6.9 times among years. The low ratio value for 1944 was due to the increase in investment of fixed assets as there was an increase in sales volume.

The high turnover values for 1946, 1947 and 1948 were due to high prices of butter. The lower values for 1949 and 1950 were due in part to

[23]Of the creameries studied this association had the highest investment in fixed assets relative to total assets. A large part of this investment was in buildings. As an example in 1949 about 50 per cent of the investment in fixed assets was invested in buildings. This resulted from the fact that the creamery plant was rebuilt in 1944 at a cost of about $20,000 and in 1948 the egg and poultry plant was added at a cost of about $12,000. The other creameries had much older buildings and as a result had a lesser portion of their funds tied up in these assets.

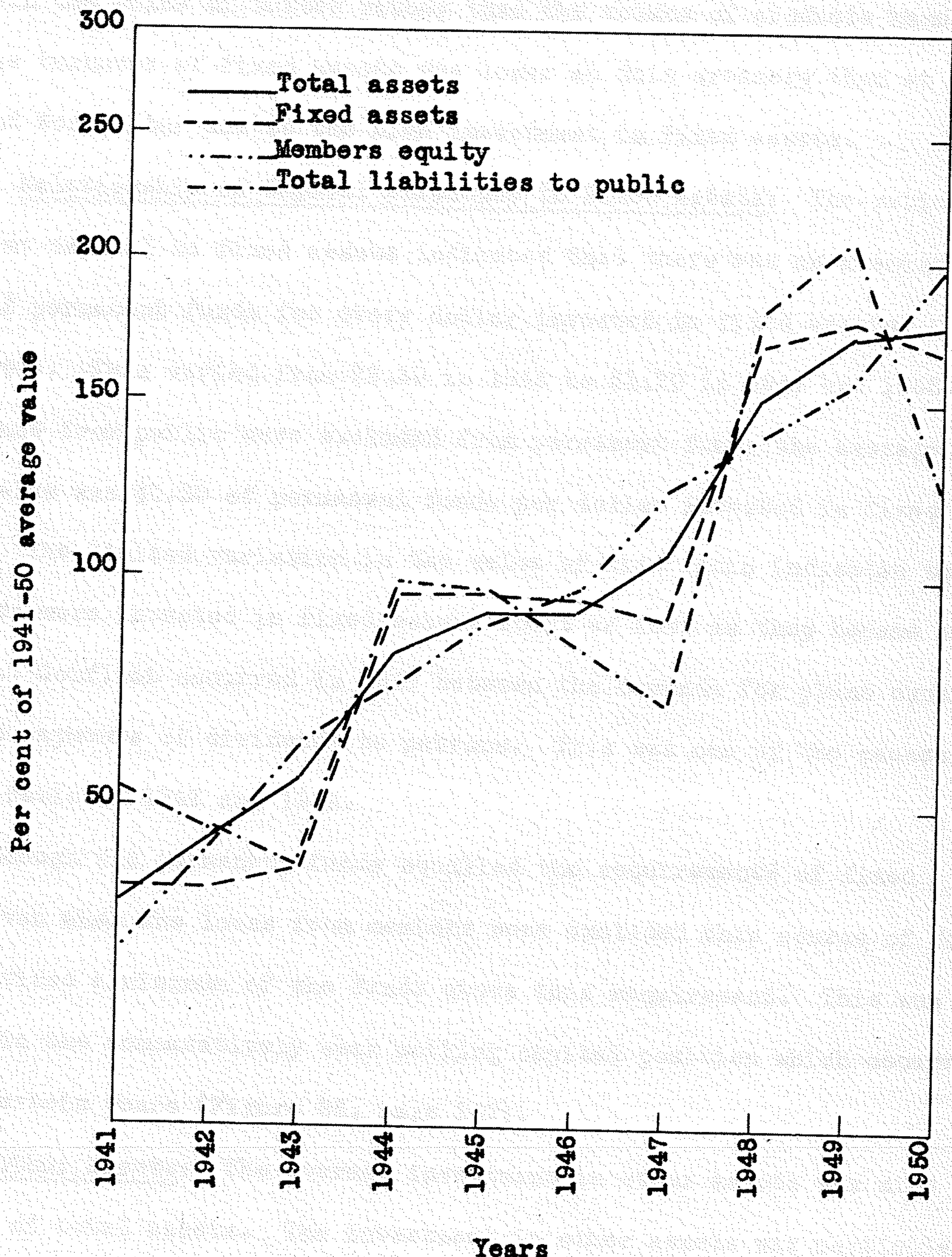

Figure 27. Trend percentages of selected balance sheet components for the years 1941 to 1950 (base 1941-50 average): Winkler Co-operative Creamery Limited.

a drop in the price of butter rather than the volume of products handled.

The turnover of fixed assets was lower at this creamery than at Vita and North Star due to the high investment in fixed assets.

4. Relationship of Capital Structure to Fixed Assets: The ratio of permanent capital to fixed assets indicated that there was an average of $1.50 of permanent funds for every dollar invested in fixed assets. (Table 40). This varied from $2.30 in 1943 to $1.20 in 1944 and 1948. When loans from public were excluded from permanent funds the average ratio value was $1.30 of permanent funds per dollar invested in fixed assets. The limited variation in the value of this ratio indicated that the funds were invested in fixed assets about as fast as they became available. Conflict occurred in 1948 between the demands for plant expansion and payments of dividends to patrons. This was one of the causes of the low ratio in 1948 and 1949.

Although the permanent funds equalled the requirements of fixed assets even when the loans from members were excluded this source of funds only provided a minimum of the funds above this requirement. This was reflected in the comparatively weak working capital position which occurred during certain years (Figure 26, page 247).

5. Other Assets: The average investment in other assets was nine per cent of total assets. The investment in other assets was particularly high during the last few years which suggested that the added enterprises required more of the items included here. Over one-half of the other assets were made up of supplies and materials which became relatively

more important as the new enterprises were added. The investment in other assets was particularly high during 1949 and 1950 as a result of ice cream operations. This investment made up 10 and 17 per cent of the total investment in assets respectively during these two years. As a result there was a lesser amount available for current assets.

K. Equity Capital Position: The equity capital was increased about \$70,300 between 1941 and 1950 (Table 72, Appendix A). About \$39,500 of this increase was in net worth and \$30,800 in allocated surplus. About \$15,000 of the increase in net worth was in special reserves and outstanding capital. The remainder were all funds that could be allocated to members on the revolving surplus fund plan. Therefore, although this was a good source of funds, the low level of outstanding capital tended to give the financial set-up an appearance of instability. This was particularly important when outside credit was required.

a) Equity Capital Relationships:

(1) Membership Equity to Total Assets: The members supplied an average of 70 per cent of the funds invested in total assets (Table 41). Although the value of membership equity increased steadily in absolute terms it varied considerably from year to year relative to the total investment in assets. This variation was due to the fact that total assets were increased faster between 1943 and 1944 and between 1947 and 1948 than were the supply of equity funds. The initial increase in the relative importance of equity funds from 51 per cent in 1941 to 80 per cent in 1943, as well as the recovery following each expansion, illustrated

the importance of the revolving surplus fund as a method of financing once the Association got under way.

(2) Members Equity to Fixed Assets: There was an average of $1.28 of equity capital for every dollar invested in fixed assets (Table 41). The supply of equity capital exceeded the requirements for fixed assets for eight out of the ten years but the margin was not very satisfactory for three of these years. Only during four years did the supply of equity capital exceed the requirements for fixed assets by more than 50 per cent. This further illustrated the relative importance of the investment in fixed assets compared to the supply of funds.

Table 41. Ratio Analysis Showing the Members Equity Relationships: Winkler Co-operative Creamery Limited, 1941-50

Years	Ratios		
	Member equity to total assets	Member equity to fixed assets	Members equity to capital outstanding
	-per cent-	-dollars-	
1941	51	0.84	7.23
1942	69	1.54	1.15
1943	80	2.03	2.90
1944	64	0.98	2.93
1945	69	1.18	3.56
1946	73	1.30	3.89
1947	81	1.74	5.07
1948	65	1.04	4.15
1949	64	1.12	4.37
1950	79	1.50	5.50
Average 1941-50	70	1.28	4.20

A further illustration of this relationship was made by comparing net worth to fixed assets. Net worth only supplied about 61 per cent of the average investment in fixed assets for the ten years.

(3) Members Equity to Capital Outstanding: There was an average of $4.20 of members equity for every dollar of capital outstanding

(Table 41). The increase in the value of the ratio from $1.15 of equity capital per dollar of outstanding share capital in 1942 to $5.50 per dollar in 1950 further indicated the emphasis placed on allocated and unallocated surplus relative to share capital. The high ratio value, especially during the last six years, reflected excessive non-share capital. Despite the good qualities of the revolving surplus fund it cannot be considered as sound under present statutes as outstanding share capital.

The increase in the value of share capital was indicated by the ratio of net worth to outstanding share capital. In 1941 there was $1.08 of net worth to every dollar of outstanding share capital and in 1950 the value of the ratio had increased to $2.72.

(4) Average Equity Per Member: The average equity per member for the ten years was about $24 (Table 42). This was increased from $15 in 1942 to $30 in 1950. When the co-operative was formed in 1940 there were 120 members with an average equity of about five dollars each. Thus the net increase by 1950 was about $25 per member. Excluding 1945 and 1946 the equity per member increased gradually from 1943 to 1949.[24] This slow increase was due to a fairly rapid increase in the number of members relative to the increase in equity capital.

In comparison with the results shown for the Vita Co-operative Limited

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[24]The 1945 and 1946 membership estimates were lower than they should have been due to the fact that no monies where transferred to share capital during these two years.

this increase in equity per member was considerably less.[25] Vita excluded from membership patrons who had not contributed sufficient dividends to purchase a ten dollar share within four years. Winkler, on the other hand included all patrons during the 1941-50 period which meant that they had a large number of members with extremely small accounts.

Table 42. Estimated Number of Members and Average Equity per Member: Winkler Co-operative Creamery Limited, 1941-50

Year	Estimated membership[a]	Total equity capital	Average equity per member
	-numbers-	-dollars-	-dollars-
1941	344	9,423	27
1942	1,165	17,214	15
1943	1,236	25,190	20
1944	1,430	30,221	21
1945	1,500	36,275	24
1946	1,600	38,890	24
1947	2,280	49,930	22
1948	2,399	56,389	24
1949	2,616	63,392	24
1950	2,692	79,706	30
Average 1941-50	1,726	40,663	24

a The number of members were gathered from miscellaneous reports, considered an estimate only.

L. Summary: The Winkler Co-operative handled a larger volume of business and expanded operations more during the 1941-50 period than the other three co-operatives. Apparently, the plant operations were carried on efficiently and membership support was fairly steady. The scale of operations at this plant made it possible and necessary for the manager to concentrate on management and public relations. Consequently, this

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[25] See page 211.

allowed more emphasis to be placed on co-operative education and a greater opportunity to plan for future expansion.

The Winkler co-operative was favoured in terms of location both from the fact that a large volume of produce was available within a reasonable distance of the plant and from the fact that several other successful co-operatives were operating in the district. The first made an adequate scale of operations possible and the second enhanced the experience of members with co-operative enterprise. As a result of these conditions, the co-operative was able to return a fairly high net margin on operations. Most of the net margin was retained in allocated form and used for expansion of plant which greatly improved the marketing services available to members.

The extent of the expansion program is illustrated by the fact that sales were increased by about $360,000 and the total investment in assets by about $82,900 during the ten year period. About $23,900 of the increase was invested in current assets, $16,900 in other assets and $42,100 in fixed assets. The high investment in fixed assets reflects the extensive expansion and improvements to plant. Although net working capital was increased by $9,300 between 1941 and 1950 some loss of mobility resulted due to an increased investment in receivables.

About 85 per cent of the increased investment in assets between 1941 and 1950 were financed by equity capital. Apparently, this was a satisfactory level as the Association was able to carry out an effective expansion program without retarding operations. The only weak point of the financial position was the fact that the allocated and unallocated surplus were subject to disposal by the board of directors. Excessive pressure from the members could cause considerable financial difficulties especially during a period of expansion. This weakness was recognized and in 1952 the By-laws were amended so that 25 per cent of the patronage dividends were applied directly to the purchase of shares.

CHAPTER X

SUMMARY

The four co-operative creameries have been reviewed and the basic characteristics of each outlined. Although they were all local type co-operative organizations some differences were observed in the interpretations of basic co-operative characteristics, and in the financial success of operations. Differences were attribted to the age of the co-operative, to the experience of management and directors in handling co-operative organizations, to variations in characteristics of the districts and to the type and volume of production.[1]

Although the description and analysis of the four co-operatives did not extend beyond 1950 consideration was given to the fact that they have continued to operate since that date. The important changes that occurred in the by-laws of these co-operatives were indicated in the text up to 1954. As observed, many of these changes were made to correct or improve conditions that existed during the 1941-50 period. In addition to the changes in the by-laws some changes have occurred in the types of operations at these co-operatives. The North Star co-operative has expanded cold storage facilities and added a meat processing plant. The Winkler co-operative has continued to expand at about the same rate as it did

[1]Due to the variation in type and volume of production it was not possible to use the average of the four co-operatives as a bench mark for comparative purposes.

during the 1941-50 period. At this plant cheese manufacture and milk distribution have been added to creamery operations and an eviscerating plant added to poultry operations. The latter was an important additional service provided to farmers in the area. The Winkler co-operative has continued to follow the same pattern of financing established during the 1941-50 period, that is, funds were borrowed for expansion to be replaced later by members equity capital accumulated from the net margin on operations. The North Star co-operative adopted a revolving fund plan in 1952 that increased the rate of equity accumulation and eased the working capital position somewhat. The Riverton co-operative discontinued cream trucking operations after 1950. The Vita co-operative operates about the same facilities as it did in 1950. From all indications these co-operatives are operating as well, and in some instances better than they were during the 1941-50 period.

A. Special Co-operative Characteristics: The most important co-operative principles were included in the by-laws of these organizations. Voting was limited to one per member; membership was restricted to patrons; the rate of returns on outstanding share capital was limited to seven or five per cent; restrictions were placed on the number of shares each member could own, and the proceeds were to be distributed on the basis of patronage. Although these were included in the by-laws, the one vote per member principle was the only one not subject to some variation in interpretation or use.

Employees were allowed to become members at the Vita and Riverton co-operatives. Winkler did not pay interest on outstanding share capital; Riverton paid five per cent from 1941 to 1943; North Star paid five per cent every year; Vita paid seven per cent up to 1948 and five per cent in 1949 and 1950. (The seven per cent rate of interest was a relatively high return for money invested. Even the five per cent rate appeared high during years when the net margin on operations was low.) Shares were purchased at the North Star co-operative by cash. Although some shares were purchased by cash at the other three co-operatives the majority were purchased through retained patronage dividends.

Most of the net margin on operations was allocated to members on the basis of patronage. The North Star co-operative paid these dividends in cash while the other three retained the dividends to help finance the co-operative. These were payable later at the discretion of the directors. Some of these monies were paid out on the revolving fund plans established in 1947 and 1948.

During the ten years there was some distribution of dividends that was not strictly on the basis of patronage. As an example, at Vita the earnings from the P.S.V. enterprise were apparently used to bolster the net margin on creamery operations and subsequently were distributed on the basis of creamery patronage. A similar situation was apparent at the North Star co-operative to the extent that earnings from locker plant operations were distributed to creamery patrons. At Winkler and Riverton some of the overhead costs were apparently allocated among enterprises on an arbitrary basis which implied some transfer of costs from one department to another. These examples suggest a lack of accounting controls or lack of recognition on the part of management that such controls were necessary. In some instances the inequities in payment resulted from the fact that more accurate distribution necessitated additional clerical staff, the cost of which would have absorbed a large share of the distributed funds.

Another important observation was the fact that three of the co-operatives instituted a revolving surplus fund plan during the 1941-50 period. These plans differed somewhat among creameries. The Riverton co-operative established a plan in which the funds became payable after they had been retained for ten years. This co-operative had a separate fund for each department. At Vita the dividends were payable three years after they were declared. The Winkler co-operative established a revolving fund for creamery patrons which revolved about every seven years and one for the poultry department that revolved every five to six years. This revolving fund plan was discontinued in 1952 and payment was made on a percentage basis with the amount to be paid established each year. The North Star co-operative delayed the establishment of a revolving fund plan until 1952. When properly handled the revolving fund plans provided an equitable means of financing in that the members supplied funds in proportion to the use they made of the co-operatives.

B. Problems of Proper Interpretation of Retained Dividends and Revolving Surplus Funds: Considerable variation was observed in the location of the retained dividends and revolving surplus funds on the original balance sheets. On some of the accounts they were carried as a part of the surplus and in others as a current liability. As the provisions in the by-laws of the three co-operatives were about the same this suggested some disagreement among auditors as to the legal interpretation of these funds. These differences were observed among years at the same creamery as well as among creameries.

These variations were not indicated on the tables in this report as this part of equity capital was handled as part of the allocated surplus. This adjustment did not remove the discrepancies on the original statements.

As it is the purpose of the retained dividends to provide equity capital for the co-operative such funds should be legally established with a lower priority than those of outside creditors. As long as the legal nature of these funds remain in doubt the co-operatives will have difficulty in obtaining loans through normal channels. This is especially important in the early years of a co-operative's development when reserves and outstanding share capital have not been accumulated. It is important for any co-operative that uses retained dividends as the main source of funds.

C. Age of Co-operative and Present Characteristics: It was observed that the North Star co-operative more closely resembled the corporate type of organization then did the other three co-operatives. This was attributed to the fact that this organization had been established when co-operatives could not differ materially from the corporate form due to statutory regulations and, also, because the members had failed to adjust the organization to changes allowed by statute. The main differences resulted from the fact that equity funds were not retained in allocated form, dividends were not applied to the purchase of shares for non-members, and the patronage dividends were paid on the basis of a price improvement. As a result this co-operative did not accumulate equity at the same rate as the other co-operatives and the membership situation was unsound to the extent that a large number of the members were inactive and there was excessive non-member business.

D. Membership Statistics: Only limited membership statistics were recorded by these co-operatives. This resulted partially from a shortage of staff and partially from a lack of concern over problems associated with non-active members and non-member business. Apparently, management was satisfied with a general knowledge of the membership status. Although this may have satisfied management, difficulties could arise with the Income Tax Department over the proper estimate of non-member business. It was also apparent that the lack of adequate membership and patronage dividend records led to some dissatisfaction among members.

Apparently non-active members were more important at the North Star and Riverton co-operatives. The North Star co-operative was the only one that reported an extremely high non-member business. Both non-active members and non-member business reflected tardy membership policies at these two older co-operatives. The Vita and Winkler co-operatives redeemed equity capital regularly to retired members and applied dividends to the purchase of shares for new members which resulted in a more satisfactory membership situation.

E. Educational Program: The educational program at the Riverton and Vita co-operatives was limited in scope. More active programs were in existance at the North Star and Winkler co-operatives with the latter having the most active program. The Winkler co-operative was influenced by the educational activities of other co-operatives in the district.

For the four creameries, the amount paid out for educational purposes was very small compared to the volume of business handled and the patronage dividends distributed. As the directors and managers carried out a considerable portion of the public relations work as part of their regular responsibilities the amount of money spent was not considered a final criterion. Consequently, it was concluded that the true value of an educational program could only be determined through contact with members to discover their knowledge of the purpose and activities of the co-operatives. This was beyond the scope of this study.

F. Results of Operations: For the ten year period 1941-50, Vita had an average net margin of $4,200 per year which amounted to 2.4 cents per dollar of net sales, Riverton averaged $2,500 per year or 1.7 cents per dollar of net sales, North Star $6,600 per year or 4.0 cents per dollar of net sales and Winkler $10,500 per year or 3.1 cents per dollar of net sales. The low rate of return at Vita compared to North Star was assumed due to more extreme seasonal fluctuations in cream production and the lower average over-run in butter manufacture. The Vita creamery also had high cream trucking costs. The low rate of return at Riverton was due primarily to the lack of volume. The difference between the rate of return at Winkler and North Star was due partially to the high investment in fixed assets at Winkler and partially to differences in services provided to patrons. As the Winkler co-operative had a much larger volume of business the lower rate of return implied that some of the economies of scale had been offset by other factors such as the lower volume per shipper and lower rates of return from added enterprises.

Although there was slight variation among creameries there was a definite tendency for the net margin on operations to be low during the 1943-46 period. This resulted primarily from price controls and suggested that there was less control on costs than on the price of cream and butter. The creameries all showed an improved net margin by 1948 which reflected high cream and butter prices. There was a tendency to obtain a lower net margin in 1949 and 1950 as the price of butter was again regulated and the volume output per creamery was low. The net margin obtained in 1941 and 1942 reflected high output and fairly low costs.

1. Initial Prices and Dividends to Patrons: Variations that existed among the co-operatives in the average returns obtained by patrons per pound of butterfat delivered were summarized in Table 43. Although consideration was not given to the variation in quality of cream among creameries the Winkler and North Star co-operatives returned the highest average price and dividends to patrons. The Vita and Riverton co-operatives

paid a fraction of a cent less than the other two with Riverton paying the lowest. This was anticipated due to its low volume of business. It was observed that there was limited variation in the average initial prices paid on butterfat consequently, the patronage dividends were the main factor in determining the difference in the final payment among creameries. The general observation here was that the patronage dividend received was regulated directly by the success of the co-operative in its ability to return a high net margin on operation per dollar of sales.

Table 43. Summary of the Average Initial Prices, Declared Patronage Dividend and the Total Returns to Patrons per pound of Butterfat Delivered 1941-50

Creamery	Average initial price (1941-50)	Dividend declared	Total return to patron
	-cents per pound of butterfat-		
North Star	46.4	1.8	48.2
Riverton	46.4	0.9	47.3
Vita	46.6	0.9	47.5
Winkler	46.2	1.8	48.0

G. Total Assets and Equity Accumulation: The average investment in total assets for the four creameries is summarized in Table 44. The important observation here was that the members supplied an average of from 68 to 78 per cent of the total investment in assets among creameries for the ten year period. As an overall condition this was fairly satisfactory although considerable fluctuation did occur among years. It was observed that the newer co-operatives had a greater share of their funds supplied through equity capital despite the fact that these co-operatives started operations with a low equity position just prior to 1941.

Table 44. Summary of the Average Investment in Total Assets, the Net Change in Investment and the Share of Funds Provided by Equity Capital for the Four Creameries during the 1941-50 period

Name of co-operative	Average total investment 1941-50	Portion of total assets owned by members	Change in total assets between 1941 and 1950	Increase in members equity between 1941 and 1950	
	-dollars-	-per cent-	-dollars-	-dollars-	per cent of total increase
North Star	27,500	69	5,900	1,400	24
Riverton	31,600	68	22,200	11,000	50
Vita	25,400	78	18,500	24,100	130
Winkler	57,700	70	82,900	70,300	85

The significance of the difference between the two older and two newer co-operatives was illustrated by the change in investment over the period and the portion of this investment that was supplied by members. The North Star co-operative had a net increase in total assets of $5,900, of which, only 24 per cent of the funds were supplied through members equity. On the other hand, Winkler increased total investment by $82,900 of which 85 per cent was supplied by the accumulation of equity capital. The substantial difference in the increased investment between these two co-operatives was due to the fact that the Winkler co-operative made substantial improvements to plant and equipment and had added a greater number of enterprises than had the North Star co-operative. The difference in the accumulation of equity was a direct result of high cash payments at North Star as compared to Winkler's policy of retaining a large portion of these funds. It was concluded that without the accumulation of equity, the Winkler co-operative could not have carried out such an active expansion program with the result that many of the services would not have been made available to patrons.

The Vita co-operative increased equity capital more than the net increase in total assets. This represented increased stability especially as a large portion of this increase was in reserves and outstanding share capital. At Riverton, the equity capital provided funds for 50 per cent of the increase in investments. Although this was much lower than recorded for Vita and Winkler it represented a more satisfactory condition than that which occurred at the North Star co-operative. This illustrated further the results of high cash payments at North Star. These cash payments were to the immediate advantage of patrons but tended to restrict the co-operative's expansion program.

The main observation here was that with the use of the revolving surplus fund, properly constituted in the by-laws, members are more likely to provide a satisfactory portion of equity capital. Without this provision for equity capital accumulation the co-operatives must borrow directly from the members or from other outside sources.

H. Influence of the Change in Type of Ownership on Output: It was observed that the butter output at Vita and Winkler increased during the 1941-50 period over the average output during the 1935-39 period. Part of this increase was attributed to the change from private to co-operative ownership. As the Riverton and North Star co-operatives operated as co-operatives throughout both periods the production at these two creameries and the average production for all creameries in the province provided a basis for comparison.

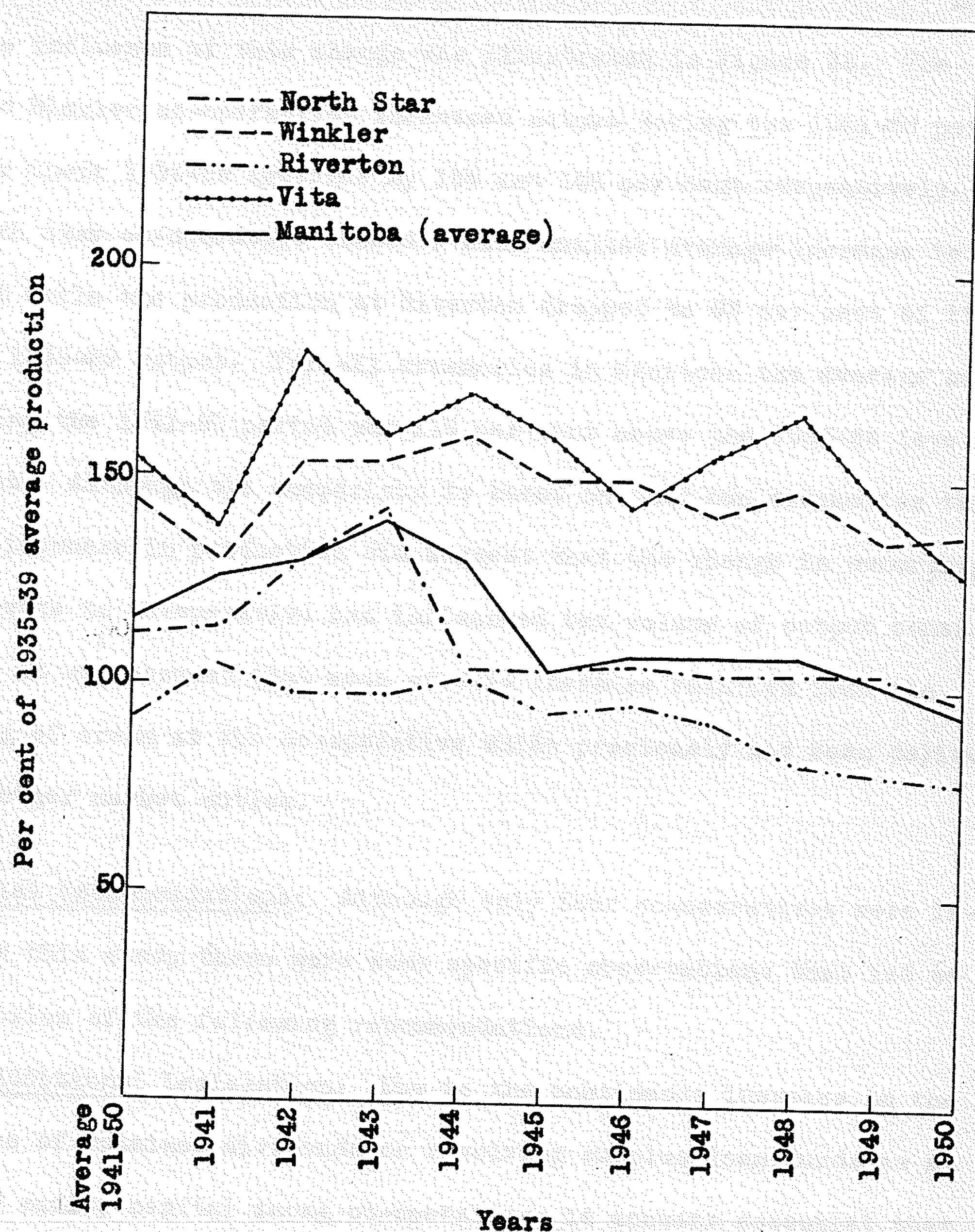

Figure 28. The percentage change in butter production from 1941 to 1950 relative to the 1935-39 average for each creamery.

The influence of this change was illustrated in Figure 28. The Vita and Winkler co-operatives increased output during the 1941-50 period over their 1935-39 averages by 154 and 146 per cent respectively. The North Star co-operative showed a much smaller average increase to 111 per cent while the production at Riverton dropped to 93 per cent of its average 1935-39 output. For all creameries in Manitoba the average output during the 1941-50 period was 116 per cent above the 1935-39 level of output. Although the comparison is based on only two creameries the greater increase in production did suggest that the change in ownership from private to co-operative had influenced the volume of output considerably. It was assumed that much of this increase resulted from the marketing of cream at the co-operative which previously had been delivered to another market outlet.

I. Special Recommendations: Although only four co-operatives were included in this study there were some specific observations that led to the inclusion of the following recommendations.

1. Additional Legislation: Due to the continuous increase in the importance of retained dividends or revolving surplus loan funds as a source of equity capital among co-operatives it appears essential that some special legislation should be provided to eliminate some of the basic weaknesses. In the first place these loans or retained dividends should be held as part of equity capital with similar priority to share capital in the event that the co-operative is dissolved. Secondly, some consideration should be given to the establishment of limits to regulate

the amount payable from this fund in any one year and a limit below which the fund could not be depleted. This would add some stability to the financial structure of the co-operative and reduce the possibility of over-payment to patrons.

This latter provision was considered essential as the retained dividends and revolving surplus loans become payable at some future date. Consequently, they are not as stable as funds provided through outstanding share capital and reserves. Provisions envisaged here would be similar to those that regulate payment of dividends under impaired capital situations. Such regulations would have to allow for changes in the volume of business and the functions to be performed. Provision for such a regulation becomes more important as retained dividends and revolving surplus fund loans replace outstanding share capital and statutory reserves as a major source of equity capital.

There was a definite indication that support for co-operative education was lacking among these four co-operatives. Based on the assumption that this situation was fairly general among most local type co-operatives in Manitoba it appears advisable that some special legislation be provided so that each co-operative would set aside a certain portion of each year's net margin for educational purposes. As most local type co-operatives cannot support adequately trained staff for educational purposes some consideration should be given to the establishment of district representatives who would be supported in part or total by the above mentioned educational fund contributions. Such a representative would have the responsibility of promoting co-operative education for all co-operatives in a district. The establishment of such a position would allow a greater degree of homogeniety among co-operatives and in co-operative thinking than exists at the present time.

2. Establishment of a Centralized Co-operative Auditing and Statistics Service: It was considered important that each co-operative select an auditor who recognized the basic difference between co-operative and corporate financial characteristics. The service provided by an auditor is particularly important among local type co-operatives as the auditor is usually the main source of information on new co-operative developments and the proper legal interpretation of special by-laws and government regulations.

As a result, it is apparent that a competent centralized auditing service should be established by local type co-operatives. Such an organization would allow a certain amount of specialization to meet the specific problems of the co-operatives and at the same time provide each co-operative with data on other co-operatives showing useful comparisons. More overall statistics would be made available making it possible for co-operative leaders to keep up to date with the status of co-operatives. It would also be possible to anticipate changes required in legislation at an earlier date than at present. Standardized forms of accounting and terminology could be established which would greatly increase the value of the annual statements to members and other interested individuals.

The type of organization envisaged is one that would provide an auditing service and special information and advice. By the nature of the service provided it would not be associated with the managerial function. This central auditing service would be in a position to provide much of the information that presently is unavailable to local type co-operatives. This would tend to reduce the unnecessary deviations from well established co-operative principles and aid co-operative development generally.

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APPENDIX A

The tables included in this appendix are for the four creameries described in chapters V1 to 1X. These tables contain the comparative operating, cost of manufacture and balance sheet statements for the ten years 1941 to 1950. Each of these statements are shown in absolute, component percentage and trend percentage form. The last table for each creamery consists of a summary of the balance sheet changes that occurred from 1941 to 1950, 1941 to 1946 and 1946 to 1950.

Tables 45 to 51 contain the data for the North Star Co-operative Creamery Association Limited (Chapter V1), Tables 52 to 58 for the Riverton Co-operative Creamery Association Limited (Chapter V11), Tables 59 to 65 for the Vita Co-operative Limited (Chapter V111), and Tables 66 to 72 for the Winkler Co-operative Creamery Limited (Chapter 1X).

Table 45. Comparative Cost of Manufacture and Operating Statements for years 1941 to 1950 and 1941-50 average: North Star Co-operative Creamery Association Limited

Components	Years										Average
	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1941-50
	- thousands of dollars -										
Cost of butterfat	97.5	124.3	152.9	114.7	116.9	131.4	145.7	187.1	160.4	137.5	136.8
Trucking expense	1.5	2.5	2.6	0.5	0.3	0.3	-	-	-	-	0.8
TOTAL COST AT PLANT	99.0	126.8	155.5	115.2	117.2	131.7	145.7	187.1	160.4	137.5	137.6
Cost of materials	2.8	3.3	3.6	3.0	2.7	3.5	3.7	4.1	3.3	4.3	3.5
General expenses and allowances	3.4	3.8	5.4	5.1	5.2	5.4	5.8	6.4	5.0	4.0	4.9
Wages and salaries	6.2	6.6	7.3	7.4	7.6	7.6	8.2	9.2	9.4	9.5	7.9
TOTAL MANUFACTURING COST	12.4	13.7	16.3	15.5	15.5	16.5	17.7	19.7	17.7	17.8	16.3
COST OF PRODUCT MANUFACTURED	111.4	140.5	171.8	130.7	132.7	148.2	163.4	206.8	178.1	155.3	153.9
Gross sales	115.4	153.2	184.1	141.1	140.1	156.0	175.6	211.0	208.9	166.2	165.2
Net sales	113.2	150.8	181.4	140.8	139.1	154.9	174.4	209.9	206.2	162.9	163.4
Net inventory change	-8.3	-0.8	3.9	4.2	0.7	-0.1	-0.2	-11.4	15.4	-3.3	*
Cost of product sold	103.1	139.7	175.7	134.9	133.4	148.1	163.2	195.4	193.5	152.0	153.9
Gross margin on sales	10.1	11.1	5.7	5.9	5.7	6.8	11.2	14.5	12.7	10.9	9.5
Other revenue from operations	0.1	0.2	0.2	0.4	0.5	(- 0.1)	0.9	1.4	1.5	2.6	0.8
Total gross margin	10.2	11.3	5.9	6.3	6.2	6.7	12.1	15.9	14.2	13.5	10.3
ADMINISTRATIVE AND GENERAL EXPENSE	3.1	3.3	3.1	3.2	2.8	3.0	3.3	5.1	4.9	4.8	3.7
NET MARGIN ON OPERATIONS	7.1	8.0	2.8	3.1	3.4	3.7	8.8	10.8	9.3	8.7	6.6

* Less than 50 dollars.

Table 46. Comparative Cost of Manufacture and Operating Statements in Component Percentage Form for years 1941 to 1950 and 1941-50 average: North Star Co-operative Creamery Association Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
					- per cent -						
Cost of butterfat	87.5	88.4	89.0	87.8	88.1	88.6	89.2	90.5	90.1	88.5	88.9
Trucking expense	1.3	1.8	1.5	0.3	0.2	0.2	-	-	-	-	.5
TOTAL COST AT PLANT	88.8	90.2	90.5	88.1	88.3	88.8	89.2	90.5	90.1	88.5	89.4
Cost of materials	2.5	2.3	2.1	2.3	2.1	2.3	2.3	2.0	1.8	2.8	2.2
General expenses and allowances	3.1	2.7	3.2	3.9	3.9	3.7	3.5	3.0	2.8	2.6	3.2
Wages and salaries	5.6	4.7	4.2	5.7	5.7	5.2	5.0	4.5	5.3	6.1	5.2
TOTAL MANUFACTURING COST	11.2	9.7	9.5	11.9	11.7	11.2	10.8	9.5	9.9	11.5	10.6
COST OF PRODUCT MANUFACTURED	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gross sales	102.0	101.6	101.5	100.2	101.0	100.7	100.7	100.5	101.3	102.0	101.1
Net sales	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cost of product sold	91.1	92.7	96.9	95.8	95.9	95.6	93.6	93.1	93.8	93.3	94.2
GROSS MARGIN ON SALES	8.9	7.3	3.1	4.2	4.1	4.4	6.4	6.9	6.2	6.7	5.8
Other revenue from operations	0.1	0.2	0.2	0.3	0.3	(-0.1)	0.5	0.7	0.7	1.6	0.4
Total gross margin	9.0	7.5	3.3	4.5	4.4	4.3	6.9	7.6	6.9	8.3	6.2
Administrative and general expense	2.7	2.2	1.7	2.3	2.0	1.9	1.9	2.4	2.4	3.0	2.2
NET MARGIN ON OPERATIONS	6.3	5.3	1.6	2.2	2.4	2.4	5.0	5.2	4.5	5.3	4.0

Table 47. Comparative Cost of Manufacture Statements in Trend Percentage Form for years 1941 to 1950 (Base 1941-50 average): North Star Co-operative Creamery Association Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- per cent -										
Cost of product at plant	72	92	113	84	85	96	106	136	116	100	100
Total manufacturing expense	76	84	100	95	95	102	108	121	108	110	100
COST OF PRODUCT MANUFACTURED	72	91	112	85	86	96	106	134	116	101	100
Gross sales	70	93	111	85	85	94	106	128	126	101	100
Net sales	69	92	111	86	85	95	107	128	126	100	100
Cost of product sold	67	91	114	88	87	96	106	127	126	99	100
GROSS MARGIN ON SALES	107	117	61	62	60	72	119	153	134	115	100
Other revenue	18	34	29	52	61	(-14)	112	179	191	338	100
Administrative and general expense	85	91	84	87	76	81	90	139	135	131	100
NET MARGIN ON OPERATIONS	109	122	44	47	51	57	134	164	141	132	100
Bonus to producers	120	147	57	62	51	52	149	148	122	91	100

Table 48. Comparative Balance Sheet Statements for years 1941 to 1950 and average 1941-50: North Star Co-operative Creamery Association Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	Years										
	- thousands of dollars -										
Assets											
Cash plus government bonds	1.1	2.5	3.3	3.4	5.0	3.3	3.0	6.0	4.6	3.2	3.6
Current receivables	2.5	5.1	3.8	2.8	3.0	2.6	1.2	1.3	3.2	2.5	2.8
Inventories	13.5	14.3	10.4	6.2	5.4	5.5	5.8	17.1	1.7	5.0	8.5
TOTAL CURRENT ASSETS	17.1	21.9	17.5	12.4	13.4	11.4	10.0	24.5	9.5	10.7	14.9
Prepaid expenses	1.7	2.1	1.0	1.6	1.8	1.3	1.4	1.2	1.7	1.5	1.5
Supplies and materials	0.7	1.0	1.0	1.5	1.1	1.6	1.4	1.2	1.1	1.5	1.2
TOTAL OTHER ASSETS	2.4	3.1	2.0	3.1	2.9	2.9	2.8	2.4	2.8	3.0	2.7
FIXED ASSETS	7.0	7.1	6.1	4.6	2.7	11.1	10.4	11.8	19.7	18.7	9.9
TOTAL ALL ASSETS	26.5	32.1	25.6	20.1	19.0	25.4	23.2	38.7	32.0	32.4	27.5

Table 48. Continued

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	Years										
	- thousands of dollars -										
LIABILITIES AND NET WORTH											
Bank or Credit Union	7.4	13.5	7.1	2.8	-	3.3	1.9	15.4	5.1	7.5	6.4
Accounts payable	*	0.1	0.3	0.1	0.1	1.1	0.1	0.4	0.6	0.8	0.4
Other current liabilities	-	-	-	-	-	-	0.3	1.0	3.1	0.6	0.5
TOTAL CURRENT LIABILITIES TO PUBLIC	7.4	13.6	7.4	2.9	0.1	4.4	2.3	16.8	8.8	8.9	7.3
LOANS FROM PUBLIC	-	-	-	-	0.8	2.4	2.7	2.6	-	3.0	1.1
TOTAL LIABILITIES TO PUBLIC	7.4	13.6	7.4	2.9	0.9	6.8	5.0	19.4	8.8	11.9	8.4
Capital dividend reserve	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Patronage dividend payable	-	-	-	-	-	-	-	-	0.1	0.1	*
Liabilities to members	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5
Capital outstanding	10.4	10.4	10.1	10.0	10.8	10.7	10.6	10.7	10.7	10.6	10.5
Undivided surplus	8.2	7.6	7.5	6.7	6.8	7.4	7.1	8.1	11.9	9.3	8.1
Net worth	18.6	18.0	17.6	16.7	17.6	18.1	17.7	18.8	22.6	19.9	18.6
Members equity	19.1	18.5	18.1	17.2	18.1	18.6	18.2	19.3	23.2	20.5	19.1
MEMBERS EQUITY PLUS LIABILITIES TO PUBLIC	26.5	32.1	25.6	20.1	19.0	25.4	23.2	38.7	32.0	32.4	27.5

* Less than 50 dollars

Table 49. Comparative Balance Sheet in Component Percentage Form for years 1941 to 1950 and average 1941-50: North Star Co-operative Creamery Association Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- per cent -										
ASSETS											
Cash plus government bonds	4	8	13	17	26	13	13	16	15	10	13
Current receivables	10	16	15	14	16	10	5	3	10	8	10
Inventories	51	44	40	31	29	22	25	44	5	15	31
TOTAL CURRENT ASSETS	65	68	68	62	71	45	43	63	30	33	54
Prepaid expenses	6	7	4	8	9	5	6	3	5	5	6
Supplies and materials	3	3	4	7	6	6	6	3	4	4	4
TOTAL OTHER ASSETS	9	10	8	15	15	11	12	6	9	9	10
FIXED ASSETS	26	22	24	23	14	44	45	31	61	58	36
TOTAL ALL ASSETS	100	100	100	100	100	100	100	100	100	100	100

Table 49. Continued.

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- per cent -										
Liabilities and members equity											
Bank or Credit Union	28	42	28	14	-	13	8	40	16	23	24
Accounts payable	*	*	1	*	*	5	*	1	2	3	1
Other current liabilities	-	-	-	-	-	-	1	2	10	2	2
TOTAL CURRENT LIABILITIES TO PUBLIC	28	42	29	14	*	18	9	43	28	28	27
Loans from public	-	-	-	-	4	9	12	7	-	9	4
TOTAL LIABILITIES TO PUBLIC	28	42	29	14	4	27	21	50	28	37	31
Capital Dividend reserve	2	2	2	3	3	2	2	1	2	2	2
Patronage dividend payable	-	-	-	-	-	-	-	-	*	*	*
LIABILITIES TO MEMBERS	2	2	2	3	3	2	2	1	2	2	2
Capital outstanding	39	32	40	50	57	42	46	28	33	33	38
Undivided surplus	31	24	29	33	36	29	31	21	37	28	29
NET WORTH	70	56	69	83	93	71	77	49	70	61	67
MEMBERS EQUITY	72	58	71	86	96	73	79	50	72	63	69
MEMBERS EQUITY PLUS LIABILITIES TO PUBLIC	100	100	100	100	100	100	100	100	100	100	100

*Less than .5 per cent

Table 50. Comparative Balance Sheets in Trend Percentage Form for years 1941-50 (Base 1941-50 average): North Star Co-operative Creamery Association Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
					- per cent -						
ASSETS											
Cash plus government bonds	31	70	93	97	141	92	86	170	130	89	100
Current receivables	90	182	135	99	106	93	44	46	115	90	100
Inventories	159	168	122	73	64	66	68	202	20	59	100
TOTAL CURRENT ASSETS	115	147	117	84	91	77	68	165	64	72	100
Total other assets	89	116	73	113	105	104	101	88	102	110	100
Fixed assets	70	72	62	47	27	112	105	119	198	188	100
TOTAL ALL ASSETS	96	117	93	73	69	92	84	141	117	118	100
LIABILITIES AND MEMBERS EQUITY											
Bank or Credit Union	115	211	111	44	-	52	29	241	78	117	100
Accounts payable	8	28	90	16	17	296	28	120	169	228	100
Total current liabilities to public	102	188	103	39	1	61	31	232	121	123	100
Loans from public	-	-	-	-	72	209	234	223	-	262	100
TOTAL LIABILITIES TO PUBLIC	98	180	98	38	1	58	30	222	116	158	100
Liabilities to members	96	96	94	93	100	98	98	98	115	113	100
Capital outstanding	99	99	97	96	103	102	102	102	102	101	100
Undivided surplus	102	95	93	83	84	91	88	101	148	115	100
Net worth	100	97	95	90	95	97	96	101	122	107	100
Members equity	100	97	95	90	95	97	96	101	122	107	100

Table 51. Summary of Balance Sheet Changes between the years 1941 and 1950; 1941 and 1946; 1946 and 1950: North Star Co-operative Creamery Association Limited

Components	1941-50 period		1941-46 period		1946-50 period	
	Where got	Where gone	Where got	Where gone	Where got	Where gone
	- thousands of dollars -					
ASSETS						
Cash plus government bonds	-	2.1	-	2.2	-0.1	-
Current receivables	*	-	-	0.1	-0.1	-
Inventories	-8.5	-	-7.9	-	-0.6	-
TOTAL CURRENT ASSETS	-6.4	-	-5.6	-	-0.8	-
Prepaid expenses	-0.1	-	-0.4	-	-	0.3
Supplies and materials	-	0.7	-	0.8	-0.1	-
Total other assets	-	0.6	-	0.4	-	0.2
FIXED ASSETS	-	11.7	-	4.1	-	7.6
TOTAL ALL ASSETS	-	5.9	-1.1	-	-	7.0
LIABILITIES AND MEMBERS EQUITY						
Bank or Credit Union	0.1	-	-	-4.1	4.2	-
Accounts payable	0.8	-	1.1	-	-	-0.3
Other current liabilities	0.6	-	-	-	0.6	-
Total current liabilities to public	1.5	-	-	-3.0	4.5	-
Loans from public	3.0	-	2.4	-	0.6	-
TOTAL LIABILITIES TO PUBLIC	4.5	-	-	-0.6	5.1	-
Capital dividend reserve	*	-	*	-	-	*
Patronage dividend payable	0.1	-	-	-	0.1	-
Total liabilities to Members	0.1	-	*	-	0.1	-
Capital outstanding	0.2	-	0.3	-	-	-0.1
Undivided surplus	1.1	-	-	-0.8	1.9	-
Net worth	1.3	-	-	-0.5	1.8	-
Members equity	1.4	-	-	-0.5	1.9	-
MEMBERS EQUITY PLUS LIABILITIES TO PUBLIC	5.9	-	-	-1.1	7.0	-

*Less than 50 dollars.

Table 52. Comparative Cost of Manufacture and Operating Statements for Years 1942 to 1951 and average 1942-51: Riverton Co-operative Creamery Association Limited

Components	Year ending										Average
	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1942-51
	- thousand dollars -										
Cost of butterfat	48.7	56.2	58.0	60.3	56.6	67.4	74.9	80.8	67.4	60.3	63.1
Trucking expense	2.3	2.8	2.5	2.9	3.0	3.1	3.4	3.1	3.2	2.9	2.9
Total cost at plant	51.0	59.0	60.5	63.2	59.6	70.5	78.3	83.9	70.6	63.2	66.0
Manufacture expense	5.6	5.6	6.3	6.4	6.9	7.3	7.3	7.6	9.4	7.9	7.0
COST OF PRODUCT MANUFACTURED	56.6	64.6	66.8	69.6	66.5	77.8	85.6	91.5	80.0	71.1	73.0
Gross sales	63.0	68.0	68.9	74.4	70.0	82.4	90.8	96.3	83.9	76.3	77.4
Net sales	63.0	67.9	68.4	73.9	69.5	81.9	90.3	95.8	83.5	75.8	77.0
Cost of product sold	57.3	63.8	67.0	70.1	66.3	77.6	84.7	91.6	81.5	69.9	73.0
Gross margin on sales	5.7	4.1	1.4	3.8	3.2	4.3	5.6	4.2	2.0	5.9	4.0
Other revenue	-	*	0.1	0.7	-	-	0.1	*	(-.1)	0.1	0.1
Total gross margin	5.7	4.1	1.5	4.5	3.2	4.3	5.7	4.2	1.9	6.0	4.1
Administrative and general expense	3.3	2.0	2.3	2.3	2.3	2.6	3.2	3.2	3.3	3.6	2.8
NET MARGIN ON OPERATIONS	2.4	2.1	(-.8)	2.2	0.9	1.7	2.5	1.0	(-1.4)	2.4	1.3

* Less than 50 dollars.

Table 53. Comparative Cost of Manufacture and Operating Statements in Component Percentage Form for Years 1942 to 1951 and average 1942-51: Riverton Co-operative Creamery Association Limited

Components	Year ending										Average
	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1942-51
	- per cent -										
Cost of butterfat	86.0	87.0	86.7	86.6	85.1	86.7	87.5	88.3	84.3	84.8	86.4
Trucking expense	4.1	4.4	3.8	4.2	4.5	3.9	3.9	3.4	3.9	4.1	4.0
Total cost at plant	90.1	91.4	90.5	90.8	89.6	90.6	91.4	91.7	88.2	88.9	90.4
Manufacture expense	9.9	8.6	9.5	9.2	10.4	9.4	8.6	8.3	11.8	11.1	9.6
COST OF PRODUCT MANUFACTURED	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gross sales	100.0	100.2	100.8	100.7	100.7	100.6	100.6	100.5	100.5	100.7	100.5
Net sales	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cost of product sold	91.0	94.0	97.9	94.8	95.4	94.8	93.8	95.6	97.6	92.2	94.8
Gross margin on sales	9.0	6.0	2.1	5.2	4.6	5.2	6.2	4.4	2.4	7.8	5.2
Other revenue	-	-	0.1	0.9	-	-	0.1	-	(-.1)	0.1	0.1
Total gross margin	9.0	6.0	2.2	6.1	4.6	5.2	6.3	4.4	2.3	7.9	5.3
Administrative and general expense	5.2	3.0	3.3	3.2	3.3	3.2	3.5	3.4	3.9	4.7	3.6
NET MARGIN ON OPERATIONS	3.8	3.0	(-1.1)	2.9	1.3	2.0	2.8	1.0	(-1.6)	3.2	1.7

Table 54. Comparative Cost of Manufacture and Operating Statements in Trend Percentage Form for the years 1942 to 1951 (Base 1942-51 Average) for the Riverton Co-operative Creamery Association Limited

Components	Year ending 1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	Average 1942-51
	- per cent -										
Total cost at plant	77	89	92	96	90	107	119	127	107	96	100
Manufacture expense	80	79	90	91	99	104	104	108	133	112	100
Cost of product manufactured	78	88	92	95	91	107	117	125	110	97	100
Net sales	82	88	89	96	90	106	117	124	108	98	100
Gross margin on sales	142	102	36	95	80	107	139	104	50	147	100
Administrative and general expenses	117	72	81	83	83	94	113	114	116	126	100
NET MARGIN ON OPERATIONS	185	161	(-60)	167	68	127	194	77	(-107)	187	100

Table 55. Comparative Balance Sheet Statements for the years 1942 to 1951 and average 1942-51, Riverton Co-operative Creamery Association Limited

Assets	Year ending 1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	Average 1942-51
	- thousand dollars -										
Current											
Cash plus government bonds	1.0	2.4	1.9	2.1	1.9	0.8	0.6	0.9	1.0	0.3	1.3
Current receivables	4.8	4.8	5.9	5.5	6.9	8.3	9.2	9.5	9.6	10.0	7.4
Store	3.9	2.8	2.7	1.7	3.8	5.2	6.9	7.3	7.8	8.9	5.1
Creamery	0.9	2.0	3.2	3.8	3.1	3.1	2.3	2.2	1.8	1.1	2.3
Inventories											
Store	6.9	6.8	8.7	8.2	9.9	13.7	15.9	15.5	17.0	16.6	11.0
Creamery	0.7	1.5	1.4	0.9	1.1	1.4	2.3	2.1	0.7	1.9	1.4
Total store	11.3	10.8	12.3	10.9	14.6	19.3	23.1	23.2	25.3	25.7	17.6
Total creamery	2.1	4.7	5.6	5.8	5.2	4.9	4.9	4.8	3.0	3.1	4.4
TOTAL CURRENT ASSETS	13.4	15.5	17.9	16.7	19.8	24.2	28.0	28.0	28.3	28.8	22.0
Other Assets											
Store	0.1	0.2	0.2	0.1	0.4	0.7	0.7	1.1	1.2	1.4	0.6
Creamery	1.1	1.0	1.3	1.2	1.2	0.9	1.0	0.9	1.5	2.6	1.3
TOTAL OTHER ASSETS	1.2	1.2	1.5	1.3	1.6	1.6	1.7	2.0	2.7	4.0	1.9
Fixed Assets											
Store	1.4	1.1	1.6	1.5	1.8	1.9	2.1	2.1	2.3	2.1	1.8
Creamery	3.4	2.9	5.2	5.4	6.7	6.1	7.8	7.9	6.8	6.7	5.9
TOTAL FIXED ASSETS	4.8	4.0	6.8	6.9	8.5	8.0	9.9	10.0	9.1	8.8	7.7
Total store	12.8	12.1	14.1	12.5	16.8	21.9	25.9	26.4	28.8	29.2	20.0
Total creamery	6.6	8.6	12.1	12.4	13.1	11.9	13.7	13.6	11.3	12.4	11.6
TOTAL ALL ASSETS	19.4	20.7	26.2	24.9	29.9	33.8	39.6	40.0	40.1	41.6	31.6

Table 55. Continued.

Liabilities	Year ending										Average
	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1942-51
	-thousands dollars-										
Current											
Bank Store	1.0	0.4	1.0	0.8	0.6	-	0.8	-	-	-	0.5
Creamery	0.2	0.3	3.4	3.4	4.8	3.6	3.6	4.6	4.5	4.7	3.3
Accounts payable											
Store	1.3	2.2	2.5	2.2	2.3	3.0	4.6	3.9	5.7	6.4	3.4
Creamery	0.3	-	-	-	-	-	-	-	-	0.1	0.1
Customer Credit balance	0.3	0.7	0.5	0.3	0.3	0.5	0.6	1.5	0.3	-	0.5
Other current	-	0.1	1.4	-	*	0.3	0.6	0.5	0.3	0.1	0.3
Loans from members	-	-	0.8	0.7	2.3	3.3	3.3	2.1	3.3	2.7	1.8
Total current - Store	2.6	3.3	4.8	4.0	5.5	6.8	9.3	7.5	9.3	9.1	6.2
Creamery	0.5	0.4	4.8	3.4	4.8	3.9	4.2	5.1	4.8	4.9	3.7
TOTAL	3.1	3.7	9.6	7.4	10.3	10.7	13.5	12.6	14.1	14.0	9.9
Fixed liabilities	-	-	-	-	*	0.3	0.3	0.3	0.3	0.3	0.1
Total liabilities to public	3.1	3.7	9.6	7.4	10.3	11.0	13.8	12.9	14.4	14.3	10.0
Dividends payable	-	-	-	-	-	-	-	0.1	0.3	0.3	0.1
Revolving surplus fund	2.3	2.4	2.7	4.7	9.8	9.7	15.6	17.6	18.8	18.8	10.2
Total allocated surplus	2.3	2.4	2.7	4.7	9.8	9.7	15.6	17.7	19.1	19.1	10.3
Capital stock outstanding[a]	6.3	7.0	7.5	7.7	7.6	7.3	6.8	6.7	6.7	6.7	7.1
Reserves and surplus	7.7	7.6	6.4	5.1	2.2	5.8	3.4	2.7	-0.1	1.5	4.2
Net worth	14.0	14.6	13.9	12.8	9.8	13.1	10.2	9.4	6.6	8.2	11.3
Members equity	16.3	17.0	16.6	17.5	19.6	22.8	25.8	27.1	25.7	27.3	21.6
MEMBERS EQUITY PLUS LIABILITIES TO PUBLIC	19.4	20.7	26.2	24.9	29.9	33.8	39.6	40.0	40.1	41.6	31.6

a Includes credit to shares.

Table 56. Comparative Balance Sheets in Component Percentage Form for the Years 1942 to 1951 and Average 1942-51: Riverton Co-operative Creamery Association Limited

Components	Years ending										Average
	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1942-51
	- per cent -										
Cash plus government bonds	5	11	7	8	7	2	1	2	3	1	4
Current receivables	25	24	23	22	23	24	23	24	23	24	24
Store	20	14	10	7	13	15	17	18	19	21	16
Creamery	5	10	13	15	10	9	6	6	4	3	8
Inventories											
Store	35	33	33	33	33	41	40	39	42	40	38
Creamery	4	7	5	4	4	4	6	5	2	5	4
Current assets											
Store	58	52	47	44	49	57	58	58	63	62	56
Creamery	11	23	21	23	18	14	12	12	7	8	14
Total	69	75	68	67	67	71	70	70	70	70	70
Other assets											
Store	1	1	1	*	1	2	2	3	3	3	2
Creamery	5	5	5	5	4	3	3	2	4	6	4
Total	6	6	6	5	5	5	5	5	7	9	6
Fixed assets											
Store	7	5	6	6	6	6	5	5	6	5	5
Creamery	18	14	20	22	22	18	20	20	17	16	19
Total	25	19	26	28	28	24	25	25	23	21	24
Total assets											
Store	66	58	54	50	56	65	65	66	72	70	63
Creamery	34	42	46	50	44	35	35	34	28	30	37
TOTAL	100	100	100	100	100	100	100	100	100	100	100

Table 56. Continued.

Components	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	Average 1942-51
	Year ending										
	- per cent -										
Liabilities and Members equity:											
Bank: Store	5	2	4	3	2	-	2	-	-	-	1
Creamery	1	2	13	14	16	10	9	11	11	12	10
Accounts payable											
Store	7	11	10	9	8	9	12	10	14	15	11
Creamery	1	-	-	-	-	-	-	-	-	*	*
Customer's credit balance	2	3	2	1	1	1	2	4	1	-	2
Other current	-	*	5	-	*	1	1	1	1	*	1
Loans from members	-	-	3	3	7	10	8	5	8	6	6
Current liabilities											
Store	14	16	19	16	18	20	24	19	23	21	20
Creamery	2	2	18	14	16	11	10	22	12	12	11
Total	16	18	37	30	34	31	34	31	35	33	31
Fixed liabilities	-	-	-	-	*	1	1	1	1	1	1
TOTAL LIABILITIES TO PUBLIC	16	18	37	30	34	32	35	32	36	34	32
Dividend payable	-	-	-	-	-	-	-	*	1	1	*
Revolving surplus	12	11	10	19	33	29	39	44	47	45	33
Total allocated surplus	12	11	10	19	33	29	39	44	48	46	33
Capital stock outstanding[a]	32	34	29	31	26	22	17	17	16	16	22
Reserves and undivided surplus	40	37	24	20	7	17	9	7	*	4	13
Net worth	72	71	53	51	33	39	26	24	16	20	35
Members equity	84	82	63	70	66	68	65	68	64	66	68
MEMBERS EQUITY PLUS LIABILITIES TO PUBLIC	100	100	100	100	100	100	100	100	100	100	100

*Less than one half per cent.

a Includes credit to shares.

Table 57. Comparative Balance Sheets in Trend Percentage Form for Years Ending 1942-51, (Base 1942-51 Average): Riverton Co-operative Creamery Association Limited

Component	Years ending										Average
	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1942-51
	- per cent -										
ASSETS											
Current receivables	64	65	80	74	93	111	124	127	128	134	100
Inventories (store)	57	57	73	69	83	115	133	130	143	140	100
Current Assets: Store	64	61	70	62	83	110	131	131	143	145	100
Creamery	47	107	128	131	118	110	110	110	67	71	100
TOTAL	60	70	81	76	90	110	127	127	128	131	100
Total Other Assets	66	64	79	72	85	84	91	105	145	210	100
Total Fixed Assets	62	53	88	89	110	105	128	130	119	115	100
TOTAL ASSETS: Store	64	60	70	62	84	110	129	132	143	146	100
Creamery	57	75	105	107	113	103	118	118	98	107	100
Total	61	66	83	79	95	107	125	127	127	132	100
Liabilities and Members Equity											
Current liabilities:											
Store	42	53	77	65	88	109	150	121	150	145	100
Creamery	13	11	132	92	132	105	113	138	129	134	100
Total	32	38	97	75	104	108	136	127	142	141	100
Total liabilities to public	31	37	96	74	103	109	137	128	143	142	100
Total allocated surplus	23	23	26	46	94	94	151	172	186	186	100
Capital outstanding[a]	89	100	107	109	108	104	97	96	95	95	100
Reserves and Surplus	181	181	151	121	53	138	81	63	-4	36	100
NET WORTH	124	130	123	113	87	117	91	84	58	73	100
MEMBERS' EQUITY	75	79	77	81	91	106	119	126	119	127	100

a Includes credit to shares.

Table 58. Summary of Balance Sheet Changes Between Years 1942-51; 1942-47; 1947-51, Riverton Creamery Association Limited

Components	1942-51 period Where got	1942-51 period Where gone	1942-47 period Where got	1942-47 period Where gone	1947-51 period Where got	1947-51 period Where gone
Assets	-		-thousands of dollars-		-	
Cash plus government bonds	-0.7	-	-0.2	-	-0.5	-
Current receivables	-	5.2	-	3.5	-	1.7
Store	-	5.0	-	1.3	-	3.7
Creamery	-	0.2	-	2.2	-2.0	-
Inventories: Store	-	9.7	-	6.8	-	2.9
Creamery	-	1.2	-	0.7	-	0.5
Total store	-	14.4	-	8.0	-	6.4
Total creamery	-	1.0	-	2.8	-1.8	-
TOTAL CURRENT ASSETS	-	15.4	-	10.8	-	4.6
Other assets: Store	-	1.3	-	0.6	-	0.7
Creamery	-	1.5	-0.2	-	-	1.7
TOTAL OTHER ASSETS	-	2.8	-	0.4	-	2.4
Fixed assets: Store	-	0.7	-	0.5	-	0.2
Creamery	-	3.3	-	2.7	-	0.6
TOTAL FIXED ASSETS	-	4.0	-	3.2	-	0.8
Total store	-	16.4	-	9.1	-	7.3
Total creamery	-	5.8	-	5.3	-	0.5
TOTAL ALL ASSETS	-	22.2	-	14.4	-	7.8
Liabilities						
Current bank store	-	-1.0	-	-1.0	0.0	-
Creamery	4.5	-	3.4	-	1.1	-
Accounts payable store	5.1	-	1.7	-	3.4	-
Creamery	-	-0.2	-	-0.3	0.1	-
Customer credit balance	-	-0.3	0.2	-	-	-0.5
Other current	0.1	-	0.3	-	-	-0.2
Loans from members	2.7	-	3.3	-	-	-0.6
Total current store	6.5	-	4.2	-	2.3	-
Creamery	4.4	-	3.4	-	1.0	-
Total	10.9	-	7.6	-	3.3	-
Fixed liabilities	0.3	-	0.3	-	0.0	-
TOTAL LIABILITIES TO PUBLIC	11.2	-	7.9	-	3.3	-
Dividends payable	0.3	-	-	-	0.3	-
Revolving surplus fund	16.5	-	7.4	-	9.1	-
TOTAL ALLOCATED SURPLUS	16.8	-	7.4	-	9.4	-
Capital stock outstanding[a]	0.4	-	1.0	-	-	-0.6
Reserves and surplus	-	-6.2	-	-1.9	-	-4.3
Net worth	-	-5.8	-	-0.9	-	-4.9
Members equity	11.0	-	6.5	-	4.5	-
MEMBERS EQUITY PLUS	-	-	-	-	-	-
LIABILITIES TO PUBLIC	22.2	-	14.4	-	7.8	-

a Includes credit to shares.

Table 59. Comparative Cost of Manufacture and Operating Statements for Years 1941 to 1950 and Average 1941-50
Vita Co-operative Limited

Components	Years										Average
	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1941-50
	- thousand dollars -										
Cost of butterfat	85.8	126.5	126.4	141.9	132.2	131.6	166.1	229.8	166.5	131.8	143.8
Trucking expense	4.2	6.4	4.5	5.1	4.2	6.0	4.9	8.1	8.0	5.6	5.7
TOTAL COST AT PLANT	90.0	132.9	130.9	147.0	136.4	137.6	171.0	237.9	174.5	137.4	149.5
Cost of materials	2.8	2.9	3.3	3.8	4.4	4.9	5.5	4.4	4.7	5.0	4.2
General expenses and allowances	2.1	3.0	3.5	4.6	5.0	4.7	5.6	5.7	5.3	6.4	4.6
Wages and salaries	3.4	3.5	3.8	4.9	4.4	4.2	4.2	5.0	4.9	4.7	4.3
TOTAL MANUFACTURING COST	8.3	9.4	10.6	13.3	13.8	13.8	15.3	15.1	14.9	16.1	13.1
COST OF PRODUCT MANUFACTURED	98.3	142.3	141.5	160.3	150.2	151.4	186.3	253.0	189.4	153.5	162.6
Gross sales	102.9	153.3	148.1	166.8	157.2	156.3	201.7	262.1	198.9	161.5	170.9
Net sales	101.8	151.9	146.5	164.8	155.5	154.9	200.0	260.3	197.2	160.2	169.3
Net inventory change	-1.0	-0.4	0.5	0.3	0.2	-1.5	1.5	-2.4	2.2	0.6	-*
Cost of product sold	97.3	141.9	142.0	160.6	150.4	149.9	187.8	250.6	191.6	154.1	162.6
Gross margin on sales	4.5	10.0	4.5	4.2	5.1	5.0	12.2	9.7	5.6	6.1	6.7
Other revenue	*	-	0.1	0.6	0.2	*	1.4	1.8	1.1	1.3	0.7
Total gross margin	4.5	10.0	4.6	4.8	5.3	5.0	13.6	11.5	6.7	7.4	7.4
Administrative and general expense	2.1	3.0	2.9	3.3	2.8	3.0	3.3	3.8	3.5	3.9	3.2
NET MARGIN ON OPERATIONS	2.4	7.0	1.7	1.5	2.5	2.0	10.3	7.7	3.2	3.5	4.2

*Less than 50 dollars

Table 60. Comparative Cost of Manufacture and Operating Statements in Component Percentage Form for the Years 1941 to 1950 and 1941-50 average, Vita Co-operative Limited

Components	Year 1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- per cent -										
Cost of butterfat	87.3	88.9	89.3	88.5	88.0	86.9	89.2	90.8	88.0	85.8	88.5
Trucking expense	4.3	4.5	3.2	3.2	2.8	4.0	2.6	3.2	4.2	3.7	3.5
TOTAL COST AT PLANT	91.6	93.4	92.5	91.7	90.8	90.9	91.8	94.0	92.2	89.5	92.0
Cost of material	2.8	2.1	2.3	2.4	2.9	3.3	3.0	1.8	2.4	3.3	2.6
General expenses and allowances	2.1	2.1	2.5	2.9	3.4	3.0	3.0	2.3	2.8	4.2	2.8
Wages and salaries	3.5	2.4	2.7	3.0	2.9	2.8	2.2	1.9	2.6	3.0	2.6
TOTAL MANUFACTURING COST	8.4	6.6	7.5	8.3	9.2	9.1	8.2	6.0	7.8	10.5	8.0
COST OF PRODUCT MANUFACTURED	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gross sales	101.2	101.0	101.0	101.2	101.1	100.9	100.9	100.7	100.9	100.8	100.9
Net sales	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cost of product sold	95.6	93.4	96.9	97.4	96.7	96.8	93.9	96.3	97.2	96.2	96.1
Gross margin on sales	4.4	6.6	3.1	2.6	3.3	3.2	6.1	3.7	2.8	3.8	3.9
Other revenue	-	-	0.1	0.3	0.1	-	0.7	0.7	0.6	0.8	0.4
Total gross margin	4.4	6.6	3.2	2.9	3.4	3.2	6.8	4.4	3.4	4.6	4.3
ADMINISTRATIVE AND GENERAL EXPENSES	2.1	2.0	2.0	2.0	1.8	1.9	1.7	1.5	1.8	2.4	1.9
Net margin on operations	2.3	4.6	1.2	0.9	1.6	1.3	5.1	2.9	1.6	2.2	2.4

Table 61. Comparative Cost of Manufacture and Operating Statements in Trend Percentage Form for years 1941 to 1950 (Base 1941-50 average): Vita Co-operative Limited

Components	Years										Average
	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1941-50
	- per cent -										
Cost of product at plant	60	89	88	98	91	92	114	159	117	92	100
Total manufacturing expense	64	72	81	102	106	106	117	116	114	123	100
COST OF PRODUCT MANUFACTURED	60	88	87	98	92	93	114	156	116	94	100
Gross sales	60	90	87	98	92	92	118	153	116	94	100
Net sales	60	90	87	97	92	92	118	154	116	95	100
Cost of product sold	60	87	87	99	92	92	115	154	118	95	100
Gross margin on sales	67	149	68	63	77	75	182	144	84	91	100
Other revenue	4	-	14	95	33	4	214	274	162	200	100
ADMINISTRATIVE AND GENERAL EXPENSE	66	94	92	105	89	94	105	120	111	124	100
NET MARGIN ON OPERATIONS	57	167	41	37	60	49	246	184	76	83	100

Table 62. Comparative Balance Sheet Statements for years 1941 to 1950 and Average 1941-50: Vita Co-operative Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- thousands of dollars -										
ASSETS											
Cash plus government bonds	4.7	8.8	4.2	6.4	5.7	4.9	12.0	6.7	5.4	5.0	6.4
Current receivables	0.9	1.8	2.0	1.2	1.5	1.0	2.6	3.6	3.2	5.7	2.4
Inventories	1.1	1.5	1.0	0.7	0.5	2.3	0.6	3.0	0.8	0.1	1.1
TOTAL CURRENT ASSETS	6.7	12.1	7.2	8.3	7.7	8.2	15.2	13.3	9.4	10.8	9.9
Prepaid expenses	0.4	1.9	3.0	0.9	1.8	2.2	3.2	4.9	5.7	3.6	2.7
Plant supplies and materials	0.2	0.4	0.6	0.6	0.8	1.1	0.6	2.8	1.9	1.2	1.0
Intangibles	0.6	0.6	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.1
TOTAL OTHER ASSETS	1.2	2.9	4.7	2.6	3.7	4.5	4.9	8.8	8.8	6.0	4.8
FIXED ASSETS	6.2	5.8	7.8	9.0	9.6	9.9	12.9	14.5	15.5	15.7	10.7
TOTAL ALL ASSETS	14.1	20.8	19.7	19.9	21.0	22.6	33.0	36.6	33.7	32.6	25.4

Table 62. Continued.

Components	Years 1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- thousands of dollars -										
LIABILITIES AND NET WORTH											
Bank or Credit Union	3.8	6.0	4.1	5.1	4.0	5.2	5.8	6.0	3.0	1.6	4.5
Accounts payable	0.7	1.0	1.1	0.1	-	-	-	-	*	-	0.3
Other current liabilities	0.2	0.2	1.0	0.3	0.5	0.2	-	*	-	-	0.2
TOTAL CURRENT LIABILITIES TO PUBLIC	4.7	7.2	6.2	5.5	4.5	5.4	5.8	6.0	3.0	1.6	5.0
Loans from public	2.5	1.7	-	-	-	-	-	-	-	-	0.4
TOTAL LIABILITIES TO PUBLIC	7.2	9.0	6.2	5.5	4.5	5.4	5.8	6.0	3.0	1.6	5.4
Capital Dividend payable	0.2	0.5	0.8	0.3	0.6	0.2	0.2	0.2	0.2	1.5	0.5
Patronage Dividend (Retained)	4.2	6.3	7.2	4.7	4.0	4.0	4.0	6.6	3.9	6.7	5.2
TOTAL ALLOCATED SURPLUS	4.4	6.8	8.0	5.0	4.6	4.2	4.2	6.8	4.1	8.2	5.7
Capital outstanding	2.1	4.1	4.3	6.7	7.9	9.2	8.9	11.5	11.5	12.1	7.8
Reserves	0.5	1.0	1.1	1.1	1.3	1.5	1.6	4.7	5.0	5.3	2.3
Undivided surplus	-0.1	-0.1	*	1.6	2.7	2.2	12.5	7.6	10.1	5.4	4.2
Net worth	2.5	5.0	5.5	9.4	11.9	13.0	23.0	23.8	26.6	22.8	14.3
Members equity	6.9	11.8	13.5	14.4	16.5	17.2	27.2	30.6	30.7	31.0	20.0
PLUS LIABILITIES TO PUBLIC	14.1	20.8	19.7	19.9	21.0	22.6	33.0	36.6	33.7	32.6	25.4

*Less than 50 dollars

Table 63. Comparative Balance Sheets in Component Percentage Form for Years 1941 to 1950 and average 1941-50, Vita Co-operative Limited

Components	Years										Average
	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1941-50
	- per cent -										
ASSETS											
Cash plus government bonds	33	42	21	33	27	22	36	18	16	15	25
Current receivables	7	9	10	6	7	5	8	10	10	17	9
Inventories	8	7	5	3	2	10	2	8	2	1	5
TOTAL CURRENT ASSETS	48	58	36	42	36	36	46	36	28	33	39
Prepaid expenses	3	9	15	4	8	10	10	13	17	11	11
Plant supplies and materials	1	2	3	3	4	5	2	8	6	4	4
Intangibles	5	3	6	6	6	5	3	3	3	4	4
Total other assets	9	14	24	13	18	20	15	24	26	19	19
Fixed assets	43	28	40	45	46	44	39	40	46	48	42
TOTAL ALL ASSETS	100	100	100	100	100	100	100	100	100	100	100

Table 63. Continued.

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- per cent -										
LIABILITIES AND NET WORTH											
Bank or Credit Union	27	29	21	26	18	23	18	16	9	5	18
Accounts payable	4	5	6	-	-	-	-	-	-	-	1
Other current liabilities	2	1	5	2	3	1	-	-	-	-	1
TOTAL CURRENT LIABILITIES TO PUBLIC	33	35	32	28	21	24	18	16	9	5	20
Loans from public	18	8	-	-	-	-	-	-	-	-	2
TOTAL LIABILITIES TO PUBLIC	51	43	32	28	21	24	18	16	9	5	22
Capital Dividend payable	2	2	4	2	3	1	1	1	1	5	2
Patronage dividend (retained)	29	31	36	23	19	18	12	18	11	20	20
Total allocated surplus	31	33	40	25	22	19	13	19	12	25	22
Capital outstanding	15	19	22	33	38	40	27	31	34	37	31
Reserves	4	5	6	6	6	7	4	13	15	16	9
Undivided surplus	-1	-	-	8	13	10	38	21	30	17	16
Net worth	18	24	28	47	57	57	69	65	79	70	56
MEMBERS EQUITY	49	57	68	72	79	76	82	84	91	95	78
MEMBERS EQUITY PLUS LIABILITIES TO PUBLIC	100	100	100	100	100	100	100	100	100	100	100

Table 64. Comparative Balance Sheets in Trend Percentage Form for years 1941-50, (Base 1941-50 average): Vita Co-operative Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- per cent -										
ASSETS											
Cash plus government bonds	74	136	66	100	90	77	189	105	84	78	100
Current receivables	40	77	85	52	65	44	108	151	137	241	100
Inventories	97	132	88	57	43	197	50	257	67	13	100
TOTAL CURRENT ASSETS	68	122	73	84	78	83	154	134	95	109	100
Total other assets	25	60	97	55	77	92	102	183	183	125	100
Fixed assets	57	55	73	84	89	93	120	136	145	147	100
TOTAL ALL ASSETS	56	82	78	78	83	89	130	144	133	128	100
LIABILITIES AND MEMBERS EQUITY											
Bank or Credit Union	86	136	91	114	89	116	130	134	68	36	100
Total current liabilities to public	94	146	124	109	90	108	116	120	61	32	100
TOTAL LIABILITIES TO PUBLIC	133	166	115	101	83	99	107	111	56	30	100
Total liabilities to members	78	121	142	89	82	75	75	121	72	146	100
Capital outstanding	27	52	56	85	101	118	113	148	148	153	100
Reserves	21	42	49	49	56	67	67	202	216	231	100
Undivided surplus	2	1	0	37	64	53	299	181	241	129	100
Net worth	17	35	38	65	83	91	160	166	186	159	100
Members equity	35	59	68	72	83	86	136	153	154	155	100
MEMBERS EQUITY PLUS TOTAL LIABILITIES TO PUBLIC	56	82	78	78	83	89	130	144	133	128	100

Table 65. Summary Balance Sheet Changes between years 1941-50; 1941-46; 1946 and 1950: Vita Co-operative Limited

Components	1941-50 period: Where got	1941-50 period: Where gone	1941-46 period: Where got	1941-46 period: Where gone	1946-50 period: Where got	1946-50 period: Where gone
ASSETS						
Cash plus government bonds	-	0.3	-	0.2	-	0.1
Current receivables	-	4.8	-	0.1	-	4.7
Inventories	-1.0	-	-	1.2	-2.2	-
TOTAL CURRENT ASSETS	-	4.1	-	1.5	-	2.6
Prepaid expenses	-	3.2	-	1.7	-	1.5
Supplies and materials	-	1.1	-	1.0	-	0.1
Intangibles	-	0.5	-	0.5	-	-
TOTAL OTHER ASSETS	-	4.8	-	3.2	-	1.6
FIXED ASSETS	-	9.6	-	3.8	-	5.8
TOTAL ALL ASSETS	-	18.5	-	8.5	-	10.0
LIABILITIES AND MEMBERS EQUITY						
Bank or Credit Union	-	-2.2	1.4	-	-	-3.6
Accounts payable	-	-0.7	-	-0.7	-	-
Other current liabilities	-	-0.2	*	-	-	-0.2
Total current liabilities to public	-	-3.1	0.7	-	-	-3.8
Fixed Liabilities to public	-	-2.5	-	-2.5	-	-
TOTAL LIABILITIES TO PUBLIC	-	-5.6	-	-1.8	-	-3.8
Capital dividend payable	1.3	-	-	*	1.3	-
Patronage dividend (retained)	2.5	-	-	-0.2	2.7	-
TOTAL LIABILITIES TO MEMBERS	3.8	-	-	-0.2	4.0	-
Capital outstanding	9.9	-	7.1	-	2.8	-
Reserves	4.9	-	1.1	-	3.8	-
Undivided surplus	5.5	-	2.3	-	3.2	-
NET WORTH	20.3	-	10.5	-	9.8	-
MEMBERS EQUITY	24.1	-	10.3	-	13.8	-
MEMBERS EQUITY PLUS LIABILITIES TO PUBLIC	18.5	-	8.5	-	10.0	-

*Less than 50 dollars.

Table 66. Comparative Cost of Manufacture and Operating Statements for years 1941 to 1950 and average year 1941-50: Winkler Co-operative Creamery Limited

Component	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- thousands of dollars -										
Cost of produce	115.6	153.5	149.0	177.6	251.7	270.1	307.1	489.8	455.7	395.5	276.5
Trucking expense	1.8	1.5	1.4	1.1	2.1	4.2	5.0	8.7	9.4	6.5	4.2
Cost at plant	117.4	155.0	150.4	178.7	253.8	274.3	312.1	498.5	465.1	402.0	280.7
Manufacture expense	12.4	19.6	21.6	26.4	33.6	37.7	38.8	41.8	61.1	65.7	35.9
COST OF PRODUCT MANUFACTURED	129.8	174.6	172.0	205.1	287.4	312.0	350.9	540.3	526.2	467.7	316.6
Gross sales	141.1	182.7	184.9	214.7	305.8	326.7	373.2	577.4	555.7	516.4	337.9
Net sales	138.7	181.6	183.6	212.0	300.1	325.0	369.7	568.2	545.1	501.2	332.5
Net inventory change	-1.1	-2.3	-0.7	-1.2	0.6	3.0	-3.4	-0.1	-2.4	1.2	-0.6
Cost of product sold	128.8	172.3	171.3	203.9	288.0	315.0	347.5	540.2	523.8	468.9	316.0
Gross margin on sales	9.9	9.3	12.3	8.1	12.1	10.0	22.2	28.0	21.3	32.3	16.5
Other revenue	0.1	0.9	0.2	1.2	-	0.6	0.2	0.6	1.3	9.7	1.5
Total gross margin	10.0	10.2	12.5	9.3	12.1	10.6	22.4	28.6	22.6	42.0	18.0
Administrative and general expense	2.0	2.7	4.2	3.6	4.5	3.7	10.0	12.6	13.6	18.2	7.5
NET MARGIN ON OPERATIONS	8.0	7.5	8.3	5.7	7.6	6.9	12.4	16.0	9.0	23.8	10.5

Table 67. Comparative Cost of Manufacture and Operating Statements for 1941 to 1950 in Component Percentage Form: Winkler Co-operative Creamery Limited

Items of Cost	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	Years – per cent –										
Cost of Butterfat	89.0	87.9	86.6	86.6	87.6	86.6	87.5	90.7	86.6	84.6	87.3
Cream trucking	1.4	0.8	0.8	0.5	0.7	1.3	1.4	1.6	1.8	1.4	1.3
Cost at plant	90.4	88.7	87.4	87.1	88.3	87.9	88.9	92.3	88.4	86.0	88.6
Manufacture expense	9.6	11.2	12.6	12.9	11.7	12.1	11.1	7.7	11.6	14.0	11.3
COST OF PRODUCT MANUFACTURED	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gross sales	101.8	100.6	100.6	101.3	101.9	100.5	100.9	101.6	102.0	103.0	101.6
Net sales	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cost of product sold	92.9	94.9	93.3	96.2	96.0	96.9	94.0	95.1	96.1	93.5	95.0
Gross margin on sales	7.1	5.1	6.7	3.8	4.0	3.1	6.0	4.9	3.9	6.5	5.0
Other revenue	0.1	0.5	0.1	0.6	-	0.2	0.1	0.1	0.2	1.9	0.4
Total gross margin	7.2	5.6	6.8	4.4	4.0	3.3	6.1	5.0	4.1	8.4	5.4
Administrative and general expense	1.4	1.3	2.3	1.7	1.5	1.2	2.7	2.2	2.5	3.6	2.3
NET MARGIN ON OPERATIONS	5.8	4.1	4.5	2.7	2.5	2.1	3.4	2.8	1.6	4.8	3.1

Table 68. Comparative Cost of Manufacture and Operating Statements in Trend Percentage Form for years 1941-50 (Base 1941-50 average): Winkler Co-operative Creamery Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
					- per cent -						
Cost at plant	42	55	54	64	90	98	111	178	166	143	100
Manufacture expense	35	55	60	74	94	105	108	117	170	183	100
COST OF PRODUCT MANUFACTURED	41	55	54	65	91	99	111	171	166	148	100
Gross sales	42	54	55	64	90	97	110	171	164	153	100
Net sales	42	55	55	64	90	98	111	171	164	151	100
Cost of product sold	41	54	54	64	91	100	110	171	166	148	100
GROSS MARGIN ON SALES	60	56	74	49	73	60	134	169	129	196	100
Other revenue	8	65	15	82	-	40	16	39	86	649	100
Administrative and general expense	26	36	56	47	60	49	133	168	182	242	100
NET MARGIN ON OPERATIONS	76	72	79	54	72	66	118	151	85	227	100

Table 69. Comparative Balance Sheet Statements for years 1941 to 1950 and average 1941-50: Winkler Co-operative Creamery Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
					- thousands of dollars -						
ASSETS											
Cash plus government bonds	2.7	8.9	9.5	3.9	9.3	7.2	12.0	8.6	7.0	4.4	7.3
Current receivables	2.2	0.9	4.1	3.4	5.9	10.4	12.4	13.4	18.5	20.8	9.2
Business account	2.2	-	1.0	1.7	4.3	6.8	12.4	8.1	8.9	14.6	6.0
Instalment account	-	-	0.1	-	-	-	-	-	4.9	4.6	1.0
Government subsidy	-	0.9	3.0	1.7	1.6	3.6	-	5.3	4.6	1.6	2.2
Inventories	1.7	3.4	4.2	5.5	2.7	1.4	4.9	5.1	7.5	5.3	4.2
TOTAL CURRENT ASSETS	6.6	13.1	17.8	12.8	17.9	19.0	29.3	27.1	33.0	30.5	20.7
Prepaid expenses	0.3	0.4	0.3	2.1	2.2	1.4	0.7	1.2	1.1	1.1	1.1
Supplies and materials	0.3	0.3	1.0	1.2	1.6	2.3	2.1	3.3	4.9	11.8	2.8
Fixed receivables	*	*	0.1	0.2	0.2	0.4	1.1	1.6	3.4	4.6	1.2
TOTAL OTHER ASSETS	0.6	0.7	1.4	3.5	4.0	4.1	3.9	6.1	9.4	17.5	5.1
FIXED ASSETS	11.2	11.2	12.4	30.7	30.7	30.0	28.8	54.0	56.6	53.3	31.9
TOTAL ALL ASSETS	18.4	25.0	31.6	47.0	52.6	53.1	62.0	87.2	99.0	101.3	57.7

* Less than 50 dollars.

Table 69. Continued.

	Years										
	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
LIABILITIES AND MEMBERS EQUITY	- thousands of dollars -										
Bank and Credit Union	-	-	-	8.0	0.3	0.3	0.5	0.5	10.7	1.7	2.2
Accounts payable	0.5	0.5	2.7	2.5	3.9	3.1	4.1	10.9	8.1	7.6	4.4
Accrued expense	*	0.5	0.4	0.2	1.3	0.8	1.4	2.5	2.5	2.5	1.2
Other current liabilities	0.4	0.5	-	0.6	*	-	-	5.6	-	-	0.7
Total current liabilities to public	0.9	1.5	3.1	11.3	5.5	4.2	6.0	19.5	21.3	11.8	8.5
Loans from public	8.1	6.3	3.3	5.5	10.8	10.0	6.0	11.3	14.3	9.8	8.5
TOTAL LIABILITIES TO PUBLIC	9.0	7.8	6.4	16.8	16.3	14.2	12.0	30.8	35.6	21.6	17.0
Dividend payable	-	-	-	-	0.5	0.5	0.4	2.2	2.0	3.7	1.0
Revolving surplus fund	8.0	14.8	14.3	16.7	14.9	18.3	21.9	22.0	35.1	35.1	20.1
Total allocated surplus	8.0	14.8	14.3	16.7	15.4	16.8	22.3	24.2	37.1	38.8	21.1
Capital outstanding	1.3	1.5	8.7	10.3	10.2	10.0	12.3	13.6	14.5	14.5	9.7
Reserves	0.1	0.9	2.2	3.2	3.2	3.2	3.1	3.1	3.1	4.9	2.7
Undivided surplus	-	-	-	-	7.5	6.9	12.3	15.5	8.7	21.5	7.2
Net worth	1.4	2.4	10.9	13.5	20.9	20.1	27.7	32.2	26.3	40.9	19.6
Members equity	9.4	17.2	25.2	30.2	36.3	38.9	50.0	56.4	63.4	79.7	40.7
NET WORTH PLUS MEMBERS EQUITY	18.4	25.0	31.6	47.0	52.6	53.1	62.0	87.2	99.0	101.3	57.7

*Less than 50 dollars

Table 70. Comparative Balance Sheet Statement in Component Percentage Form for years 1941-50, Winkler Co-operative Creamery Limited

Assets	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	- per cent -										
Cash plus government bonds	14	36	30	8	18	14	19	10	7	4	13
Current receivables	12	4	13	7	11	19	20	15	19	21	16
Inventory	9	13	14	12	5	3	8	6	7	5	7
Total current assets	35	53	57	27	34	36	47	31	33	30	36
Prepaid expenses	2	2	1	5	4	3	1	1	1	1	2
Supplies and materials	2	1	3	2	3	4	3	4	5	12	5
Fixed receivables	*	-	-	1	1	1	2	2	4	4	2
Total other assets	4	3	4	8	8	8	6	7	10	17	9
Fixed assets	61	44	39	65	58	56	47	62	57	53	55
TOTAL ASSETS	100	100	100	100	100	100	100	100	100	100	100

* Less than .5 per cent

Table 70 . Continued

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
					- per cent -						
Bank (Loans or overdraft)	-	-	-	17	1	1	1	1	11	2	4
Accounts payable	3	2	9	5	7	6	7	12	8	8	8
Accrued expenses	*	2	1	*	2	2	2	3	2	2	2
Other current	2	2	-	2	*	-	-	6	-	-	1
Total current liability to public	5	6	10	24	10	8	10	22	21	11	15
Loans from public	44	25	10	12	21	19	9	13	15	10	15
Total liabilities to public	49	31	20	36	31	27	19	35	36	21	30
Dividend payable	-	-	-	-	1	1	1	3	2	4	2
Revolving surplus fund	44	59	45	35	28	34	35	25	35	35	34
Total allocated surplus	44	59	45	35	29	35	36	28	37	39	36
Capital outstanding	7	6	28	22	20	19	20	16	15	14	17
Reserve and undivided surplus	*	4	7	7	20	19	25	21	12	26	17
Net worth	7	10	35	29	40	38	45	37	27	40	34
Members' equity	51	69	80	64	69	73	81	65	64	79	70
Members equity and liabilities to public	100	100	100	100	100	100	100	100	100	100	100

*Less than .5 per cent.

Table 71. Comparative Balance Sheets in Trend Percentage Form for years 1941-50 (Base 1941-50 average): Winkler Co-operative Creamery Limited

Components	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Average 1941-50
	Years										
	- per cent -										
ASSETS											
Cash plus government bonds	35	121	130	53	127	98	163	116	96	59	100
Current receivables	23	10	44	37	64	113	135	146	201	227	100
Inventories	42	82	100	132	65	34	118	121	180	127	100
TOTAL CURRENT ASSETS	32	64	86	62	87	92	141	130	159	147	100
Total other assets	12	14	28	69	78	79	77	120	184	340	100
Fixed assets	35	35	39	96	96	94	90	169	177	167	100
TOTAL ALL ASSETS	32	43	55	81	91	92	107	151	172	176	100
LIABILITIES AND MEMBERS EQUITY											
Bank or Credit Union	-	-	-	363	13	15	24	22	486	78	100
Total current liabilities to public	11	17	37	133	65	50	71	229	250	139	100
Loans from public	95	74	39	64	126	117	71	133	167	115	100
TOTAL LIABILITIES TO PUBLIC	53	46	38	98	96	83	71	181	209	127	100
Revolving surplus fund	40	74	71	83	74	91	108	109	174	175	100
Liabilities to members	38	70	68	80	73	90	106	115	176	184	100
Capital outstanding	14	16	89	106	105	103	127	140	150	150	100
Reserves	2	32	84	118	118	118	116	116	116	183	100
Undivided surplus	-	-	-	-	103	95	170	215	120	297	100
Net worth	7	12	56	69	106	102	141	164	134	208	100
Members equity	23	42	62	74	89	96	123	139	156	196	100

Table 72. Summary Balance Sheet Changes between the years 1941 and 1950; 1941 and 1946; 1946 and 1950: Winkler Co-operative Creamery Limited

Components	1941-50 period		1941-46 period		1946-50 period	
	Where got	Where gone	Where got	Where gone	Where got	Where gone
	-thousands of dollars-					
ASSETS						
Cash plus government bonds	-	1.7	-	4.6	-2.9	-
Business accounts	-	12.4	-	4.6	-	7.8
Instalment accounts	-	4.6	-	-	-	4.6
Government subsidy	-	1.6	-	3.6	-2.0	-
Current receivables	-	18.6	-	8.2	-	10.4
Inventories	-	3.6	-0.3	-	-	3.9
TOTAL CURRENT ASSETS	-	23.9	-	12.5	-	11.4
Prepaid expenses	-	0.8	-	1.1	-0.3	-
Supplies and materials	-	11.5	-	1.9	-	9.6
Fixed receivables	-	4.6	-	0.4	-	4.2
TOTAL OTHER ASSETS	-	16.9	-	3.4	-	13.5
FIXED ASSETS	-	42.1	-	18.8	-	23.3
TOTAL ASSETS	-	82.9	-	34.7	-	48.2
LIABILITIES AND MEMBERS EQUITY						
Bank or Credit Union	1.7	-	0.3	-	1.4	-
Accounts payable	7.1	-	2.6	-	4.5	-
Accrued expenses	2.4	-	0.7	-	1.7	-
Other current liabilities	-	-0.3	-	-0.3	-	*
Total current liabilities to public	10.9	-	3.3	-	7.6	-
Loans from public	1.7	-	1.9	-	-	-0.2
TOTAL LIABILITIES TO PUBLIC	12.6	-	5.2	-	7.4	-
Patronage dividend payable	3.7	-	0.5	-	3.2	-
Revolving surplus	27.1	-	10.3	-	16.8	-
TOTAL LIABILITIES TO MEMBERS	30.8	-	10.8	-	20.0	-
Capital outstanding	13.2	-	8.7	-	4.5	-
Reserves	4.8	-	3.1	-	1.7	-
Undivided surplus	21.5	-	6.9	-	14.6	-
Net worth	39.5	-	18.7	-	20.8	-
MEMBERS EQUITY	70.3	-	29.5	-	40.8	-
MEMBERS EQUITY PLUS LIABILITIES TO PUBLIC	82.9	-	34.7	-	48.2	-

*Less than 50 dollars.

APPENDIX B

The butter production of the four creameries is illustrated in Figure 29 for the 1931 to 1950 period. The average production per creamery for all creameries in the province is included for comparative purposes. The average production per creamery rose from 312,000 pounds in 1935 to 485,000 pounds in 1943 but had decreased to 326,000 pounds by 1950. The annual production at the four co-operative creameries followed the same general trend although, with the exception of Riverton, more extreme variations occurred among years.

In Figure 30 the seasonal variation in butter production is outlined for the four creameries and for Manitoba average conditions. The high-low ratios are included to further illustrate the range in output. The high-low ratios were calculated by dividing the output for the high production month by that for the low production month. There was an average of 3.9 times as much butter manufactured during the peak production months as during the low production month for all Manitoba creameries. The North Star creamery had the lowest high-low ratio value and the Vita creamery the highest. This range in output among months reflects the pattern of cream production established by the farmer patrons of each creamery. A low seasonal variation is desirable as it reduces the scale of plant required to handle a given output.

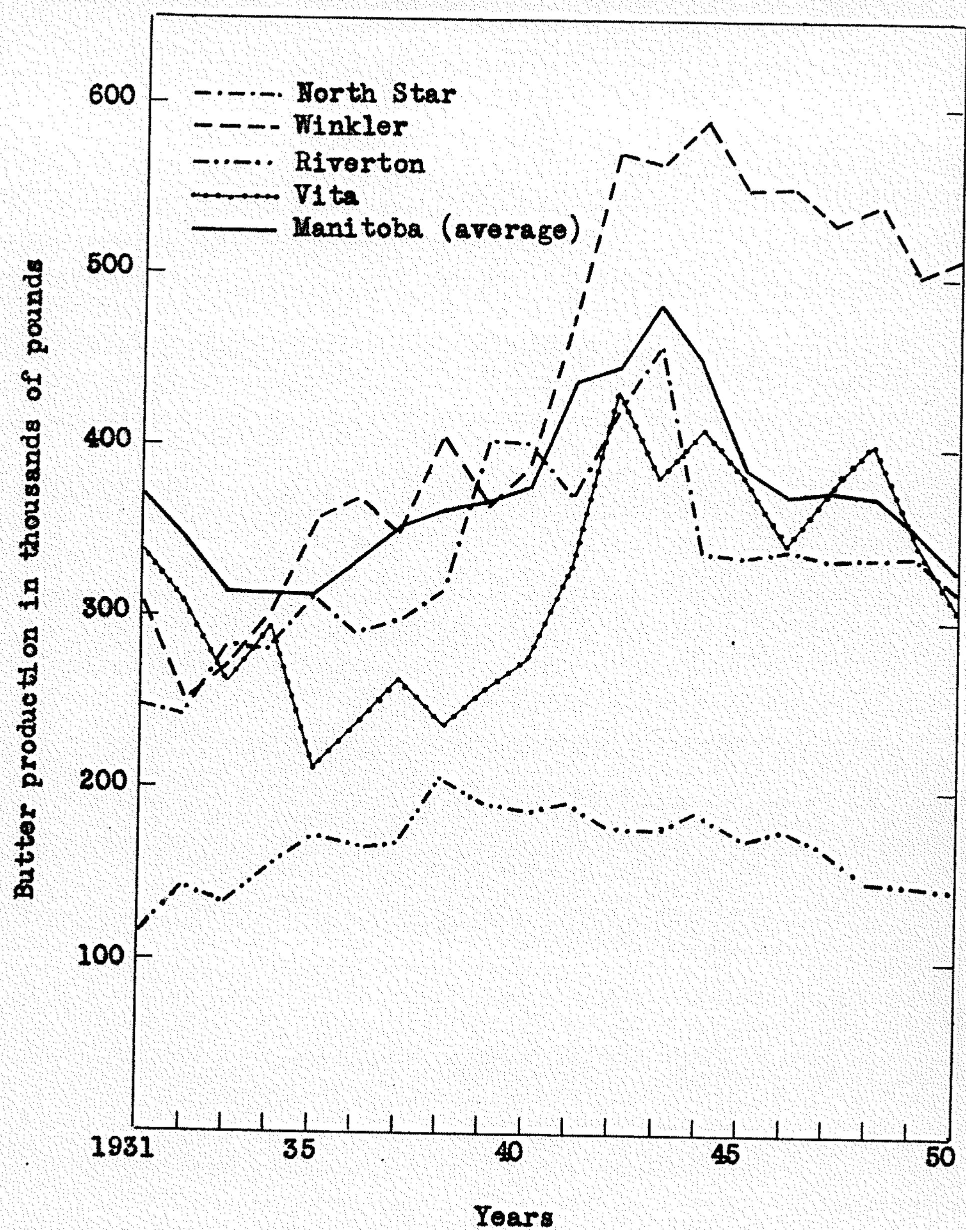

Figure 29. Annual butter production by creamery and the average production per creamery for Manitoba, 1931-50, from unpublished data, Dairy Branch, Manitoba Department of Agriculture.

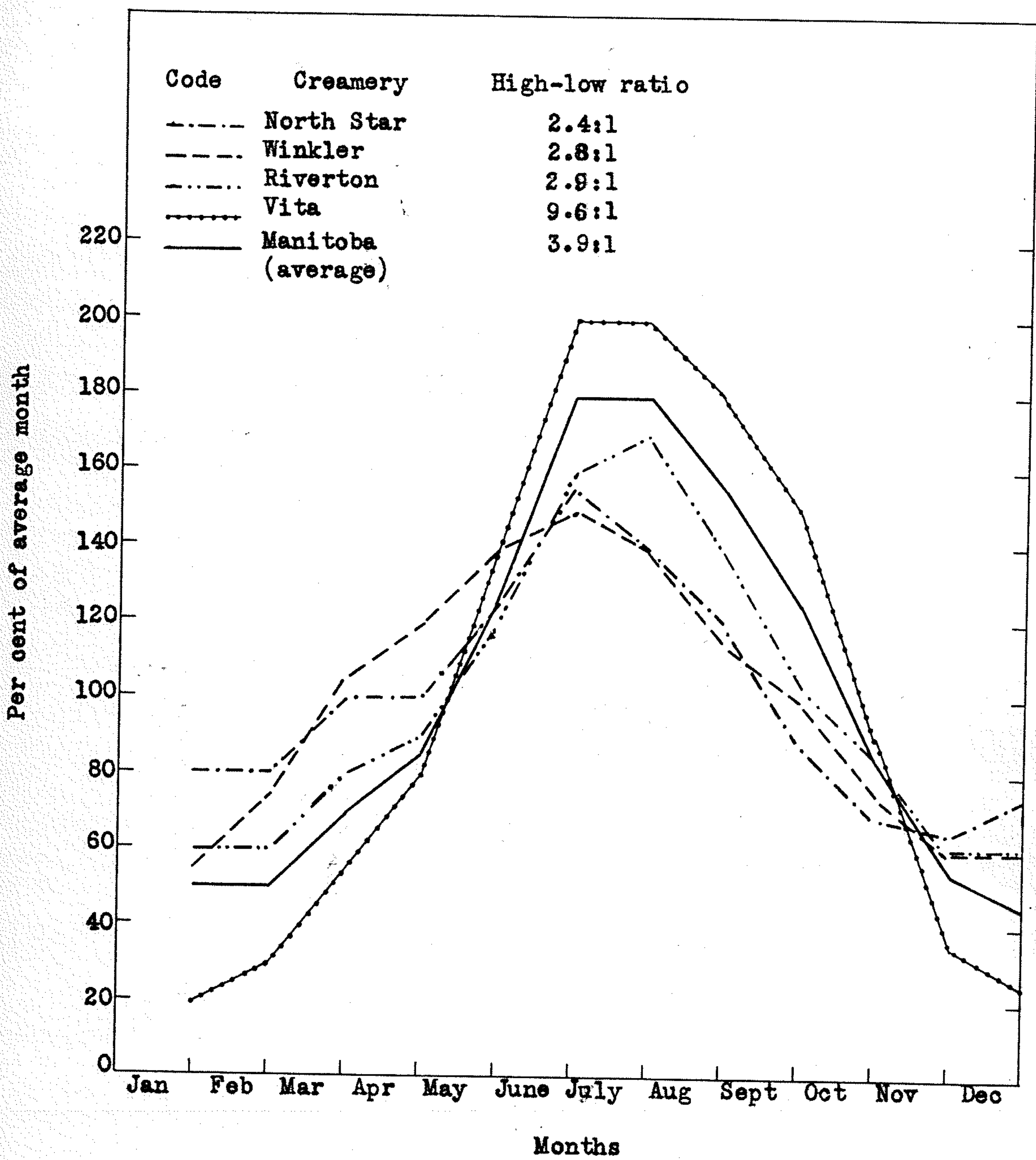

Figure 30. The seasonal variation in production relative to the average per month by creamery and for Manitoba and the ratio of high-low production months.