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To the Graduate Council:

I am submitting herewith a thesis written by Bobby Hugh Pentecost entitled "An Economic and Financial Analysis of 77 Local Farmers Cooperatives Affiliated with the Tennessee Farmers Cooperative." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Economics.

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210
33

AN ECONOMIC AND FINANCIAL ANALYSIS OF 77 LOCAL FARMERS COOPERATIVES
AFFILIATED WITH THE TENNESSEE FARMERS COOPERATIVE

A THESIS

Submitted to
The Graduate Council
of
The University of Tennessee
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for the degree of
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by
Bobby Hugh Pentecost
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CHAPTER I

INTRODUCTION

Farmers cooperatives were originated by farmers for the purpose of providing themselves with badly needed, economical and convenient services. They have become increasingly more important as a source of farm supplies. The total gross value of all farm supplies handled by cooperatives in the United States in 1954-55 was \$2,920,096,000 compared with \$2,839,963,000 in 1953-54, an increase of almost 3 per cent. The net value of these supplies totaled \$2,019,854,000 in 1954-55 compared with \$1,976,288,000 during the previous year, representing an increase of 2.2 per cent. Statistics of farmer cooperatives indicated a much larger percentage increase during that same period. The gross value of farm supplies handled by cooperatives in this state during 1954-55 was \$33,962,000, an increase of 12.9 per cent over the \$30,072,000 volume handled in 1953-54. The net value of these supplies increased from \$19,181,000 in 1953-54 to \$20,626,000 in 1954-55, or an increase of 7.5 per cent.^{1, 2}

Many cooperatives in Tennessee have experienced considerable growth in volume of business and services to members while others have experienced very little success. Some have reached a plateau and remained there; others have failed completely. The financial condition of a cooperative organization is viewed by many as the major criterion of its success or

¹Anne L. Gessner, Statistics of Farmer Cooperatives, 1953-54, Farmer Cooperative Service General Report 23, Washington, D. C., June 1956.

²Anne L. Gessner, Statistics of Farmer Cooperatives, 1954-55, Farmer Cooperative Service General Report 31, Washington, D. C., June 1957.

failure. Out of 820 marketing and purchasing cooperatives in Tennessee, 1878-1938, reporting main reasons for going out of business, 26 per cent reported reasons that were directly related to their financial condition.³ An unsound financial structure often brings higher operating costs and places an organization in a vulnerable position among competitors. The primary purpose of every farmer cooperative is to serve its members. Therefore, it is imperative that these organizations maintain a sound financial condition if they are to serve their purpose most effectively.

Statement of the Problem

Many managers and directors of local cooperative organizations have received no formal business training, while others have had only limited training or experience. A lack of training creates a problem which cannot usually be solved by experience alone.

The audit report of a business is the most important indicator of operational efficiency available to management. This report consists of a balance sheet and operating statement. The value of such a report, if used advantageously, far exceeds the cost of auditing service which is usually less than two per cent of the total operating expenses. The financial statement is a frame which holds the complete business picture of an organization. However, a manager or director not accustomed to working with a large number of financial figures will need further

³Development of Farmers Cooperatives in Tennessee, Monograph 99, Tennessee Agricultural Experiment Station, 1939.

simplification in order to determine the weak and strong points of his organization. Also, absolute figures presented in financial statements do not give a true picture for comparisons with cooperatives having different volumes of business.

Objectives of the Study

The objectives of this study are:

1. To examine the financial statements of local cooperatives affiliated with the Tennessee Farmers Cooperative to:
 - a. describe and analyze the current financial structure and determine the relative financial condition of 77 local farmers cooperatives.
 - b. study trends of selected organizations for relationships affecting operational efficiency.
2. To describe and compare factors relative to managerial efficiency and ability.

Importance of the Study

The Tennessee Farmers Cooperative is interested in the possibility of improving financial management among farmer cooperatives at the local level. Also many local managers and directors have expressed a desire for information which will aid them in improving the financial position of their organizations. Financial statements furnish a means by which managers and directors are informed of vital facts regarding the financial position of their organization. Therefore, a complete analysis of the balance sheets and

operating statements of local cooperatives can be an important source of information for them. A financial statement contains historic information. It does not present a future procedure but records the financial condition at the end of a given time period. Although analysis in this study will report on what has already happened, the resulting information may be used by local management as a guide to future financial procedure. Through pointing out various weaknesses in financial policy resulting from poor financial management and other factors, and offering suggestions for possible improvement, this study should provide insight toward attaining a higher efficiency rating for many local cooperatives.

The writer is aware of the fact that financial statement analysis alone cannot solve the many problems of a business. It would obviously be a waste of time to attempt to predict the outcome of a cross-country bicycle race by making a detailed analysis of the different bicycles entered. The outcome would be largely a result of the physical stamina and skill of the rider. By the same token the future of a business does not depend altogether on the financial position it now holds, but rather it depends to a vast degree on the efficiency and ability of management. This study attempts to relate various managerial relationships to selected factors affecting operational efficiency. The results of this particular phase of the study should point out the importance of high caliber management and serve as an important guide when recruiting new personnel.

Review of Related Studies

A similar study was made at the University of Tennessee in 1949.⁴ The primary objectives of that study were to determine the financial soundness of 55 farmers purchasing cooperatives in Tennessee through analyzing their balance sheets and operating statements and to determine pertinent relationships which could be used as measures of successful business operations. From the evidence presented it was indicated that the cooperatives doing the largest volume of business were in the most sound financial condition. This was attributed, by the writer, to more sound operating principles among the larger organizations.

A joint study by the Tennessee Agricultural Experiment Station and the Tennessee Valley Authority was made prior to World War II.⁵ Included in the study were the larger Tennessee farmers cooperatives that engaged in the business of marketing and purchasing during 1938. Part 2 of the study was concerned with purchasing cooperatives and was relatively broad in nature. Included in that part of the study was a brief history of purchasing cooperatives, a description of the area served, the organizational structure, and a limited financial analysis.

⁴T. L. Calloway, "A Business Analysis of 55 Farmers' Purchasing Cooperatives in Tennessee" (Unpublished Master's Thesis, University of Tennessee, 1951).

⁵B. D. Raskopf and P. W. Valtz, Farmers' Marketing and Purchasing Associations in Tennessee, Tennessee Agricultural Experiment Station, Bulletin 177, September 1941.

An economic study of cooperative purchasing of farm supplies in Tennessee was completed in 1955.⁶ The financial aspects received major emphasis. The specific findings and implications of the study were grouped under ten factors set up in terms of requirements for a sound financial plan. These requirements were suggested as possible guides for cooperatives in appraising their current financial programs and in determining future policies.

Financial management of 21 Mississippi Farmer Cooperatives was studied at Mississippi State College in 1956.⁷ That study indicated a need for more control on credit extension by cooperatives and an apparent need for membership education to increase the volume of business necessary for efficient operation. In general, however, the financial condition of those cooperatives was found to be satisfactory.

In 1954 a study was undertaken by Wendell Marlin McMillan⁸ to describe, analyze, and appraise the financial structure and management of the locally owned and controlled purchasing cooperatives operating in Pennsylvania during the post-war period 1947-48 through 1951-52. It was found that one of the most important needs of the local purchasing cooperatives is that of increased efficiency in the use of capital. It was

⁶John Lewis Fischer, "The Economics of Cooperative Purchasing of Farm Supplies in Tennessee, with Emphasis on the Financial Aspects" (Unpublished Ph.D. thesis, The University of Wisconsin, 1955).

⁷Charlie B. Robbins, "Financial Management Analysis of Farmer Cooperatives in Mississippi" (Unpublished Master's thesis, State College, Mississippi, January 1956).

⁸Wendell Marlin McMillan, "Financial Analysis of Farmer Purchasing Cooperatives in Pennsylvania" (Unpublished Ph.D. thesis, The Pennsylvania State University, June 1954).

suggested that many associations need to increase their volume of business in order to reduce per unit costs. Several important areas for increasing efficiency and reducing costs were suggested.

Another related study was made at the Texas Agricultural Experiment Station. A consolidated balance sheet and operating statement of 577 local cooperatives revealed a highly satisfactory financial condition. Limited ratio analysis was applied to the consolidated forms. The organizations were then broken down into groups according to types of operation. Percentage analysis was used primarily.

Related studies have been made at other Agricultural Experiment Stations: A Financial and Business Analysis of Indiana Grain Elevators at Purdue;¹⁰ Operation and Management of 13 Farmers' Cooperatives in North Georgia, 1944;¹¹ and a Business Analysis of Farmers' Grain Elevators at Illinois.¹² Two of these studies, however, were made primarily on marketing organizations rather than purchasing and supply operations.

⁹W. E. Paulson, Business and Financial Analysis of Local Cooperative Associations of Texas, Season 1949-50, Texas Agricultural Experiment Station, Bulletin 782, June 1954.

¹⁰E. G. Byer, G. B. Wood, and G. S. Abshier, A Financial and Business Analysis of Indiana Grain Elevators, Indiana Agricultural Experiment Station, Bulletin 547, February 1950.

¹¹N. M. Penny, Growth and Financial Condition of 13 Farmers' Cooperatives in North Georgia, 1944-1954, Georgia Agricultural Experiment Station, Mimeo Series N. S. 25, September 1956.

¹²R. J. Mutti, et al, Business Analysis of Farmers' Grain Elevators, Illinois Agricultural Experiment Station, Bulletin AE 2467, July 1947.

Scope of the Study

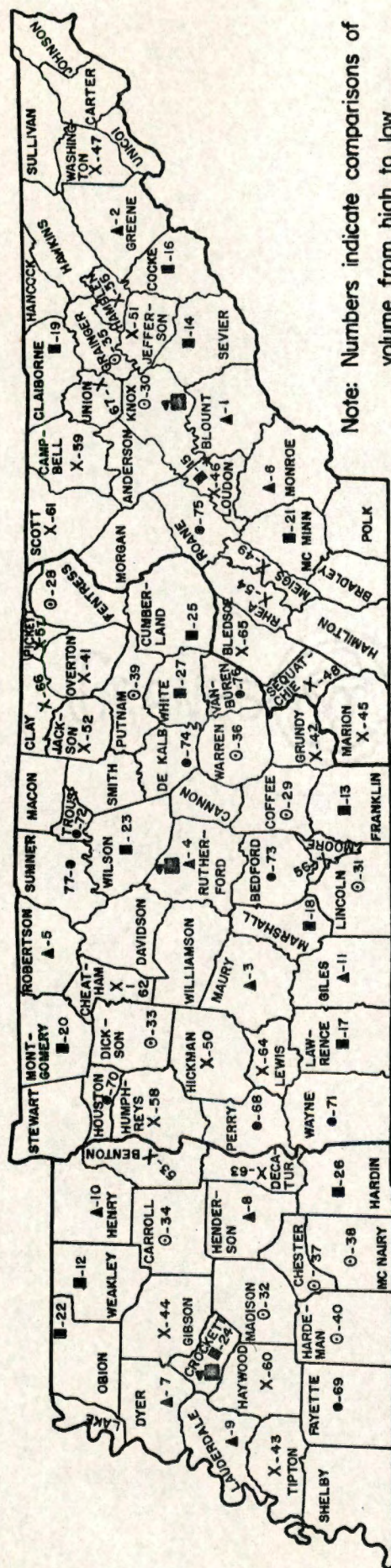
This study reports the current financial condition, relative efficiency, and ability of management of local farmers cooperatives in Tennessee (Figure 1). Trends of a selected number of organizations were studied to determine reasons for financial strength and possible causes of any current financial weaknesses occurring.

The findings may be applicable to all Tennessee farmer cooperatives and to similar organizations, both in Tennessee and other areas. The resulting information may also serve as an aid for teachers of vocational agriculture and for college instructors of courses in cooperation. Extension Service personnel may also use this information as resource material to help educate farmers in the area of cooperation.

Methodology and Sources of Data

Financial statements of 77 local cooperatives affiliated with the Tennessee Farmers Cooperative were analyzed. These statements were analyzed from two different viewpoints. First, the current situations of the 77 organizations were analyzed. Percentage analysis was used to describe the existing financial structure, whereas the relative financial condition was explored through the use of multiple ratio analysis. Secondly, trends of selected organizations were studied for relationships affecting operational efficiency. In addition, factors pertaining to relative efficiency and ability of managers of 55 local cooperatives were analyzed.¹³

¹³Data for twenty-two organizations were not available.



*** Number 46-Greenback**

LEGEND:

- Under \$100,000
 x \$100,000-\$199,999
 o \$200,000-\$299,999

Figure 1. Location of 77 local farmers cooperatives affiliated with the Tennessee Farmers Cooperative, Tennessee, 1957.

This study was made primarily by analyzing the annual audit reports of the 77 local cooperatives. Each report consists of a balance sheet and statement of operations prepared by the Tennessee Farmers Cooperative auditing service. The organizations studied have adopted a uniform system of bookkeeping which makes for a more meaningful analysis. Additional information was obtained from managers of those organizations under study. This information was secured by means of questionnaires.

CHAPTER II

FINANCIAL STRUCTURE

The Balance Sheet

Two financial statements are prepared annually for each organization-- a balance sheet and an operating statement. The balance sheets of the 77 local cooperatives included in this study present the relative financial structure of these organizations at the close of the 1957 fiscal year. The "component percentage method" was used in examining the financial structure. The major advantage of this method is simplification of the statements by reducing the figures to a size that can be grasped more easily. It is especially advantageous to the relatively inexperienced analyst. By using the percentage technique, it is easier to ascertain what proportions various items appearing on the statement are of the total. Improvements or deterioration in financial structure can be detected more quickly from these simplified relationships. This method is especially valuable in a changing economy because relative change in relation to other balance sheet components are more important than absolute changes.

A separate examination was made of the two major segments of the balance sheets. First, the components making up the total assets were examined and, secondly, the total liabilities and net worth were analyzed. According to James Bliss¹ the prime objective of the balance sheet is to

¹James H. Bliss, Financial and Operating Ratios in Management (Second printing; New York: Ronald Press Company, 1923), p. 163.

answer two questions:

1. What money is invested in the business, and how?
2. From what source is such capital secured?

The asset side of the balance sheets indicates the manner in which these organizations use their capital, while the liability and net worth segment show the sources from which capital is secured. The asset side is especially important in depicting the financial structure of a business because it presents the total money investment in plant and equipment, receivables, inventories, etc., at a given time. All of these items should show balance in relation to the total capital investment.

Current Assets

Current assets represent those items that are in the form of cash or can readily be converted into cash if necessary. Data in Table I show the average dollar value and the percentages of the various classes of assets in relation to the total assets. The current assets for the 77 local cooperatives studied averaged \$53,297, or 50.1 per cent of the total assets at the close of the 1957 fiscal year.

When analyzed by groups according to volume of sales, it was found that, in general, the smaller organizations held a larger percentage of current assets. However, the proportion of current assets held by each group averaged approximately 50 per cent (Table II).

Cash. Cash, which includes cash on hand and in banks, averaged \$8,889 or 8.4 per cent of the total assets for the 77 local cooperatives (Table I). It is desirable that a cooperative maintain an adequate cash balance to enable it to meet daily operating expenses. However, to hold excess

TABLE I

AVERAGE ASSETS, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Assets		Dollars	Per cent of total
Current assets			
Cash on hand and in banks		8,889	8.4
Advances and deposits		2,866	2.7
Receivables	18,984		17.8
Less reserve	<u>1,674</u>		<u>1.6</u>
Net receivables		17,310	16.2
Inventory		<u>24,247</u>	22.8
Total current assets		53,297	50.1
Fixed assets			
Real estate, buildings and equipment	38,544		36.2
Less reserve for depreciation	<u>8,860</u>		<u>8.3</u>
Book value fixed assets		29,684	27.9
Investments		15,330	14.4
Other assets		<u>8,115</u>	<u>7.6</u>
Total assets		106,440	100.0

amounts of cash is an indication of poor resource use and may be viewed as inefficient use of capital.

Table III shows a lower per cent of cash for the three top sales groups. This is an indication that working capital is being used more adequately by these organizations. Three of the organizations in the two lowest sales groups had overdrawn accounts, while one showed no cash in any form. This is an indication of poor financial management. Only one organization of the three larger sales groups showed an overdrawn account, and all of them maintained some form of cash balance.

Advances and deposits. This component of current assets represents the amounts on deposit with Tennessee Farmers Cooperative, entitling the organizations to a one per cent discount on purchases when all invoices are paid weekly. This is an important means of savings; therefore, every cooperative manager should strive to maintain a sufficient deposit which will enable his association to take advantage of such a profitable opportunity. For the 77 local cooperatives studied the average amount on deposit with Tennessee Farmers Cooperative was \$2,866, or 2.7 per cent of total assets.

Table IV indicates that, although the average proportion of advances and deposits to total assets does not vary significantly with volume of sales, a much greater percentage of the larger organizations take advantage of the one per cent discount offered by Tennessee Farmers Cooperative. Of the 14 organizations keeping no assets in this form, 12 were in the two lower sales groups.

TABLE II

DISTRIBUTION OF CURRENT ASSETS AS PER CENT OF TOTAL ASSETS ACCORDING
TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	45.2-66.3	52.5	10
100,000-199,999	34.4-74.4	52.8	27
200,000-299,999	34.6-70.5	49.7	13
300,000-399,999	33.6-69.4	46.4	16
400,000 and over	28.9-69.2	49.3	11
All organizations	28.9-74.4	50.1	77

TABLE III

DISTRIBUTION OF CASH AS PER CENT OF TOTAL ASSETS ACCORDING TO VOLUME
OF SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range	Per cent Averages of organizations reporting	Number of organizations	
			Reporting cash	Not reporting cash
Under \$100,000	1.4-23.3	12.5	9	1 ^a
100,000-199,999	1.0-34.6	11.8	24	3 ^b
200,000-299,999	0.2-23.3	6.5	12	1 ^a
300,000-399,999	0.4-17.1	7.9	16	-
400,000 and over	0.5-17.9	8.8	11	-
All organizations	0.2-34.6	9.5	72	5

^aOne overdrawn account.

^bTwo overdrawn, one no cash included.

Receivables. At the close of the 1957 fiscal year, the capital used by the 77 local cooperatives for the extension of credit to patrons averaged \$17,310, or 17.8 per cent of the total assets. The net receivables (accounts and notes receivable less reserve for bad debts) equalled 16.2 per cent of total assets. The major portion of credit extended to patrons was in the form of accounts receivable (claims against patrons for merchandise purchased on credit) leaving only a minor portion in the form of notes receivable (claims supported by written promises to pay a specific amount of money on demand or on a determined date). Cooperative managers should strive to control these accounts in so far as possible because serious financial weaknesses can result from high percentages of the total assets being held in the form of receivables. The earning power of a cooperative may be affected by the overextension of credit because this often ties up the availability of badly needed working capital.

As shown in Table V, the smallest sales group held an average of 13.2 per cent of net receivables to total assets, which was the smallest percentage held by any of the five groups. The middle sales group held the largest percentage of 21.5. The average net receivables for all cooperatives ranged from 0.6 to 53.8 per cent of total assets. While the evidence did not indicate a high proportion of receivables to be necessarily analogous to a low rate of earnings, many of the organizations holding a high percentage of receivables could possibly improve their financial position by initiating more control over receivables and thereby releasing capital to be invested in earning assets. This should also considerably reduce the bad debt loss.

TABLE IV

DISTRIBUTION OF ADVANCES AND DEPOSITS AS PER CENT OF TOTAL ASSETS
ACCORDING TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Sales group	Range	Per cent	Number of organizations	
		Averages of organizations reporting	Reporting	Not reporting
Under \$100,000	1.6-4.2	2.7	4	6
100,000-199,999	2.0-4.7	3.4	21	6
200,000-299,999	2.0-5.5	3.7	12	1
300,000-399,999	1.6-5.1	3.1	15	1
400,000 and over	1.5-4.3	2.9	11	-
All organizations	1.5-5.5	3.2	63	14

TABLE V

DISTRIBUTION OF NET RECEIVABLES AS PER CENT OF TOTAL ASSETS ACCORDING
TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	8.3-37.1	13.2	9 ^a
100,000-199,999	1.9-53.8	19.5	27
200,000-299,999	9.7-29.3	21.5	13
300,000-399,999	0.6-48.1	13.9	16
400,000 and over	1.5-30.5	16.6	11
All organizations	0.6-53.8	16.2	77

^aOne with more reserve for bad debts than receivables not included.

The average cooperative maintained a reserve for bad debts of \$1,674, or 1.6 per cent of total assets. Of all 77 local cooperatives studied, 5 had no reserve for bad debts. Seventeen of the remaining 72 organizations had a reserve of less than 0.5 per cent of total assets.

Inventory. The amounts of merchandise in the warehouses available for sale to patrons was one of the most important uses of capital for the average local farmers cooperative. For the 77 organizations studied inventories averaged \$24,247, or 22.8 per cent of total assets and was the largest component of current assets (Table I). Cooperative managers should guard against the possibility of overinvesting in inventories since relatively high inventories decrease the supply of available working capital which is often needed to meet daily operating expenses.

It was noted that as volume of sales increased, the average percentage of total assets held in the form of inventory decreased. For the smallest sales group the inventory averaged 29.4 per cent of total assets while the largest group averaged only 22.8 per cent (Table VI). In general, this relationship is an indication that the cooperatives with the higher volume of sales and having a lower percentage of capital invested in inventory were utilizing their working capital more efficiently and were, therefore, in a better financial position. It should be mentioned, however, that a large inventory is not always indicative of a weak financial condition. The annual inventory turnover largely determines whether or not a weakness exists.

TABLE VI

DISTRIBUTION OF INVENTORY AS PER CENT OF TOTAL ASSETS ACCORDING
TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	20.4-39.2	29.4	10
100,000-199,999	11.5-37.0	24.6	27
200,000-299,999	06.8-38.6	21.2	13
300,000-399,999	10.6-35.9	23.2	16
400,000 and over	08.0-43.2	22.8	11
All organizations	06.8-43.2	22.8	77

Fixed Assets

Fixed assets representing real estate, buildings and equipment averaged \$29,684, or slightly over one-fourth of total assets, after a reserve for depreciation on buildings and equipment had been deducted (Table I). It is desirable for a cooperative to own as much of its fixed assets as possible. However, it should be recognized that newly organized cooperatives may not have sufficient operating capital and must necessarily make use of rented facilities.

For the group of cooperatives doing a business volume of less than \$100,000, the book value of fixed assets averaged 22.4 per cent of total assets, which was the lowest of all the groups. No important relationships were noted among the remaining sales groups (Table VII).

Although it is desirable for cooperative organizations to own their facilities, managers should not invest too heavily because over-investment in fixed assets may weaken their financial structure.

Investments

Investments representing common and preferred stock in the Tennessee Farmers Cooperative and the Louisville Bank for Cooperatives averaged \$15,330 or 14.4 per cent of the total assets for the 77 local cooperatives. The per cent of total assets invested by these cooperatives increased directly with their volume of sales up to the largest group which showed a slight decline (Table VIII).

Other Assets

Other assets, comprised of equity in Tennessee Farmers Cooperative, allocated reserves, unexpired insurance premiums and bonds, prepaid

TABLE VII

DISTRIBUTION OF BOOK VALUE FIXED ASSETS AS PER CENT OF TOTAL ASSETS
ACCORDING TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	2.0-40.8	22.4	10
100,000-199,999	1.9-45.7	37.6	27
200,000-299,999	9.3-50.1	23.5	13
300,000-399,999	7.1-49.9	28.3	16
400,000 and over	7.6-56.5	27.7	11
All organizations	1.9-56.5	27.9	77

TABLE VIII

DISTRIBUTION OF INVESTMENTS AS PER CENT OF TOTAL ASSETS ACCORDING TO
VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	0.7-24.0	12.1	10
100,000-199,999	1.8-27.0	15.4	27
200,000-299,999	10.1-21.7	15.7	13
300,000-399,999	8.0-21.5	16.3	16
400,000 and over	8.0-19.6	13.1	11
All organizations	0.7-27.0	14.4	77

expenses, and miscellaneous other assets averaged \$8,115, or 7.6 per cent of total assets for the 77 local cooperatives in 1957, as indicated in Table I. For the organizations with a sales volume of less than \$100,000, other assets averaged 10.3 per cent of total assets which was the largest percentage held by any individual group. The remaining organizations showed no distinct relationships as volume of sales changed (Table IX).

Liabilities

The total liabilities, which represents the capital supplied by creditors, averaged \$23,315, or 23.8 per cent of the capital used by the 77 local cooperatives in the 1957 year period (Table X).

The capital supplied by creditors for the smallest sales group averaged 35.1 per cent of the total capital,² which was considerably larger than the percentages for the remaining larger organizations (Table XI). This indicates a greater degree of ownership control among the larger organizations and denotes greater financial strength.

Current Liabilities

Data in Table X indicate the proportion that the various classes of liabilities and net worth (members' equity) were of total capital and the average dollar value. Accounts payable and notes payable were found to be the two most important components of current liabilities. For the local cooperatives studied, current liabilities averaged \$18,158, or 17.1 per cent of the total capital.

²Total liabilities plus total net worth.

TABLE IX

DISTRIBUTION OF OTHER ASSETS AS PER CENT OF TOTAL ASSETS ACCORDING TO
VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	1.8-32.5	10.3	10
100,000-199,999	3.8-14.7	6.3	27
200,000-299,999	5.2-13.2	8.4	13
300,000-399,999	4.2-9.6	6.3	16
400,000 and over	4.5-23.9	6.9	11
All organizations	1.8-32.5	7.6	77

TABLE X

AVERAGE LIABILITIES AND NET WORTH OF 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Liabilities and net worth	Dollars	Per cent of total
Liabilities		
Current liabilities		
Accounts payable	6,287	5.9
Accruals	1,491	1.4
Notes payable (short-term)	8,593	8.1
Other current liabilities	<u>1,787</u>	<u>1.7</u>
Total current liabilities	18,158	17.1
Fixed liabilities		
Notes payable (long-term)	<u>7,157</u>	<u>6.7</u>
Total liabilities	23,315	23.8
Net worth		
Outstanding common stock	789	.8
Outstanding preferred stock	35,176	33.1
Unissued fractional share stock	1,723	1.6
Allocated reserve	29,682	29.7
Reserve for contingencies	682	.6
Undivided prior year savings	154	.1
Undivided current year savings	<u>12,919</u>	<u>12.1</u>
Total net worth	<u>81,124</u>	<u>76.2</u>
Total liabilities and net worth	106,439	100.0

Table XII shows the average current liabilities to be 30.1, 16.9, 12.8, 12.5, and 13.3 per cent, respectively, of the total capital from the smallest to the largest sales groups. This is an indication that the co-operatives doing the larger business were in a better financial position to meet their current debts.

Accounts payable. At the close of the 1957 fiscal year accounts payable, which was the amount of all known accounts owed by the 77 local cooperatives according to information furnished by individual management, averaged \$6,287, or 5.9 per cent of total capital (Table X). These accounts were the second largest component of total current liabilities. Of the 77 organizations studied, 5 reported no accounts payable and one reported less than 0.1 per cent of total capital.

For the number of organizations having accounts payable outstanding, the average from the smallest to the largest sales group was 13.1, 8.0, 5.1, 8.0, 6.3 per cent, respectively (Table XIII).

Accruals. These liabilities, which represent various kinds of accrued taxes, interest, and salaries, were only a small portion of the current liabilities. For all organizations the accruals averaged \$1,491, or 1.4 per cent of total capital used.

Notes payable (short-term). Short-term notes payable, representing the amounts of notes due within a period of twelve months' time at the close of the 1957 season, was the largest item of current debt. The average dollar value of these debts amounted to \$8,593 for all cooperatives studied, which was 8.1 per cent of the total capital used (Table X).

For the organizations having current debt in the form of notes payable, the proportions owed by the lowest sales group was considerably

TABLE XI

DISTRIBUTION OF TOTAL LIABILITIES AS PER CENT OF TOTAL CAPITAL
 ACCORDING TO VOLUME OF SALES, 77 LOCAL FARMERS
 COOPERATIVES, TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	0.4-86.9	35.1	10
100,000-199,999	0.2-49.0	22.9	27
200,000-299,999	3.3-43.0	21.4	13
300,000-299,999	0.6-33.3	18.5	16
400,000 and over	5.9-41.8	21.1	11
All organizations	0.2-86.9	23.8	77

TABLE XII

DISTRIBUTION OF CURRENT LIABILITIES AS PER CENT OF TOTAL CAPITAL
 ACCORDING TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
 TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	0.4-86.9	30.1	10
100,000-199,999	0.2-48.8	16.9	27
200,000-299,999	3.3-35.1	12.8	13
300,000-399,999	0.6-30.2	12.5	16
400,000 and over	2.4-33.3	13.3	11
All organizations	0.2-86.9	17.1	77

greater than for the remaining larger organizations. Notes payable comprised approximately one-fourth of the total capital used by the smallest organizations, while the two groups having sales volumes between \$100,000 and \$299,999 owed approximately one-eighth in this form. The two largest sales groups had approximately one-twelfth of total capital in short-term notes payable (Table XIV).

Seventeen of the cooperatives studied reported current debt in the form of notes payable.

Other current liabilities. Other current liabilities, representing dividends payable, patronage refunds payable, and miscellaneous other assets, averaged \$1,787, or 1.7 per cent of total capital used (Table X). Twenty-nine organizations reported no other current liabilities. Of the remaining 48 organizations, only two reported liabilities of less than 0.1 per cent of total capital.

Fixed liabilities

Fixed liabilities, representing notes payable (long-term), which were the amounts on notes due after a period of twelve months averaged \$7,157, or 6.7 per cent of total capital at the close of the 1957 fiscal year (Table X).

As shown in Table XV, only 37 of the 77 organizations reported long term liabilities, with only one among the smallest sales group reporting. It was noted that although the average proportion of long-term notes to total capital was greater among the smaller organizations, more of the larger organizations used them as a source of capital.

TABLE XIII

DISTRIBUTION OF ACCOUNTS PAYABLE AS PER CENT OF TOTAL CAPITAL ACCORDING TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range	Per cent	Number of organizations	
		Averages of organizations reporting	Reporting	Not reporting
Under \$100,000	1.1-61.4	13.1	9	1
100,000-199,999	0.1-31.0	8.0	25	2
200,000-299,999	0.6-14.0	5.1	13	-
300,000-399,999	0.1-22.5	8.0	13	3 ^a
400,000 and over	1.4-11.4	6.3	10	1
All organizations	0.1-61.4	8.1	70	7

^aIncluded one reporting less than 0.1 per cent.

TABLE XIV

DISTRIBUTION OF NOTES PAYABLE AS PER CENT OF TOTAL CAPITAL ACCORDING TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range	Per cent	Number of organizations	
		Averages of organizations reporting	Reporting	Not reporting
Under \$100,000	3.8-35.2	23.5	8	2
100,000-199,999	1.9-29.1	12.2	21	6
200,000-299,999	2.1-26.3	12.5	11	2
300,000-399,999	0.9-16.2	7.9	11	5
400,000 and over	1.5-18.5	8.4	9	2
All organizations	0.9-35.2	12.9	60	17

Net Worth

Net worth (equity capital), which is the capital supplied by owners, averaged \$81,124 and accounted for 76.2 per cent of the capital used by the average local farmers cooperative studied in 1957 (Table X).

As indicated in Table XVI, the organizations with a volume of business above \$100,000 depended largely upon owners as a source of capital. A substantial net worth is desirable especially in times of crisis when outside credit sources are operating on tight money policies. A favorable relationship between net worth and total capital used is viewed by creditors as a sign of financial strength; therefore, with such a relationship good credit rating is more easily established when needed. Also, as the amount of capital supplied by owners increases, the amount of incurred expenses from such costs as interest on borrowed capital decreases. It likewise tends to create a greater feeling of responsibility among members in the operation of their organization.

Outstanding preferred stock. Outstanding preferred stock, the most important component of net worth, averaged \$35,176, or 33.1 per cent of total capital used by the 77 local cooperatives in 1957 (Table X). No distinct relationships were noted among the different sales groups. One organization in the lower sales group reported a greater amount of outstanding preferred stock than the amount of total capital used. This was due to a current and prior year loss of approximately \$14,000. For the other 9 organizations in this group, outstanding preferred stock averaged 40.6 per cent of total capital used, which was somewhat higher than the

TABLE XV

DISTRIBUTION OF FIXED LIABILITIES (LONG-TERM NOTES PAYABLE) AS PER CENT
OF TOTAL CAPITAL ACCORDING TO VOLUME OF SALES, 77 LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Per cent		Number of organizations	
	Range	Averages of organizations reporting	Reporting	Not reporting
Under \$100,000	24.9-	24.9	1	9
100,000-199,999	1.9-21.9	11.7	12	15
200,000-299,999	4.5-22.6	11.4	7	6
300,000-399,999	0.7-18.0	9.3	9	7
400,000 and over	1.1-18.6	9.6	8	3
All organizations	0.7-24.9	13.4	37	40

TABLE XVI

DISTRIBUTION OF NET WORTH AS PER CENT OF TOTAL CAPITAL ACCORDING TO
VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	13.1-99.6	65.5	10
100,000-199,999	51.0-99.8	77.6	27
200,000-299,999	57.0-96.7	77.1	13
300,000-399,999	66.7-99.4	82.0	16
400,000 and over	59.2-94.1	78.6	11
All organizations	13.1-99.8	76.2	77

remaining organizations by groups and according to volume of sales (Table XVII). The range for all organizations was from 5.2 to 117.0 per cent. It is evident that the organizations falling in the lower range could strengthen their organizations by selling more preferred stock.

Allocated reserve. At the close of the 1957 fiscal year the allocated reserve (patrons' equity), the second most important item of net worth, averaged \$29,682, or 29.7 per cent of total equity. Five of these organizations reported no allocated reserve. No consistent relationships were noted when broken down into groups according to volume of sales (Table XVIII).

Undivided current savings. According to financial records the average amount of undivided current savings for the 77 organizations was \$12,919 for the 1957 fiscal year. This accounted for 12.1 per cent of total capital and was the third and last important component of net worth (Table X). Two organizations in two lowest sales groups reported a loss rather than a savings. Again, no consistent relationships were noted as volume of sales changed (Table XIX).

The remaining components of capital supplied by owners, consisting of outstanding common stock, unissued fractional share stock, reserve for contingencies, and undivided prior years savings, accounted for approximately 3 per cent of total capital used and was an unimportant source of capital.

TABLE XVII

DISTRIBUTION OF OUTSTANDING PREFERRED STOCK AS PER CENT OF TOTAL CAPITAL
ACCORDING TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	5.2-117.0	40.6	10 ^a
100,000-199,999	10.5-44.0	31.0	27
200,000-299,999	19.5-45.5	31.1	13
300,000-399,999	13.3-52.4	31.8	16
400,000 and over	18.3-61.9	30.8	11
All organizations	5.2-117.0	33.1	77

^aOne organization had more outstanding preferred stock than total capital. This was due to an undivided current and prior year loss of over \$14,000.

TABLE XVIII

DISTRIBUTION OF ALLOCATED RESERVE AS PER CENT OF TOTAL CAPITAL ACCORDING
TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Per cent		Number of organizations	
	Range	Averages of organizations reporting	Reporting	
			Reporting	Not reporting
Under \$100,000	2.3-95.1	32.1	7	3
100,000-199,999	8.1-61.6	28.2	27	-
200,000-299,999	8.5-51.0	27.4	13	-
300,000-399,999	13.6-42.9	30.9	16	-
400,000 and over	19.2-53.5	32.8	9	2
All organizations	2.3-95.1	30.3	72	5

The Operating Statement

To be of greatest value the balance sheet must be supplemented with an operating statement; both are necessary to the analyst if he is to grasp the complete situation of a business. The operating statement is directly

TABLE XIX

DISTRIBUTION OF UNDIVIDED CURRENT SAVINGS AS PER CENT OF TOTAL CAPITAL
ACCORDING TO VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Sales group	Range	Per cent		
		Averages of organizations reporting savings	Number of organizations	
			Reporting savings	Reporting loss
Under \$100,000	5.0-24.0	12.0	9	1
100,000-199,999	1.4-22.4	12.3	26	1
200,000-299,999	1.7-25.6	12.2	13	-
300,000-399,999	2.1-25.6	13.4	16	-
400,000 and over	4.6-22.1	13.8	10	-
All organizations	1.4-25.6	12.7	75	2

Sales, which represent the total amount of supplies purchased by patrons in 1957, averaged \$23,012 (Table III). The amount of sales made by an organization is a good indication of its relative size. From an economic viewpoint it is generally believed that per unit costs can be reduced by spreading the various costs over a larger area. Therefore, it seems logical that cooperatives could increase their earnings by striving for a higher volume of sales.

The cost of supplies purchased by patrons averaged \$227,141 and amounted 84.1 per cent of the revenue received from sales, leaving a gross margin on sales of \$30,871, or 11.9 per cent for the 77 organizations studied. When divided into groups according to volume of sales, an

The Operating Statement

To be of greatest value the balance sheet must be supplemented with an operating statement; both are necessary to the analyst if he is to grasp the complete situation of a business. The operating statement is directly related to the financial structure of a business. It is of particular importance from a long-range point of view. Weaknesses appearing in the operating statement may be sufficient evidence to bring a serious decline in market value of securities offered to investors. Therefore, this would affect the future financial structure.

The components of the operating statement may be divided into two major divisions: (1) revenue, which consists of income derived from sales, service income, and other income and (2) operating expenses. However, these divisions are discussed integrally in this manuscript.

Sales and Gross Margin

Sales, which represent the total amount of supplies purchased by patrons in 1957, averaged \$258,012 (Table IX). The amount of sales made by an organization is a good indication of its relative size. From an economic viewpoint it is generally believed that per unit costs can be reduced by spreading the various costs over a larger area. Therefore, it seems logical that cooperatives could increase their earnings by striving for a higher volume of sales.

The cost of supplies purchased by patrons averaged \$227,141 and consumed 88.1 per cent of the revenue received from sales, leaving a gross margin on sales of \$30,871, or 11.9 per cent for the 77 organizations studied. When divided into groups according to volume of sales, no

TABLE XX

AVERAGE OPERATING STATEMENT OF 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Item	Dollars	Per cent of total
Total sales	258,012	100.0
Cost of goods sold	<u>227,141</u>	<u>88.1</u>
Gross margin on sales	30,871	11.9
Service income	<u>2,908</u>	<u>1.1</u>
Total operating margin	33,779	13.0
Operating expenses	<u>27,248</u>	<u>10.5</u>
Operating savings	6,531	2.5
Other income	<u>8,556</u>	<u>3.3</u>
Total savings for period	<u>15,087</u>	<u>5.8</u>
Less: dividend paid on stock	<u>1,942</u>	<u>0.7</u>
Net savings	13,145	5.1

consistent relationships were noted at this point. From the smallest to the largest, gross margins for the five sales groups averaged 12.4, 12.1, 11.3, 11.8, and 12.3 per cent respectively (Table XXI). This likeness was probably caused by the majority of organizations purchasing a considerable portion of their supplies from the Tennessee Farmers Cooperative at approximately the same per unit costs.

Total Operating Margin

The total operating margin is calculated by adding total service income to the total gross margin. This source of revenue, which consists of income received for such services as seed cleaning, trucking services, fertilizer spreading, and other miscellaneous services performed for patrons, averaged \$2,908, or 1.1 per cent of total sales, bringing the total operating margin up to an average of \$33,779, or 13.0 per cent of sales (Table XX).

Expenses

Expenses, which included salaries and labor, depreciation, trucking expense, and other expenses incurred in carrying on normal business operations, averaged \$27,248, or 10.5 per cent of sales for the 77 local farmers cooperatives in 1957. This left an average total operating savings of \$6,531, or 2.5 per cent on sales (Table XX). Ten organizations reported an operating loss for the period. As indicated in Table XXII, when divided into groups according to volume of sales, the smallest group showed the highest average expenses of 13.3 per cent of sales. The remaining groups from smallest to largest averaged 10.9, 9.8, 10.3, and 11.0 per cent respectively.

TABLE XXI

DISTRIBUTION OF GROSS MARGINS AS PER CENT OF TOTAL SALES ACCORDING TO
VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	9.3-15.3	12.4	10
100,000-199,999	7.0-17.4	12.1	27
200,000-299,999	8.8-13.9	11.3	13
300,000-399,999	8.0-13.3	11.8	16
400,000 and over	10.1-14.9	12.3	11
All organizations	7.0-17.4	11.9	77

TABLE XXII

DISTRIBUTION OF TOTAL EXPENSES AS PER CENT OF SALES ACCORDING TO
VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Sales group	Per cent		Number of organizations
	Range	Average	
Under \$100,000	7.9-22.0	13.3	10
100,000-199,999	7.3-18.9	10.9	27
200,000-299,999	5.0-15.1	9.8	13
300,000-399,999	5.0-18.7	10.3	16
400,000 and over	8.0-15.4	11.0	11
All organizations	5.0-22.0	10.5	77

Table XXIII shows the various expense items and the proportions that each were of total operating expenses. By far the most important item of expense was salaries and labor, which represented about one-half of the total operating expenses. Cooperative managers should exert every effort to keep operating costs at reasonable levels. However, caution should be observed in attempting to cut costs from the standpoint of salaries and labor because the quality of management is often the most important factor in determining the success or failure of an organization. Other important expense items were depreciation, which averaged \$2,156, or 7.9 per cent of total operating expenses, and truck expense, averaging \$1,865, or 6.9 per cent. The remaining expenses were credited to such items as advertising, interest, heat, lights and water, licenses and taxes, and other miscellaneous expenses.

Other Income

Other income represents the returns to the associations from other than usual sales operations. The components of other income are patronage dividends from the Tennessee Farmers Cooperative, discounts earned, dividends and interest received from investments in other cooperatives, and miscellaneous other income. The average amount of other income for the 77 organizations for the 1957 year period was \$8,556, or 3.3 per cent of total sales (Table XX). For some organizations this source of income made the difference between a net savings and a net loss. The total operating savings before any dividends were paid averaged \$15,087, or 5.8 per cent of total sales.

TABLE XXIII

AVERAGE OPERATING EXPENSES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Operating expenses	Dollars	Per cent of total
Salaries and labor	13,740	50.4
Travel expenses	352	1.3
Heat, lights, and water	518	1.9
Rent	456	1.6
Depreciation	2,156	7.9
Insurance and bonds	1,011	3.7
Telephone and telegraph	384	1.4
Warehouse and office supplies	699	2.6
License and taxes	627	2.3
Auditing and legal	306	1.1
Advertising	1,110	4.1
Repairs	242	0.9
Bank charges	17	0.1
Cash under	58	0.2
Postage	81	0.3
Bad debts	263	1.0
Truck expense	1,865	6.9
Interest	640	2.3
Miscellaneous	2,719	10.0
Total operating expenses	27,248	100.0

Net Savings

Net savings (net margin), which represents the amount of earnings that patrons of local farmers cooperatives made during the 1957 fiscal year, averaged \$13,141, or 5.1 per cent of the total sales after dividends were paid on stock (Table XX).

As shown in Table XXIV, the total net savings increased directly with the volume of sales for those organizations reporting savings. Only one organization reported a net loss and it was in the lowest sales group.

Most local farmers cooperatives charge prices closely related to regular retail prices, which adheres to one of the Rochdale principles. This means that patrons pay a regular market price for supplies. Then, if an association is economically efficient and shows a net savings, a substantial amount is returned to the patrons in the form of patronage dividends. Therefore, in the end, the patron actually gets his supplies below the regular market price. This is one of the many areas where member education on the cooperative system could result in more business for the cooperatives and, therefore, more earnings for patrons.

TABLE XXIV

DISTRIBUTION OF NET SAVINGS AS PER CENT OF TOTAL SALES ACCORDING TO
VOLUME OF SALES, 77 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Sales group	Range	Per cent	Number of organizations	
		Averages of organizations reporting savings	Reporting savings	Reporting loss
Under \$100,000	1.2- 6.5	4.2	9	1
100,000-199,999	0.6-10.0	4.8	27	-
200,000-299,999	0.8-10.0	4.8	13	-
300,000-399,999	0.8- 9.4	5.3	16	-
400,000 and over	3.0-10.0	5.7	11	-
All organizations	0.6-10.0	5.0	76	1

CHAPTER III

FINANCIAL CONDITION

A Basis for Comparison

Without a basis for comparison, ratio analysis would have little meaning to management. The reliability of comparisons, however, cannot be taken for granted. Comparisons of ratios must depend upon operating similarities to be significant or they may lead to erroneous conclusions.¹

Other important factors to consider when making comparisons are:

1. dates of financial statements,
2. reasonable similarity in size,
3. area of operations,
4. uniformity of accounting systems.

The primary purpose of ratio calculations is that of exhibiting simplified relationships within business figures referring to but one fiscal period.²

. . . This statement should not provoke argument with those who insist on the importance of trend study. Those competent and experienced analysts who believe that trends can be diagnosed from the historical comparison of ratios are correct insofar as trends of ratios are concerned. But ratios offer a complicated and cumbersome means of diagnosing trends of the business. We may admit that each purpose is valuable. This point is stressed because it does not seem to be a matter of common understanding that the assumption underlying the ratio method, while valid for exhibiting

¹H. H. Bakken and M. A. Schaars, The Economics of Cooperative Marketing (New York: McGraw-Hill Book Company, 1937), p. 425.

²Stephen Gilman, Analyzing Financial Statements (Revised ed.; New York: Ronald Press Company, 1934), p. 74.

simplified relationships, is inconvenient, if not actually deceptive, as a basis for general trend study.

It is maintained by some experienced analysts that much valuable information can be obtained from historical ratio comparisons. However, the writer is aware that serious misinterpretation can result when attempted by a relatively inexperienced analyst and is, therefore, prone to believe that more meaningful results were obtained from this study by limiting ratio comparisons to the current year.

With due consideration of the major factors affecting ratio comparability, standard ratios have been determined for the 77 local cooperatives under study for the fiscal year 1956-57 (Table XXV). This shows the relative financial condition of these cooperatives and provides a basis for the management of each individual organization to make comparisons.

It is usually considered necessary for standard ratios to be based upon figures for a large number of companies in order that the "law of averages" may be effective.³ Values for all the different types of ratios used in studying the 77 local cooperatives were arranged in numerical order from the lowest to the highest. From these the median and the middle one-half of the values for each selected ratio were determined as a basis for comparison. The median was selected rather than the arithmetic average to prevent distortion in case of extremely high or low values. This, of course, is not the average of the group, but is often more representative than any average could be. The upper and lower limits of the middle one-half values represent the amount of variation in the

³Ibid., p. 102.

TABLE XXV

SELECTED FINANCIAL RATIOS RELATED TO THE FINANCIAL CONDITION OF
77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Financial ratios	Lowest ratio value	Lower limit of middle one-half ratio values	Median ratio value	Upper limit of middle one-half ratio values	Highest ratio value
Current assets to current liabilities	0.66	2.03	3.06	3.88	297.28
Current assets to total liabilities	0.66	1.41	2.03	3.72	297.28
Net worth to fixed assets	1.13	2.07	3.29	5.32	48.60
Sales to fixed assets	2.72	6.85	10.30	16.15	84.40
Net worth to total liabilities	0.15	2.01	2.98	6.78	559.42
Sales to wages	10.09	16.54	20.14	24.51	45.36
Current liabilities to cash	0.01	0.88	1.95	4.09	42.10
Days' sales in accounts receivable	0.60	11.90	19.50	26.99	1078.00
Sales to accounts receivable	3.36	10.82	16.09	23.24	501.70
Inventory turnover	5.20	7.96	10.50	13.22	41.00

ratios. Those organizations which have ratios falling above or below this range, in general, indicate a need for further investigation. For some relationships, higher values are indicative of improvement, while for others lower values may be more desirable. However, a proper balance among the various ratios should be maintained for the most satisfactory financial conditions. Further investigation is a job that can best be done by management because an insight into the operational policies of each individual organization is necessary for valid results.

In order to give the management of each individual organization a better means of comparison, the 77 local cooperatives under study were divided into groups according to volume of sales (Tables XXVI-XXXV). Shown in each group are the high, low, and median figures for each different type of ratio. Each organization may classify its standing in the appropriate group, then compare its financial condition with organizations of similar operational size.

Financial Ratios

In the analysis of financial statements the use of multiple ratios has become one of the major tools for appraising the financial condition of a business organization. Ratios constitute a means of testing and comparing the financial and business activities of one cooperative with another in the same kind of business, and of measuring the solvency of the enterprise.⁴ Page after page of balance sheets and operating

⁴Bakken and Schaars, op. cit., p. 425.

statements by themselves may tend to confuse, rather than enlighten, even an experienced analyst. To those who are relatively inexperienced this is not merely a supposition. Rather they are often definitely confused even by a few pages of financial figures. Therefore, to reduce this confusion, we may resort to the use of various mathematical tools or techniques. Multiple ratio analysis has become very popular as a method of simplification. To be of value, however, a ratio must express a logical relationship; otherwise it is meaningless.

Current Ratio

One of the most widely used tests of financial condition is the relationship of current assets to current liabilities, commonly known as the "current ratio." This relationship is sometimes called the "working capital ratio." It is a specific measure of current solvency or working capital position of a business which is of primary interest to present and potential short-term creditors. Current assets include those items which are either in the form of cash or can be transformed into cash without delay if necessary. Current liabilities represent those items which normally are payable within the current year.

According to E. A. Stokdyk⁵ it is generally desirable that co-operatives maintain a ratio of current assets to current liabilities of from two or three to one. The standard current ratio adopted in this study for 77 local cooperatives, 1956-57, indicated a safe range to be

⁵E. A. Stokdyk, "The Financial Structure of Cooperatives," American Cooperation, 1934 (Washington, D. C.: The American Institute of Cooperation, 1934), p. 183.

2.03:1 to 3.88:1. The median figure for these organizations was 3.06:1 (Table XXV). However, there are some dangers in relying on this ratio alone as a measure of the financial condition of an organization. For example the "current ratio" may be excessively large due to a small amount of current liabilities. This, of course, limits the reliability of such a ratio. Other factors affecting the validity of the current ratio are (a) the nature of the current asset components, (b) maturity dates of current liabilities, and (c) management policies such as the methods of financing. Therefore, a ratio of 3.88:1 with a small proportion of cash and liquid assets may not be as favorable as a smaller ratio where there is greater liquidity.

The current ratio is obtained by dividing current assets by current liabilities. As shown in Table XXVI the organizations with a sales volume above \$100,000 had the most desirable ratios as compared to the standard in Table V. The median figure for the smallest sales group was 1.93:1. Of the ten organizations in this group only four had a ratio above the recommended minimum, and two of these were excessively high due to a relatively small amount of current liabilities. On the basis of the standards set forth in this study, the remaining organizations were in a favorable financial position in this area, with the exception of a few extreme cases.

Current Assets to Total Liabilities

The ratio of current assets to total liabilities is computed by dividing current assets by total liabilities. It is of particular importance during a period of declining economic conditions because

creditors often view long-term indebtedness coming due within two or three years as if it were current. In the event of an extended period of recession, an organization may need an extension on existing credit and find it unavailable. Therefore, it is important that an organization maintain a reasonable relationship between its relatively liquid assets and total liabilities.

As a whole the 77 local organizations studied were found to be in a relatively sound financial condition in this area. The median figure for the ratio of current assets to total liabilities for these organizations was 2.03:1. The group of organizations having the highest volume of sales had a median ratio of 2.31:1 while the median figure for the lowest sales group was 1.43:1 (Table XXVII). It was noted that the median ratios increased consistently as the volume of sales increased.

Net Worth to Fixed Assets

The ratio of net worth to fixed assets is calculated by dividing the total dollar value of net worth by the dollar value invested in fixed assets. This indicates what proportion the book value of fixed assets is to the owners' equity (net worth).

This ratio may be used as one of the tests for overinvestment in fixed assets. A relatively large ratio is looked upon with favor by creditors. Many bankers and credit men see a large ownership equity (net worth) as a sign of financial strength; therefore, the larger the ratio the more favorably it is regarded by them.

A word of warning should be given concerning the use of a standard ratio as a basis for comparison. Caution should be observed in the use

TABLE XXVI

RATIO OF CURRENT ASSETS TO CURRENT LIABILITIES ACCORDING TO VOLUME
OF SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	0.66-139.50	1.93	10
100,000-199,999	1.04-297.28	2.87	27
200,000-299,999	1.21- 21.04	2.57	13
300,000-399,999	1.69- 65.24	3.08	16
400,000 and over	1.54- 11.72	3.13	11
All organizations	0.66-297.28	3.06	77

TABLE XXVII

RATIO OF CURRENT ASSETS TO TOTAL LIABILITIES ACCORDING TO VOLUME OF
SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	0.66-139.50	1.43	10
100,000-199,999	1.04-297.28	2.03	27
200,000-299,999	0.81- 21.04	2.00	13
300,000-399,999	1.22- 65.24	2.12	16
400,000 and over	1.20- 11.72	2.31	11
All organizations	0.66-297.28	2.03	77

of all types of ratios for comparing different organizations, but this applies especially to the ratios of net worth to fixed assets because of the variations in physical needs among different organizations, differences in organizational financial policies, and differences in the method of stating value of fixed assets. There are other factors affecting the validity of this relationship which also apply to all ratio comparisons used in this study, as stated earlier in this chapter. However, the writer feels that due to the operational similarity among the 77 local cooperatives investigated, along with a uniform system of bookkeeping, a relatively satisfactory basis for comparison does exist here.

The findings of this study revealed no clear relationships among organizations of different sales volume for this particular ratio. The median ratio for the smallest sales group was 2.06:1 (Table XXVIII) which is somewhat below the minimum standard set forth in the study (Table XXV). All remaining groups showed a satisfactory median ratio, with only twelve organizations falling below 2.07:1. As a group the 77 local cooperatives studied showed a favorable financial condition in this area, the median ratio being 3.29:1. It was noted that none of the organizations studied had a ratio below 1.13:1, which means that all owned enough equity capital to at least pay for the fixed investment in property.

Ratio of Sales to Fixed Assets

The ratio of sales to fixed assets constitutes another means of diagnosing overinvestment in fixed assets. It is also of value as a test for insufficient sales.

This ratio is especially significant for newly organized cooperatives or for those contemplating expansion of present facilities. A large investment in fixed assets without sufficient sales to warrant such an expansion is undesirable. In general, relatively new organizations will show a lower ratio than those that are well established and have not acquired additional fixed assets recently.

Total sales are divided by the book value of fixed assets to obtain this ratio. It is possible that this ratio can be either too high or too low. A low ratio can result from excessive investment in permanent assets, such as real estate, equipment, etc., that does not contribute further to the operational efficiency of an organization. On the other hand, a high ratio can result from highly efficient management of fixed assets. A high ratio may also be a result of policies which allow the fixed assets to depreciate without proper maintenance to keep them in condition to provide adequate facilities for doing a satisfactory job in the future. A further investigation by management would be warranted in either extreme.

Table XXIX shows no consistent relationships between the different sales groups. The median ratios from the smallest to the largest group were 12.95, 13.41, 9.88, 7.91, and 9.61:1. The median for all organizations examined was 10.30:1, with a range of 2.72:1 to 84.40:1. As a group the 77 local cooperatives were found to be in a relatively favorable financial condition in this area.

Net Worth to Total Liabilities

The ratio of net worth to total liabilities is computed by dividing the total liabilities into the total net worth. It is a good indicator

TABLE XXVIII

RATIO OF NET WORTH TO FIXED ASSETS ACCORDING TO VOLUME OF SALES,
77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	1.42-47.90	2.06	10
100,000-199,999	1.49-48.60	3.50	27
200,000-299,999	1.13-10.45	3.32	13
300,000-399,999	1.55-10.19	2.56	16
400,000 and over	1.55-10.45	2.51	11
All organizations	1.13-48.60	3.29	77

TABLE XXIX

RATIO OF SALES TO FIXED ASSETS ACCORDING TO VOLUME OF SALES,
77 FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	6.10-84.40	12.95	10
100,000-199,999	3.68-27.20	13.41	27
200,000-299,999	3.56-28.91	9.88	13
300,000-399,999	4.31-32.96	7.91	16
400,000 and over	2.72-55.87	9.61	11
All organizations	2.72-84.40	10.30	77

of whether owners or creditors control the business. A decreasing ratio resulting from a greater proportion of capital being obtained from outside sources can put an organization in a weakened position in the event of a crisis. The risk to creditors also becomes increased. On the other hand, an increasing ratio denotes less debt pressure on the owners and an increased margin of safety for creditors. The "net worth ratio"⁶ as it is sometimes called, is considered by many analysts to be equally as important as the current ratio--the net worth ratio indicates the relative financial strength, while the current ratio is a specific measure of the relative solvency or working capital position of a cooperative.

For the 77 local cooperatives examined in this study, the net worth ratio varied from 0.15:1 to 559.42:1, the median being 2.98:1 (Table XXX). The financial strength, according to this ratio, was found to increase almost directly with the sales volume. The smallest sales group showed a median ratio of 1.87:1 (Table XXX), this being the only group falling below the desired minimum as shown in Table XXV. The largest sales group showed a desirable median ratio of 3.62:1. Only 17 of the 77 local cooperatives examined showed a ratio below the desirable minimum. The ratios for the remaining 60 organizations indicated a relatively strong financial condition in this area.

Ratios of Sales to Wages

This ratio is calculated by dividing total sales by the dollar amount paid out for wages (includes salaries, wages, and commissions).

⁶The net worth ratio is expressed by some analysts as the ratio of net worth to total capital (total liabilities plus net worth).

The ratio of sales to wages is of value to management in evaluating labor efficiency. It may also be used by an organization as an aid in decision making concerning labor force expansions. For example, if an organization is considering an increase in its present labor force at the cost of \$20 per day and expects to maintain a minimum ratio of 16.54:1, which is the minimum considered desirable in this study, an additional \$330.80 volume of business per day is necessary to warrant the hiring of the extra labor. If the volume of sales falls below this amount, the labor efficiency of the organization is likely to decrease accordingly; therefore, the proportion of operating expenses to sales also increases. However, an increase in sales can be desirable even though the total expenses increase in proportion to sales and the ratio of sales to wages becomes less favorable. The principle of opportunity costs which takes into consideration other available alternatives, should be considered by management in making a decision concerning the use of the \$20 in question.

As shown in Table XXXI the median ratios of all groups indicated efficient labor utilization during the 1957 period. The middle sales group had the highest ratio of 25.50:1. No consistent relationships were noted between the different groups. The ratios ranged from 10.09:1 to 45.36:1, the median for all organizations being 20.14:1. As a group the organizations showed satisfactory ratios. However, it should be remembered that a high ratio is not an absolute measure of efficient labor management. Relating to the example above, assuming the money invested in added labor has no better alternative use and increased the volume of sales, even though the sales to wages ratio is decreased, it would be good business to add the extra labor. Therefore, in order to say a higher ratio

TABLE XXX

RATIO OF NET WORTH TO TOTAL LIABILITIES ACCORDING TO VOLUME OF SALES,
77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	0.15-283.00	1.87	10
100,000-199,999	1.04-559.42	2.66	27
200,000-299,999	1.32-28.91	2.55	13
300,000-399,999	2.00-172.79	3.00	16
400,000 and over	1.76-15.44	3.62	11
All organizations	0.15-559.42	2.98	77

TABLE XXXI

RATIO OF SALES TO WAGES ACCORDING TO VOLUME OF SALES, 77 FARMERS
COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	11.80-32.00	19.30	10
100,000-199,999	13.58-26.70	19.30	27
200,000-299,999	12.02-37.71	25.50	13
300,000-399,999	10.09-35.00	19.89	16
400,000 and over	12.43-45.36	18.05	11
All organizations	10.04-45.36	20.14	77

is better than a lower one, an analyst would necessarily have to be aware of the availability of alternatives.

Current Liabilities to Cash

The ratio of current liabilities to cash is obtained by dividing the total of cash on hand, advances and deposits, and cash in banks into the total current liabilities. It is a measure of the immediate liquidity which indicates the ability of an organization to meet daily operating expenses.

The smallest amount of cash in proportion to current liabilities was held by the group of organizations having the smallest sales volume. This organization had a median ratio of 3.94:1. The remaining groups in order of size had median ratios of 1.74, 2.15, 1.20, and 1.41:1 respectively (Table XXXII). In general the larger sales groups showed a greater degree of liquidity; therefore, they could more easily meet their daily operating expenses. The ratios for the 77 local cooperatives ranged from 0.01:1 to 42.10:1 with a median of 1.95:1. Eighteen of the organizations showed ratios above 4.09:1 which means they are likely to be in a less favorable position to meet daily operating expenses. Only sixteen organizations had a ratio of current liabilities to cash of less than 0.88:1. While they are in a better position to meet daily operating expenses, it is possible that some of their cash could have been used more advantageously elsewhere.

Days' Sales in Accounts Receivable

The relationship of number of days' sales in accounts receivable is of value as a test of the liquidity of the receivables.⁷ It is calculated by first dividing the total sales by the number of working days in a year to get the average day's sales, then by dividing the average day's sales into the total receivables outstanding. A low ratio is desirable.

No consistent relationships were noted between the different sales groups. The median ratios of all groups indicated the days' sales in accounts receivable to be less than one month, with the middle sales group having the largest figure of 25.95 days (Table XXXIII). The days' sales in accounts receivable varied from 0.60 to 1,078.0 days. The median for all cooperatives was 19.50 days.

Ratio of Sales to Accounts Receivable

The ratio of sales to accounts receivable may be obtained by dividing the total sales by the balance of outstanding receivables at the end of the year. A high ratio is desirable.

This ratio expresses the relationship of the year's business volume to the amount of outstanding receivables. It is most often used as a supplemental ratio to give a rough index of the collection efficiency of the organizations being analyzed. It shows the amount of sales in dollars for every dollar of receivables outstanding.

For all cooperatives studied the ratios varied from 3.36:1 to 501.70:1. The median figure was 16.09:1. Sixteen organizations had ratios

⁷Liquidity of receivables may also be expressed as the length of credit. The average number of days that receivables have been outstanding is the length of credit.

TABLE XXXII

RATIO OF CURRENT LIABILITIES TO CASH ACCORDING TO VOLUME OF SALES,
77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	0.01- 9.51	3.94	10
100,000-199,999	0.01-37.17	1.74	27
200,000-299,999	0.14- 9.45	2.15	13
300,000-399,999	0.06-42.10	1.20	16
400,000 and over	0.29-11.76	1.46	11
All organizations	0.01-42.10	1.95	77

TABLE XXXIII

NUMBER OF DAYS' SALES IN ACCOUNTS RECEIVABLE ACCORDING TO VOLUME OF
SALES, 77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	2.13-1078.00	15.25	10
100,000-199,999	1.12- 82.64	19.63	27
200,000-299,999	12.56- 59.08	25.95	13
300,000-399,999	.60- 64.09	16.50	16
400,000 and over	1.42- 31.00	15.00	11
All organizations	0.60-1078.00	19.50	77

below the desirable minimum used in this study. The ratios indicated no specific differences among different sales groups (Table XXXIV).

Inventory Turnover

The standard for inventory turnover, as established in this study on the basis of performance of the middle one-half of the 77 local cooperatives studied, indicated a desirable range to be from 7.96 to 13 times annually (Table XXV). The range for all cooperatives studied was from 5.20 to 41 times, with a median of 10.50 times.

It was noted that the inventory turnover did not vary greatly when the organizations were divided into groups according to volume of sales. The median figures for inventory turnover were from the smallest to the largest 11.74, 10.20, 10.24, 10.20, and 10.33 times, respectively (Table XXXV).

Investment in inventory of slow moving items should be considered carefully by local management. It should be mentioned, however, that high gross margins often come from some slow moving items; therefore, they are an important source of savings for both the association and the farmer. Also, many slow moving items are required by farmers, and since they are the owners of the cooperative, the management must consider their requests in so far as possible. This is just one of the many important items requiring good judgment in the managerial decision-making process.

All organizations

5.20-41.00

10.50

77

TABLE XXXIV

RATIO OF SALES TO ACCOUNTS RECEIVABLE ACCORDING TO VOLUME OF SALES,
77 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	3.95-144.56	18.92	10
100,000-199,999	3.36-109.46	13.72	27
200,000-299,999	4.58- 24.16	11.73	13
300,000-399,999	4.83-501.70	15.49	16
400,000 and over	7.05-187.20	18.29	11
All organizations	3.36-501.70	16.09	77

TABLE XXXV

INVENTORY TURNOVER ACCORDING TO VOLUME OF SALES, 77 LOCAL FARMERS
COOPERATIVES, TENNESSEE, 1957

Sales group	Range of ratios	Median	Number of organizations
Under \$100,000	6.00-14.00	11.74	10
100,000-199,999	5.34-20.03	10.20	27
200,000-299,999	5.20-38.24	10.24	13
300,000-399,999	6.96-20.30	10.20	16
400,000 and over	5.47-41.00	10.33	11
All organizations	5.20-41.00	10.50	77

CHAPTER IV

TRENDS OF SELECTED ORGANIZATIONS

In an effort to present evidence indicating why certain organizations are weak and others are strong, a study of trends was made of nine selected organizations. According to the comparative standards adopted in this study, a first group of three organizations was selected because they showed apparent financial weaknesses, and a second group of three was chosen because of their relatively strong financial conditions. A third group, consisting of three organizations, was selected at random with the hope that a study of their past activities would point out various factors that would lead to higher efficiency among these organizations and serve as a guide for other cooperatives facing similar conditions (Table XXXVI).

Trends of the Balance Sheets

Assets

The percentages of various components of capital used by the three groups of organizations in relation to total capital used (total assets), and the dollar value of total assets are shown in Table XXXVII and Figure 2. For the period 1953 through 1957, the total assets of local farmers cooperative A-1 decreased from \$20,954 to \$14,020. Organization A-2 showed an increase in total assets of approximately \$3,000, while the remaining organization in group A (A-3) showed an increase of approximately \$59,000, of which over \$51,000 was for the year 1957 (Table XXXVII, group A).

TABLE XXXVI

FINANCIAL RATIOS FOR NINE SELECTED LOCAL FARMERS COOPERATIVES REFLECTING
CURRENT FINANCIAL CONDITION, TENNESSEE, 1957

Organizations	Current assets to current lia- bilities	Current assets to total lia- bilities	Net worth to fixed assets	Sales to fixed assets	Net worth to total lia- bilities	Sales to wages	Current lia- bilities to cash	Days' sales in accounts re- ceivable	Sales to accounts re- ceivable	Inventory turnover
Group A										
1	0.66	0.66	1.42	58.48	0.15	13.41	9.19	22.54	25.98	12.48
2	1.04	1.04	6.92	17.37	1.05	20.24	7.22	19.63	14.51	16.90
3	1.69	0.81	1.13	3.56	1.32	16.12	9.19	26.00	10.64	10.24
Group B										
1	2.59	2.59	3.61	7.29	3.23	19.77	1.70	27.00	11.33	8.75
2	3.19	3.19	3.32	8.47	6.17	26.24	0.88	23.24	11.73	15.10
3	3.08	1.86	2.51	8.16	2.98	18.05	1.11	16.94	18.29	10.01
Group C										
1	2.57	2.00	4.95	15.92	3.43	17.91	6.66	30.40	9.72	5.20
2	3.06	1.46	2.15	8.06	2.00	10.09	42.10	19.50	13.41	7.10
3	3.27	1.94	2.76	6.85	2.93	16.54	2.08	31.36	9.89	6.96

TABLE XXXVII

TRENDS OF ASSETS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

Assets	1953	1954	1955	1956	1957
GROUP A	Per cent				
<u>Organization A-1:</u>					
Current assets					
Cash on hand and in banks	11.5	4.9	3.6	1.8	9.4
Advances and deposits	-	-	-	3.1	-
Receivables	19.3	12.2	19.1	37.8	20.8
Less reserve for bad debts	-4.2	-5.2	-4.1	-2.7	-11.9
Net receivables	15.1	7.0	15.0	35.1	8.9
Inventory	35.4	50.7	27.7	17.3	39.2
Total current assets	62.0	62.5	43.3	57.3	57.5
Fixed assets					
Real estate, bldgs. & equip.	18.8	21.4	11.4	8.9	16.6
Less reserve for deprec.	-14.0	-16.0	-4.4	-3.0	-7.3
Book value fixed assets	4.8	5.4	7.0	5.9	9.2
Investments	8.1	9.0	20.3	16.3	0.7
Other assets	25.1	23.1	29.4	20.5	32.5
Total assets	100.0	100.0	100.0	100.0	100.0
Total Assets	\$20,954	\$18,975	\$16,195	\$25,191	\$14,020
<u>Organization A-2:</u>					
Current assets					
Cash on hand and in banks	10.3	11.7	2.5	9.0	6.7
Advances and deposits	-	-	-	-	-
Receivables	16.8	22.7	44.7	22.1	29.9
Less reserve for bad debts	-1.1	-0.9	-2.6	-9.6	-4.4
Net receivables	15.7	21.8	22.1	13.0	25.5
Inventory	39.2	34.3	19.2	30.7	18.6
Total current assets	65.2	67.8	63.8	51.8	50.8
Fixed assets					
Real estate, bldgs. & equip.	22.5	22.6	25.4	27.5	25.0
Less reserve for deprec.	-7.0	-9.7	-11.8	-15.4	-17.6
Book value fixed assets	15.5	12.9	13.6	12.1	7.4
Investments	4.8	4.2	9.9	19.6	27.1
Other assets	14.5	15.1	12.7	16.5	14.7
Total assets	100.0	100.0	100.0	100.0	100.0
Total Assets	\$25,371	\$28,645	\$32,245	\$25,866	\$28,452

TABLE XXXVII (CONTINUED)

TRENDS OF ASSETS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

Assets	1953	1954	1955	1956	1957
	Per cent				
Organization A-3:					
Current assets					
Cash on hand and in bank	0.3	0.1	0.1	1.4	0.2
Advances and deposits	2.9	2.1	2.1	2.2	2.0
Receivables	20.3	25.5	22.1	23.2	16.8
Less reserve for bad debts	-1.1	-0.3	-0.6	-1.0	-0.8
Net receivables	19.2	25.2	21.5	22.2	16.0
Inventory	26.4	19.7	20.7	21.3	16.4
Total current assets	48.8	47.1	44.4	47.1	34.6
Fixed assets					
Real estate, bldgs. & equip.	50.2	54.5	41.7	48.4	61.0
Less reserve for deprec.	-10.4	-13.0	-11.1	-12.7	-10.9
Book value fixed assets	39.8	41.5	40.6	35.7	50.1
Investments	4.0	4.0	7.3	9.3	10.1
Other assets	7.4	7.4	7.7	7.9	5.2
Total assets	100.0	100.0	100.0	100.0	100.0
Total Assets	\$104,733	\$104,759	\$105,230	\$112,515	\$163,698
GROUP B					
Organization B-1:					
Current assets					
Cash on hand and in banks	8.8	2.0	9.0	5.3	14.0
Advances and deposits	-	-	-	-	-
Receivables	19.0	26.9	20.0	25.4	21.8
Less reserve for bad debts	-1.6	-2.4	-2.8	-2.9	-2.2
Net receivables	17.4	24.5	17.2	22.5	19.6
Inventory	24.2	18.6	24.7	26.1	27.5
Total current assets	50.4	45.1	50.9	53.9	61.1
Fixed assets					
Real estate, bldgs, & equip.	49.3	58.3	45.3	42.1	34.0
Less reserve for deprec.	-10.4	-15.9	-10.6	-13.2	-12.8
Book value fixed assets	38.9	42.4	34.7	28.9	21.1
Investments	1.7	2.0	6.0	8.6	11.3
Other assets	9.0	10.5	8.4	8.6	6.4
Total assets	100.0	100.0	100.0	100.0	100.0
Total Assets	\$30,343	\$25,693	\$33,347	\$35,833	\$45,577

TABLE XXXVII (CONTINUED)

TRENDS OF ASSETS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

Assets	1953	1954	1955	1956	1957
	Per cent				
<u>Organization B-2:</u>					
Current assets					
Cash on hand and in banks	8.1	1.8	12.6	15.0	12.4
Advances and deposits	4.9	6.7	5.4	4.2	3.4
Receivables	14.7	21.1	23.7	12.0	18.3
Less reserve for bad debts	-1.3	-1.4	-0.6	-0.5	-2.5
Net receivables	13.4	19.7	23.1	11.5	15.8
Inventory	36.2	24.8	14.9	19.4	12.8
Total current assets	62.6	53.0	56.0	50.1	44.4
Fixed assets					
Real estate, bldgs. & equip.	14.8	25.7	19.9	17.9	28.2
Less reserve for deprec.	-2.6	-2.6	-2.4	-2.5	-2.2
Book value fixed assets	12.2	23.1	17.5	15.4	26.0
Investments	13.0	11.7	17.0	19.0	21.5
Other assets	12.2	12.2	9.5	15.5	8.1
Total assets	100.0	100.0	100.0	100.0	100.0
Total Assets	\$45,604	\$57,623	\$74,377	\$85,223	\$103,477
<u>Organization B-3:</u>					
Current assets					
Cash on hand and in banks	5.6	9.9	0.1	7.4	11.1
Advances and deposits	3.4	3.4	3.4	2.4	2.5
Receivables	19.4	22.2	18.0	18.2	13.3
Less reserve for bad debts	-1.0	-0.8	-0.9	-0.9	-0.9
Net receivables	18.4	21.4	17.1	17.3	12.4
Inventory	20.1	17.9	20.6	21.2	20.7
Total current assets	47.5	52.6	41.2	48.3	46.7
Fixed assets					
Real estate, bldgs. & equip.	41.2	39.2	49.6	43.2	40.2
Less reserve for deprec.	-8.0	-7.6	-9.3	-8.7	-10.3
Book value fixed assets	33.2	31.6	40.3	34.5	29.9
Investments	7.4	5.6	9.9	10.0	13.1
Other assets	11.9	10.2	8.6	7.2	10.3
Total assets	100.0	100.0	100.0	100.0	100.0
Total Assets	\$193,258	\$253,500	\$298,648	\$401,089	\$463,391

TABLE XXXVII (CONTINUED)

TRENDS OF ASSETS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

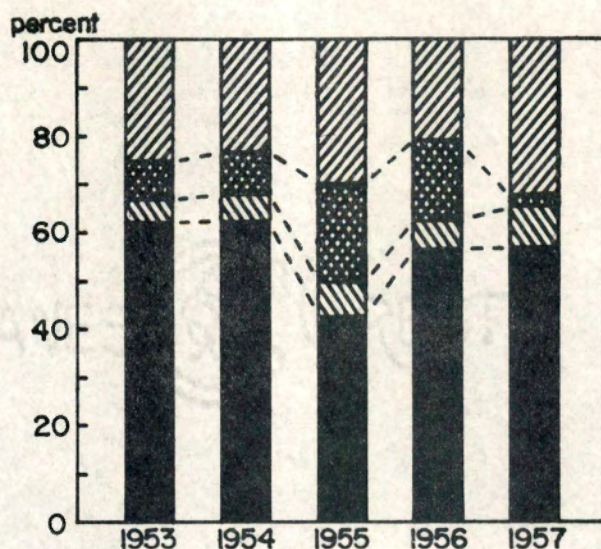
Assets	1953	1954	1955	1956	1957
GROUP C	Per cent				
<u>Organization C-1:</u>					
Current assets					
Cash on hand and in banks	2.3	3.2	-4.0	2.2	-5.0
Advances and deposits	4.8	-	3.5	3.3	3.2
Receivables	16.9	21.1	19.4	23.0	23.6
Less reserve for bad debts	-1.1	-0.7	-0.9	-2.4	-3.4
Net receivables	15.8	20.4	18.5	20.6	20.2
Inventory	41.2	36.8	39.3	39.2	38.6
Total current assets	64.1	60.4	57.3	65.3	57.0
Fixed assets					
Real estate, bldgs. & equip.	16.3	22.2	21.6	16.3	21.4
Less reserve for deprec.	-5.2	-3.8	-5.2	-5.2	-6.9
Book value fixed assets	11.1	18.4	16.4	11.1	14.5
Investments	9.1	8.4	13.4	13.3	18.8
Other assets	15.7	12.8	12.9	10.3	9.7
Total assets	100.0	100.0	100.0	100.0	100.0
Total Assets	\$69,411	\$82,428	\$94,249	\$129,111	\$129,816
<u>Organization C-2:</u>					
Current assets					
Cash on hand and in banks	0.7	0.3	2.8	1.4	0.4
Advances and deposits	-	-	-	-	-
Receivables	17.5	39.1	27.8	22.9	18.6
Less reserve for bad debts	-3.1	-2.0	-2.4	-2.6	-2.6
Net receivables	14.4	37.1	25.4	20.3	16.0
Inventory	55.6	36.2	26.2	27.3	32.4
Total current assets	70.7	73.6	54.4	51.1	48.8
Fixed assets					
Real estate, bldgs. & equip.	8.4	10.2	33.4	39.6	37.3
Less reserve for deprec.	-2.3	-3.2	-3.6	-5.9	-6.4
Book value fixed assets	6.1	7.0	29.8	33.7	30.9
Investments	3.4	6.3	7.7	8.1	13.5
Other assets	19.8	13.1	8.1	7.1	6.8
Total assets	100.0	100.0	100.0	100.0	100.0
Total Assets	\$32,678	\$57,199	\$108,509	\$146,868	\$151,202

TABLE XXXVII (CONCLUDED)

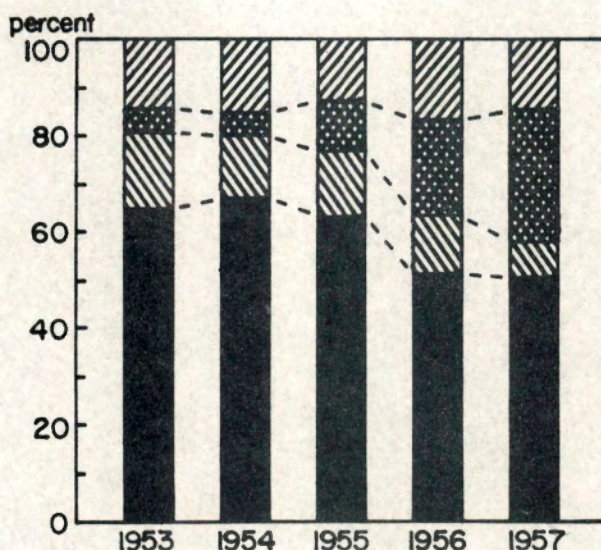
TRENDS OF ASSETS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

Assets	1953	1954	1955	1956	1957
	Per cent				
<u>Organization C-3:</u>					
Current assets					
Cash on hand and in banks	9.3	15.3	11.3	2.7	4.5
Advances and deposits	4.1	4.6	2.8	2.1	2.7
Receivables	44.4	34.7	18.1	25.6	23.0
Less reserve for bad debts	-3.0	-3.8	-2.4	-3.0	-4.2
Net receivables	41.4	30.9	15.7	22.6	18.8
Inventory	25.7	21.6	19.1	29.0	23.2
Total current assets	80.5	72.4	48.9	56.4	49.2
Fixed assets					
Real estate, bldgs. & equip.	9.7	13.0	37.3	30.7	34.0
Less reserve for deprec.	-2.0	-3.2	-3.5	-4.7	-6.9
Book value fixed assets	7.7	9.8	33.8	26.0	27.1
Investments	6.1	6.2	9.3	9.8	15.7
Other assets	5.7	11.6	8.0	7.8	8.0
Total assets	100.0	100.0	100.0	100.0	100.0
Total Assets	\$121,007	\$111,742	\$181,280	\$227,129	\$207,784

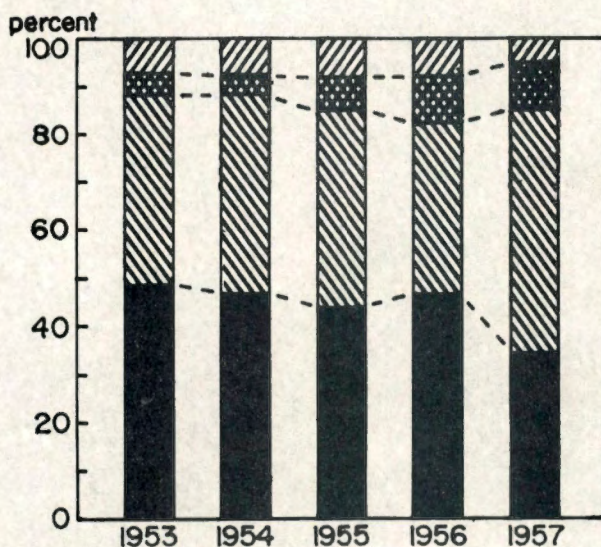
GROUP A
Organization A-1



Organization A-2



Organization A-3



LEGEND:

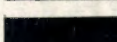
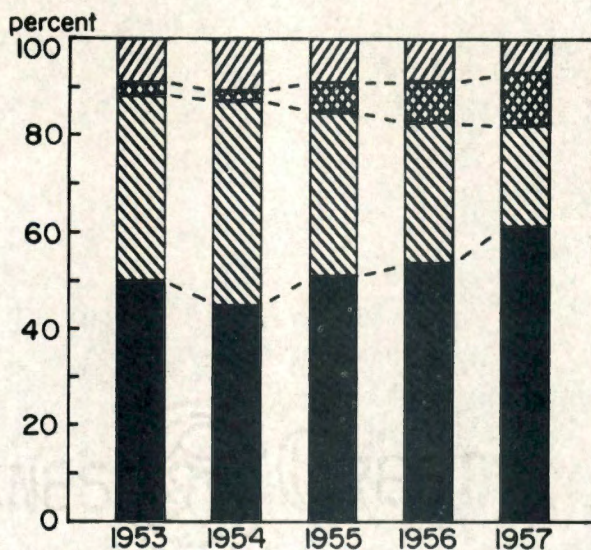
-  Other Assets
-  Investments
-  Book Value Fixed Assets
-  Current Assets

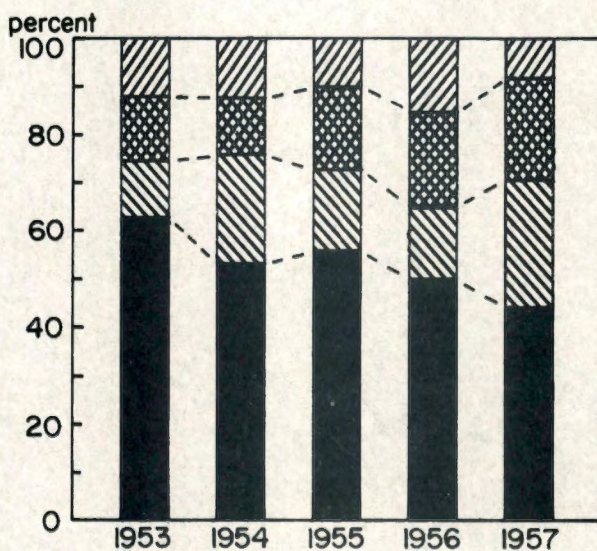
Figure 2-A. Percentage distribution of total assets, selected local farmers cooperatives, Tennessee, 1953 through 1957.

GROUP B
Organization B-1

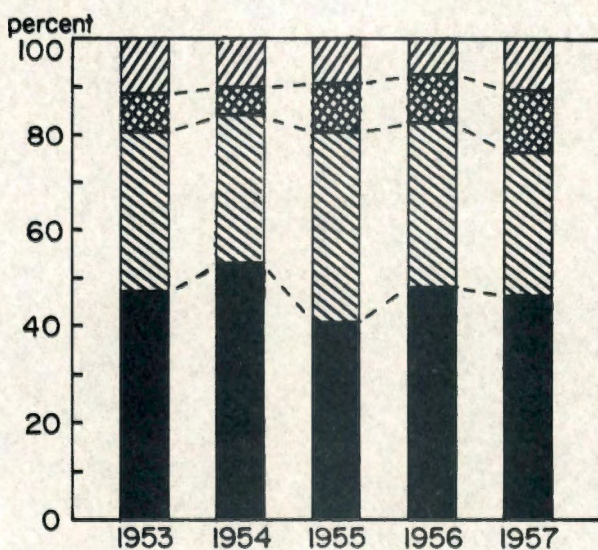
69



Organization B-2



Organization B-3



LEGEND:

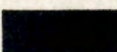
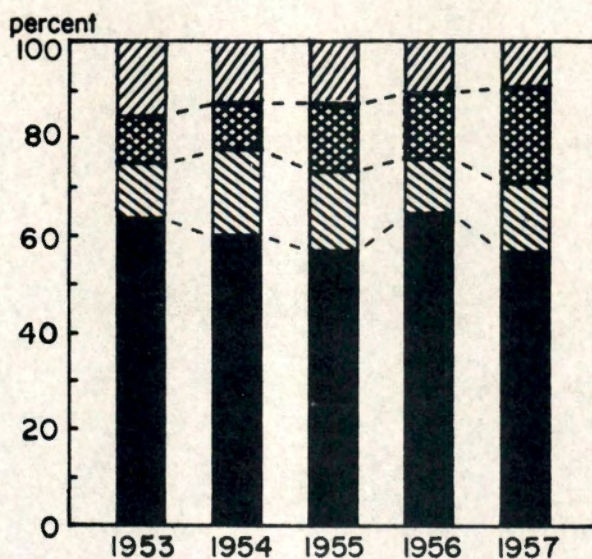
-  Other Assets
-  Investments
-  Book Value Fixed Assets
-  Current Assets

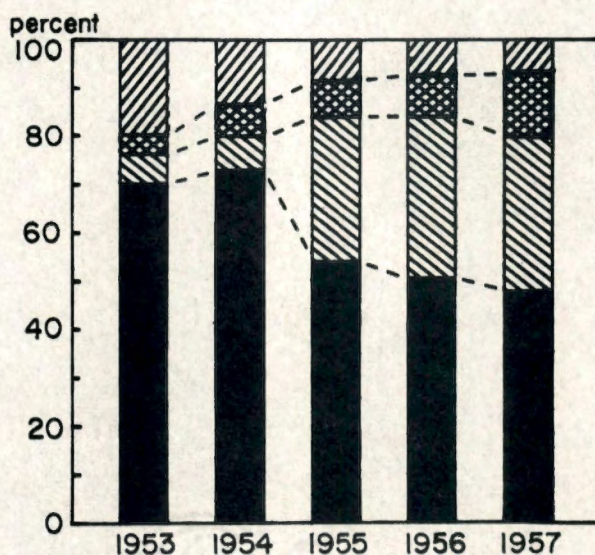
Figure 2-B. Percentage distribution of total assets, selected local farmers cooperatives, Tennessee, 1953 through 1957.

GROUP C
Organization C-1

70



Organization C-2



Organization C-3

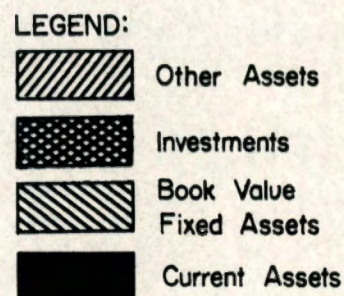
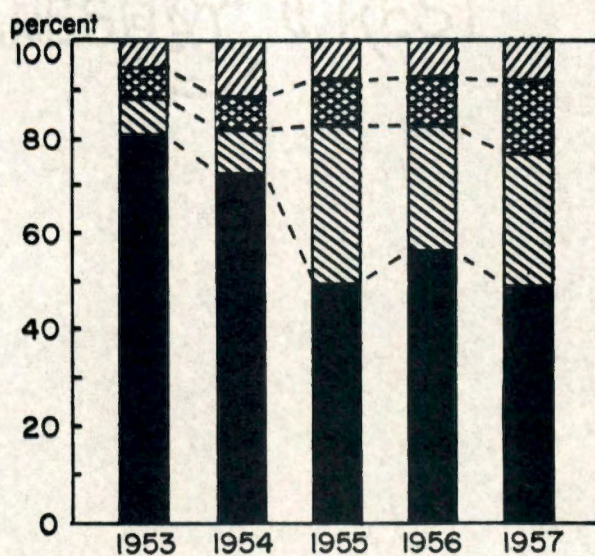


Figure 2-C. Percentage distribution of total assets, selected local farmers cooperatives, Tennessee, 1953 through 1957.

During the same period the relatively strong organizations, in general, showed far greater increases in total assets. Organization B-1 showed a constant increase after 1953, the total increase being approximately \$15,000. The second cooperative in group B (B-2) had an increase in total assets from \$45,604 to \$103,477, or slightly less than \$58,000, while B-3 showed an increase from \$193,258 to \$463,391, or over \$270,000 (Table XXXVII). As shown in Table XXXVII, group C, the first organization analyzed (C-1) showed sizeable increases in total assets from 1953 to 1956, but had an increase of only \$705 from 1956 to 1957. Organization C-2 showed a steady increase from \$32,678 in 1953 to \$151,202 in 1957, or a total increase of approximately \$118,000 during the period studied. The third organization in this group (C-3) showed an overall increase of approximately \$86,000 in total assets. However, the fluctuation of decreasing and increasing values indicated the lack of systematic use of capital. From 1956 to 1957 the value of total assets decreased from \$227,124 to \$207,784, a drop of approximately \$20,000.

Current Assets

Group A. As a percentage of total assets, the current assets for organization A-1 decreased from 62 per cent in 1953 to 57.5 per cent in 1957. Cash on hand and in banks decreased during the same period from 11.5 per cent of total assets in 1953 to 1.8 per cent in 1956, then increased to 9.4 per cent in 1957 (Table XXXVII). This organization maintained a deposit with the Tennessee Farmers Cooperative for only one of the five years studied. An adequate deposit entitles an organization to receive a 1 per cent discount on supplies purchased from the Tennessee Farmers Cooperative, which is a very important source of savings, and

one which cooperative managers should try to take advantage of in so far as possible. Receivables, after an allowance for bad debts, fluctuated from 15.1 per cent of total assets in 1953 to 8.9 per cent in 1957, indicating a lack of policy concerning credit to patrons and allowances for bad debts. Receivables is one of the principal points in current assets that deserves close attention by those interested in the success of their cooperative. Inventory, which was the largest component of total assets, increased from 35.4 per cent of total assets in 1953 to 39.2 per cent in 1957.

Organization A-2 showed a decrease in total current assets as a percentage of total assets, of approximately 14 per cent during the period under observation. The amount of cash on hand and in banks as a percentage of total assets also decreased from 10.3 per cent to 6.7 per cent during the same period. At the same time this organization had no advances and deposits with the Tennessee Farmers Cooperative. Net receivables as a proportion of total assets, increased from 15.7 per cent to 25.5 per cent, which is an indication that this cooperative is not doing as good a job of collecting accounts currently, as it has been doing in the past. Inventory decreased from 39.2 per cent of total assets to 18.6 per cent during the period studied.

As shown in Table XXXVII, group A, the proportion of cash on hand and in banks to total assets for organization A-3 was very low throughout the period of observation, and relatively little change was noted from year to year. However, the organization did take advantage of the discount given on purchases by the Tennessee Farmers Cooperative by

maintaining an adequate balance with them during the entire period. It is possible, due to circumstances not reflected in the balance sheet, that the local manager was allocating this portion of capital in the most logical manner. The net receivables decreased from 19.2 per cent of total assets in 1953 to 16.0 per cent in 1957. This is an indication of improvement in the collection of accounts. However, the reserve for bad debts held by this cooperative was somewhat low (Table XXXVII, group A). The proportion of inventory to total assets declined 10 per cent during the period under observation. Total current assets decreased from 48.8 per cent of total assets in 1953 to 34.6 per cent in 1957.

Group B. Organization B-1 showed fluctuations in its amounts of cash on hand from 8.8 per cent of total assets in 1953 to 14.0 per cent in 1957 (Table XXXVII, group B). While it is desirable for a cooperative to maintain a sufficient amount of cash to meet daily operating expenses, it seems logical that in some years a portion of this capital could have been used more advantageously in the form of advances and deposits since none were shown for the period under observation. It is obviously a waste of capital to pay full price for purchases from the regional organization when there exists an opportunity for a discount by maintaining a relatively small balance with them. After an adequate allowance for depreciation, the receivables showed alternating increases and decreases. The overall increase over 1953 was about 2 per cent. The inventory for the period under observation increased consistently from 24.2 per cent of total assets to 27.5 per cent. Total current assets

showed an increase of about 11 per cent as a proportion of total assets during the period under study.

Organization B-2 maintained both an adequate balance of cash on hand and in banks, and advances and deposits (Table XXXVII, group B). Net receivables fluctuated a great deal, increasing from 13.4 per cent of total assets in 1953 to 15.8 per cent in 1957, or about 2.5 per cent. Inventory decreased from 36.2 per cent of total assets in 1953 to 12.8 per cent in 1957, showing an almost continuous decline.

Organization B-3 maintained an adequate balance of cash on hand and in banks to meet current operating expenses, with the exception of the 1955 year, when only 0.1 per cent of total assets was in this form. Also, the required balance was maintained with the Tennessee Farmers Cooperative to insure a 1 per cent discount on all purchases.¹ Receivables, after an allowance for bad debts, decreased from 18.4 per cent of total assets to 12.4 per cent during the period under study, indicating continuous improvement in the collection of accounts. In 1953 inventory was 20.1 per cent of total assets and that percentage changed very little during the period under observation. Current assets as a whole remained fairly stable relative to the amount of total assets.

Group C. The percentage of cash on hand and in banks in relation to total assets was far from consistent for cooperative C-1 during the period studied. For the years 1955 and 1957 this organization showed an overdrawn account of 4 and 5 per cent of total assets, respectively

¹Total dollar value of a full year's purchases from the Tennessee Farmers Cooperative divided by the number of weeks in a year gives the required deposit. Adjustments are made once a year.

(Table XXXVII, group C). This is an indication of careless management, and steps should be taken immediately to prevent a recurrence. Adequate advances and deposits were maintained, except for 1954 when no balance was indicated. Net receivables increased from 15.1 per cent in 1953 to 20.2 per cent in 1957. The percentage was reduced a little in 1955, but rose again in 1956 and remained high in 1957. Although the current proportion of net receivables to total assets was not excessively high, management does need to guard against a further rise. The proportion of inventory to total assets remained relatively stable throughout the period under observation. Total current assets decreased from 64.1 per cent to 57 per cent of total assets during the period of study.

A considerable decline in total current assets over the period of study was noted for cooperative C-2. In 1953 current assets amounted to 70.7 per cent of total assets, but declined consistently to only 48.8 per cent in 1957. In general, this cooperative was in a weak financial position from the standpoint of balanced current assets. In 1953 the amount of cash on hand was only 0.7 per cent of total assets, and changed relatively little for the entire period. No advances and deposits were indicated during the period. The net receivables appeared to be the only component of current assets under control, comprising 16 per cent of total assets in 1957. Although inventory showed an almost constant downward trend in 1957, it was still high in relation to the remaining components of current assets. This organization would be better able to meet its daily operating expenses and likely show an improved financial condition if the investment in inventory could be reduced so that cash on hand and

in banks and advances and deposits with the regional organization could be increased.

The last organization studied in group C (C-3) also showed a decline in total current assets. However, a decline in current assets as a percentage of total assets is not necessarily indicative of financial weakness. There is always the possibility that part of the capital used can be allocated more profitably to other areas such as plant and equipment. Such decisions can, of course, best be made by competent management. In general, relative to total assets, the various components of current assets were in balance for the period under observation.

Fixed Assets

Group A. During the period of study, the net fixed assets of cooperative A-1 increased from 4.8 per cent of total assets to 9.2 per cent (Table XXXVII, group A). However, total assets decreased approximately \$6,000, which means there was very little actual change in fixed assets. Cooperative A-2 showed a decrease of net fixed assets from 15.5 per cent of total assets to 7.4 per cent during the same period. The third organization (A-3) had an increase in fixed assets from about 50 to 61 per cent of total assets, after an allowance for depreciation.

Group B. Table XXXVII, group B, indicates a decrease in net fixed assets as a proportion of total assets for organization B-1 from 1953 to 1957. Very little additional capital was used for purchasing additional fixed assets during the period under observation. Cooperative B-2 showed fluctuations in net fixed assets during the entire five-year period studied. As this organization grew in size, a larger proportion of capital

was used for fixed assets. During the same period of time cooperative B-3 increased in size but maintained approximately the same proportions of fixed assets from year to year, indicating a good balance in relation to the total assets.

Group C. The first cooperative in group C (C-1) showed an increase of net fixed assets of 3 per cent, while organization C-2 showed an increase in fixed assets from 6.1 per cent of total assets to 30.9 per cent during the period of observation. The third organization (C-3) had an increase in fixed assets from 7.7 per cent of total assets in 1953 to 27.1 per cent in 1957.

Investments

Group A. Cooperative A-1 had an increase in the proportion of investments to total assets from 8.1 in 1953 to 20.3 in 1955, then showed a sharp drop to 0.7 per cent at the end of the period under observation (Table XXXVII). This means that this organization is not doing a very good job in helping to support its regional wholesale agency (Tennessee Farmers Cooperative) and the Louisville Bank for Cooperatives. The more capital support these agencies get from the local organizations in the form of investments, the more they can expand their services to them. Cooperative A-2 showed considerable increase of investments both in 1956 and 1957. The third organization in group A (A-3) showed an increase of investments in relation to total assets, the percentage climbing steadily from 4.0 per cent of total assets in 1953 and 1954 to 10.1 in 1957.

Group B. All of the organizations in this group showed a total increase in the proportion of investments to total assets (Table XXXVII, group B).

Group C. The three organizations in this group also showed a total increase in the proportion of investments for the period under observation; each had approximately 15 per cent of total assets in the form of investments in 1957 (Table XXXVII, group C).

Other Assets

Other assets comprised of various items (referred to in Chapter II, page 19) remained fairly consistent throughout the period of study (Table XXXVII, groups A, B, and C).

Liabilities and Net Worth

Equity capital (net worth), or capital supplied by owners, was the most important source of capital for six of the nine organizations studied from 1953 to 1957 (Table XXXVIII and Figure 3). Of the three remaining organizations, A-1 used only 13.1 per cent of owner supplied capital in 1957, and showed an uneven trend for the period studied. Organization A-2 showed a decline in equity capital from 78.3 per cent of total capital in 1953 to 48.1 per cent in 1956, with 51.2 per cent in 1957. Organization B-1 showed a net worth of 49.2 per cent of total capital in 1953. However, for the remainder of the period under observation, organization B-1 showed an increase in net worth from 50.5 per cent in 1953 to 76.3 per cent in 1957, indicating a constant increase in the degree of ownership control of the business for the last four years.

Liabilities, group A. Organization A-1 showed a decline in total current liabilities (current debt) from 1953 to 1954 (Table XXXVIII). However, from 1954 the proportion of total capital used in this form increased constantly. In 1957 the current liabilities equalled 86.9 per

TABLE XXXVIII

TRENDS OF LIABILITIES AND NET WORTH, SELECTED LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Liabilities and net worth	1953	1954	1955	1956	1957
GROUP A	Per cent				
<u>Organization A-1:</u>					
Current liabilities					
Accounts payable	40.0	20.6	4.2	46.5	61.4
Accruals	1.3	2.7	1.7	1.1	1.0
Notes payable (short-term)	20.0	16.3	32.1	13.2	18.9
Other	-	-	2.0	3.3	5.6
Total current liabilities	61.3	39.6	40.0	64.1	86.9
Fixed liabilities					
Notes payable (long-term)	-	-	-	-	-
Total liabilities	61.3	39.6	40.0	64.1	86.9
Net worth					
Outstanding common stock	3.1	3.4	4.0	2.5	4.7
Outstanding preferred stock	78.3	86.4	101.2	65.1	116.9
Unissued fractional share stock	4.0	4.4	-	-	-
Allocated reserve	5.5	6.1	-	-	-
Reserve for contingencies	-	-	-	-	-
Undivided prior years savings (loss) ^a	-	(57.6)	(34.1)	(29.1)	(56.9)
Undivided current savings (loss)	(52.2)	17.7	(11.1)	(2.6)	(51.6)
Total net worth	38.7	60.4	60.0	35.9	13.1
Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0
Total Liabilities and Net Worth	\$20,954	\$18,975	\$16,195	\$25,191	\$14,020

TABLE XXXVIII (CONTINUED)

TRENDS OF LIABILITIES AND NET WORTH, SELECTED LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Liabilities and net worth	1953	1954	1955	1956	1957
			Per cent		
<u>Organization A-2:</u>					
Current liabilities					
Accounts payable	7.3	13.2	21.4	46.8	45.5
Accruals	1.5	1.1	0.6	2.5	1.7
Notes payable (short-term)	6.3	7.4	15.5	-	-
Other	6.6	4.4	9.0	2.6	1.6
Total current liabilities	21.7	26.1	46.5	51.9	48.8
Fixed liabilities					
Notes payable (long-term)	-	-	-	-	-
Total liabilities	21.7	26.1	46.5	51.9	48.8
Net worth					
Outstanding common stock	0.5	0.5	1.9	2.3	2.1
Outstanding preferred stock	28.3	25.2	35.3	44.1	40.2
Unissued fractional shares stock	23.1	22.4	5.7	7.1	6.4
Allocated reserve	37.4	6.3	5.6	7.0	6.4
Reserve for contingencies	-	-	-	-	-
Undivided prior year savings (loss)	17.0	15.0	13.4	16.6	15.1
Undivided current savings (loss)	(28.0)	4.5	8.4	(29.0)	(19.0)
Total net worth	78.3	73.9	53.5	48.1	51.2
Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0
Total Liabilities and Net Worth	\$25,371	\$28,645	\$32,245	\$25,866	\$28,452

TABLE XXXVIII (CONTINUED)

TRENDS OF LIABILITIES AND NET WORTH, SELECTED LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Liabilities and net worth	1953	1954	1955	1956	1957
	Per cent				
<u>Organization A-3:</u>					
Current liabilities					
Accounts payable	6.9	2.5	3.7	5.9	8.6
Accruals	0.5	0.7	1.0	0.6	0.7
Notes payable (short-term)	31.9	31.5	29.9	12.5	9.0
Other	3.9	7.9	2.5	0.8	2.1
Total current liabilities	43.2	42.6	37.1	19.8	20.4
Fixed liabilities					
Notes payable (long-term)	-	3.8	2.2	17.2	22.6
Total liabilities	43.2	46.4	39.3	37.0	43.0
Net worth					
Outstanding common stock	1.0	1.0	1.0	0.9	0.7
Outstanding preferred stock	41.9	41.8	41.7	43.8	39.9
Unissued fractional shares stock	1.7	1.7	1.6	3.7	2.5
Allocated reserve	2.9	6.7	5.8	7.4	8.5
Reserve for contingencies	3.8	2.4	2.4	2.2	1.5
Undivided prior year savings (loss)	-	-	-	-	-
Undivided current savings (loss)	5.5	-	8.2	5.0	3.9
Total net worth	56.8	53.6	60.7	63.0	57.0
Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0
<u>Total Liabilities and</u>					
Net Worth	\$104,733	\$104,759	\$105,230	\$112,515	\$163,698

TABLE XXXVIII (CONTINUED)

TRENDS OF LIABILITIES AND NET WORTH, SELECTED LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Liabilities and net worth	1953	1954	1955	1956	1957
GROUP B	Per cent				
<u>Organization B-1:</u>					
Current liabilities					
Accounts payable	12.0	11.8	15.1	6.4	6.2
Accruals	1.1	1.4	1.1	1.1	0.9
Notes payable (short-term)	37.7	36.3	25.3	23.7	16.5
Other	-	-	-	-	-
Total current liabilities	50.8	49.5	41.5	31.2	23.6
Fixed liabilities					
Notes payable (long-term)	-	-	-	-	-
Total liabilities	50.8	49.5	41.5	31.2	23.6
Net worth					
Outstanding common stock	1.1	1.9	1.4	1.3	1.1
Outstanding preferred stock	34.9	41.3	31.8	29.3	23.1
Unissued fractional shares stock	-	-	-	-	-
Allocated reserve	-	5.6	4.3	23.4	29.4
Reserve for contingencies	-	-	-	0.1	0.4
Undivided prior year savings (loss)	7.1	8.3	2.6	-	-
Undivided current savings (loss)	6.1	6.6	18.4	14.7	22.4
Total net worth	49.2	50.5	58.5	68.8	76.3
Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0
Total Liabilities and Net Worth	\$30,343	\$25,693	\$33,347	\$35,833	\$45,577

TABLE XXXVIII (CONTINUED)

TRENDS OF LIABILITIES AND NET WORTH, SELECTED LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Liabilities and net worth	1953	1954	1955	1956	1957
	Per cent				
<u>Organization B-2:</u>					
Current liabilities					
Accounts payable	1.5	7.2	0.1	8.5	2.7
Accruals	0.2	0.1	0.0	-	0.1
Notes payable (short-term)	-	4.8	3.7	-	8.7
Other	-	0.1	5.8	4.2	2.5
Total current liabilities	1.7	12.2	9.6	12.7	14.0
Fixed liabilities					
Notes payable (long-term)	-	4.8	-	-	-
Total liabilities	1.7	17.0	9.6	12.7	14.0
Net worth					
Outstanding common stock	6.1	3.8	2.9	2.6	2.2
Outstanding preferred stock	39.3	31.0	33.5	37.6	37.4
Unissued fractional shares stock	17.0	14.0	10.8	13.9	13.7
Allocated reserve	9.7	24.1	15.9	18.7	19.0
Reserve for contingencies	6.1	3.4	2.4	1.8	1.3
Undivided prior year savings (loss)	5.7	-	-	-	-
Undivided current savings (loss)	14.4	6.7	24.9	12.7	12.4
Total net worth	98.3	83.0	90.4	87.3	86.0
Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0
Total Liabilities and Net Worth	\$45,604	\$57,623	\$74,377	\$85,223	\$103,477

TABLE XXXVIII (CONTINUED)

TRENDS OF LIABILITIES AND NET WORTH, SELECTED LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Liabilities and net worth	1953	1954	1955	1956	1957
<u>Organization B-3:</u>					
Current liabilities					
Accounts payable	8.9	8.9	2.8	14.8	10.2
Accruals	1.4	2.6	1.9	1.7	2.3
Notes payable (short-term)	3.0	7.1	7.6	6.1	2.7
Other	-	0.7	3.1	0.3	-
Total current liabilities	13.3	19.3	15.4	22.9	15.2
Fixed liabilities					
Notes payable (long-term)	6.5	8.6	12.6	9.2	9.9
Total liabilities	19.8	27.9	28.0	32.1	25.1
Net worth					
Outstanding common stock	0.5	0.3	0.3	0.2	0.2
Outstanding preferred stock	49.4	37.3	34.1	27.0	25.4
Unissued fractional shares stock	-	-	-	-	-
Allocated reserve	18.4	18.7	23.1	24.2	30.6
Reserve for contingencies	-	-	-	0.8	1.0
Undivided prior year savings (loss)	-	-	-	-	-
Undivided current savings (loss)	11.9	15.8	14.5	15.7	17.7
Total net worth	80.2	72.1	72.0	67.9	74.9
Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0
Total Liabilities and Net Worth	\$193,258	\$253,500	\$298,648	\$401,089	\$463,391

TABLE XXXVIII (CONTINUED)

TRENDS OF LIABILITIES AND NET WORTH, SELECTED LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Liabilities and net worth	1953	1954	1955	1956	1957
GROUP C	Per cent				
<u>Organization C-1:</u>					
Current liabilities					
Accounts payable	7.2	1.8	1.1	5.0	4.5
Accruals	0.7	4.4	3.0	4.2	0.6
Notes payable (short-term)	16.1	13.3	15.9	15.8	17.2
Other	-	-	-	-	-
Total current liabilities	24.0	19.5	20.0	25.0	22.3
Fixed liabilities					
Notes payable (long-term)	0.9	8.5	5.9	8.2	6.3
Total liabilities	24.9	28.0	25.9	33.2	28.6
Net Worth					
Outstanding common stock	0.7	0.6	0.5	0.5	0.4
Outstanding preferred stock	63.7	51.0	44.6	36.5	41.3
Unissued fractional shares stock	0.1	0.1	0.1	-	-
Allocated reserve	13.3	11.2	17.8	20.9	25.3
Reserve for contingencies	-	-	-	0.1	0.6
Undivided prior year savings (loss)	-	2.3	-	-	-
Undivided current savings (loss)	2.7	11.4	11.1	8.8	3.8
Total net worth	75.1	72.0	74.1	66.8	71.4
Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0
<u>Total Liabilities and Net Worth</u>	\$69,411	\$82,428	\$94,249	\$129,111	\$129,816

TABLE XXXVIII (CONTINUED)

TRENDS OF LIABILITIES AND NET WORTH, SELECTED LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Liabilities and net worth	1953	1954	1955	1956	1957
	Per cent				
<u>Organization C-2:</u>					
Current liabilities					
Accounts payable	13.9	20.7	13.4	8.4	5.0
Accruals	0.5	0.8	0.9	1.7	0.7
Notes payable (short-term)	-	-	9.2	22.1	8.9
Other	1.9	1.2	-	-	1.3
Total current liabilities	15.5	22.7	23.5	32.2	15.9
Fixed liabilities					
Notes payable (long-term)	-	-	4.6	7.7	17.4
Total liabilities	15.5	22.7	28.1	39.9	33.3
Net worth					
Outstanding common stock	2.3	1.3	0.7	0.5	1.0
Outstanding preferred stock	59.1	49.4	43.4	33.2	36.8
Unissued fractional shares stock	0.3	0.1	0.1	0.1	0.1
Allocated reserve	9.5	13.0	13.7	20.1	23.4
Reserve for contingencies	-	-	0.2	0.3	1.2
Undivided prior year savings (loss)	-	-	-	-	-
Undivided current savings (loss)	13.3	13.5	13.8	5.9	4.2
Total net worth	84.5	77.3	71.9	60.1	66.7
Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0
Total Liabilities and Net Worth	\$32,678	\$57,199	\$108,509	\$146,868	\$151,202

TABLE XXXVIII (CONCLUDED)

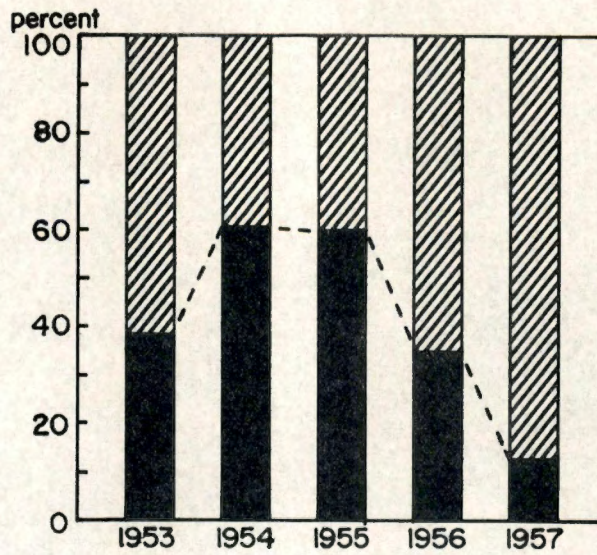
TRENDS OF LIABILITIES AND NET WORTH, SELECTED LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Liabilities and net worth	1953	1954	1955	1956	1957
Organization C-3:	Per cent				
Current liabilities					
Accounts payable	6.7	2.4	4.8	1.9	2.3
Accruals	0.5	0.8	0.4	0.5	0.7
Notes payable (short-term)	8.3	0.3	3.3	22.5	10.2
Other	1.4	1.3	1.6	1.7	1.9
Total current liabilities	16.9	4.8	10.1	26.6	15.1
Fixed liabilities					
Notes payable (long-term)	-	-	18.2	12.2	10.3
Total liabilities	16.9	4.8	28.3	38.8	25.4
Net worth					
Outstanding common stock	0.8	0.8	0.5	0.4	0.4
Outstanding preferred stock	27.5	24.1	18.3	16.4	19.9
Unissued fractional shares stock	-	-	-	-	-
Allocated reserve	35.0	50.2	36.2	33.4	44.2
Reserve for contingencies	-	-	-	0.1	0.3
Undivided prior year savings (loss)	-	-	-	-	-
Undivided current savings (loss)	19.8	20.1	16.7	10.9	9.8
Total net worth	83.1	95.2	71.7	61.2	74.6
Total liabilities and net worth	100.0	100.0	100.0	100.0	100.0
Total Liabilities and Net Worth	\$121,007	\$111,742	\$181,280	\$227,129	\$207,784

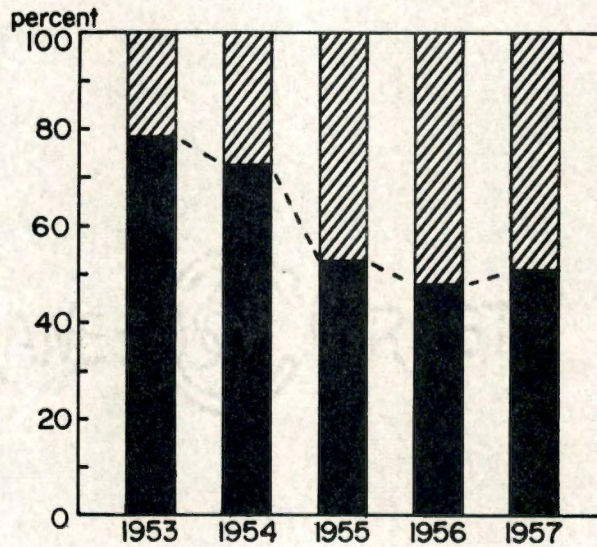
^aParentheses denote loss.

GROUP A
Organization A-1

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Organization A-2



Organization A-3

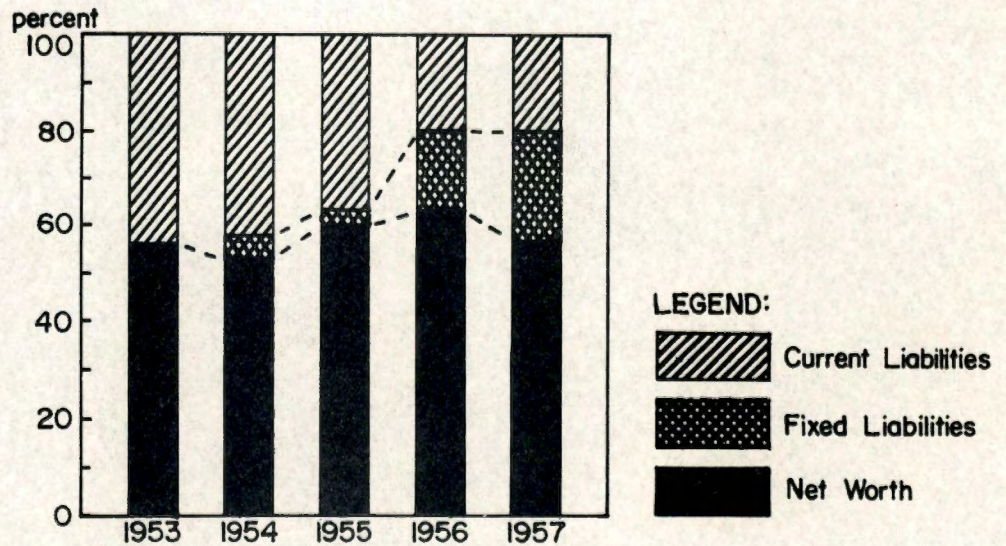
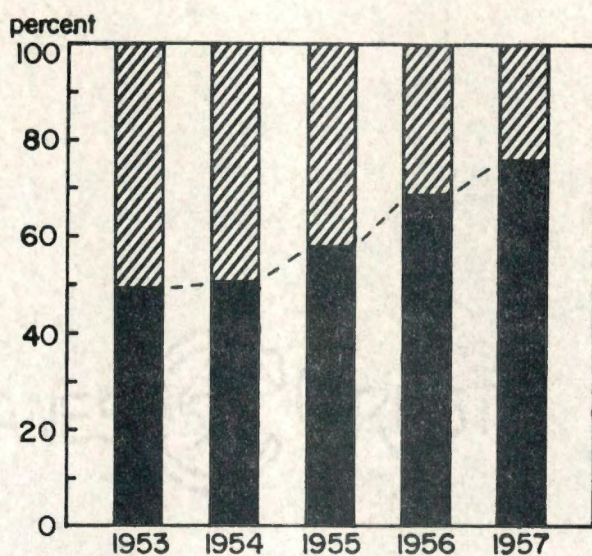


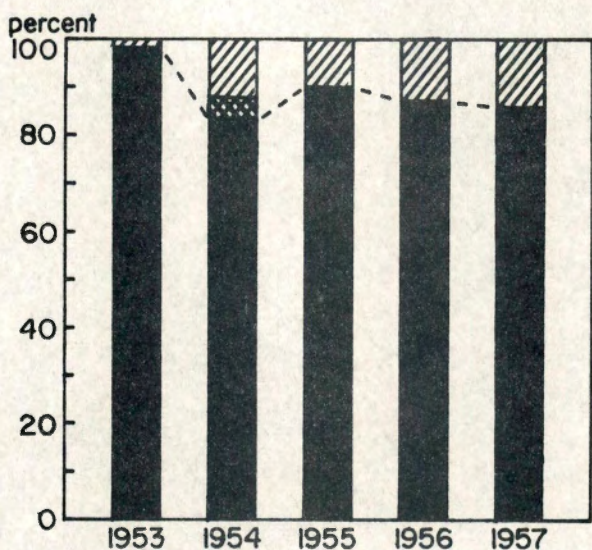
Figure 3-A. Percentage distribution of total liabilities and net worth, selected local farmers cooperatives, Tennessee, 1953 through 1957.

GROUP B
Organization B-1

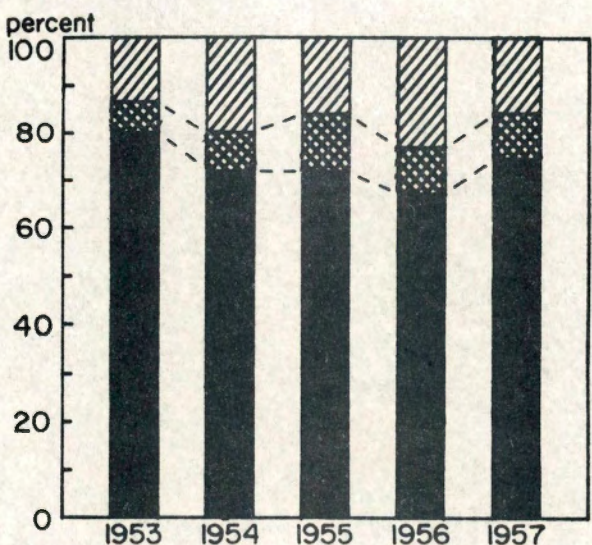
89



Organization B-2



Organization B-3



LEGEND:

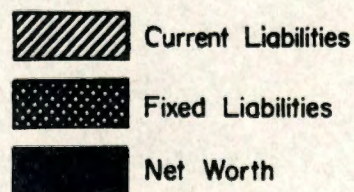
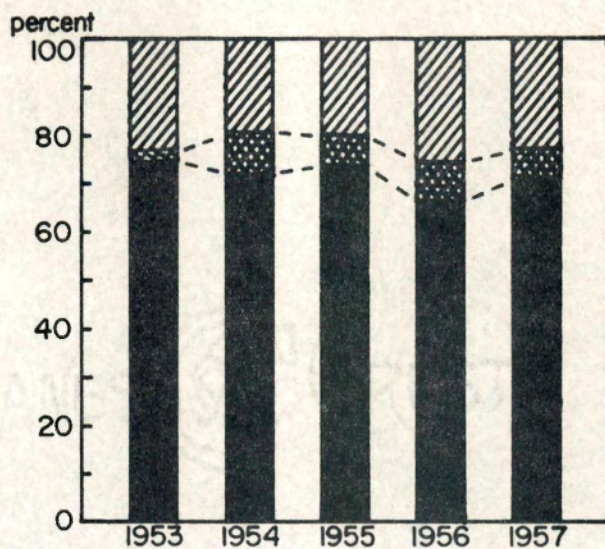
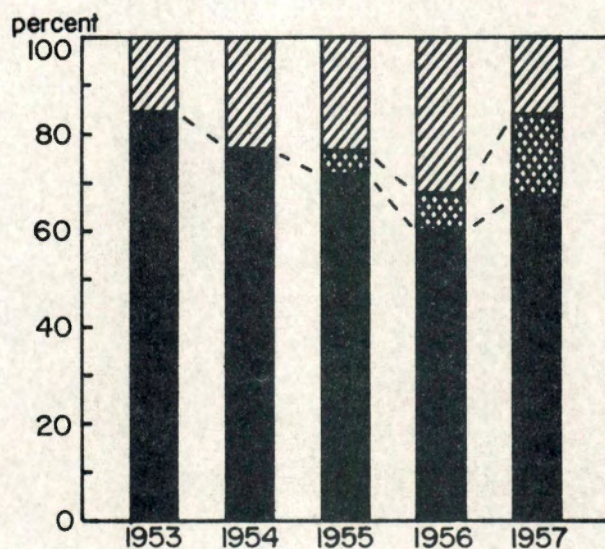


Figure 3-B. Percentage distribution of total liabilities and net worth, selected local farmers co-operatives, Tennessee, 1953 through 1957.

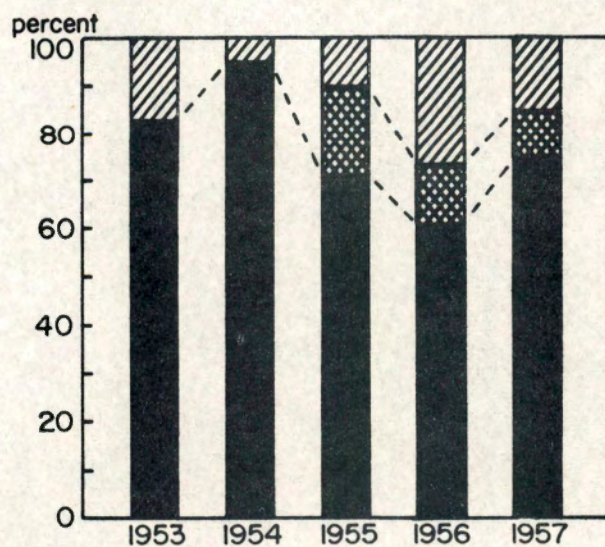
GROUP C
Organization C-1



Organization C-2



Organization C-3



LEGEND:

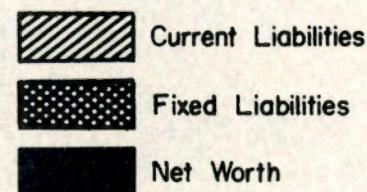


Figure 3-C. Percentage distribution of total liabilities and net worth, selected local farmers cooperatives, Tennessee, 1953 through 1957.

cent of the total capital used by this organization. The most important item of current liabilities was accounts payable except for the year 1955, when short-term notes payable equalled 32.1 per cent of total capital and accounts payable were only 4.2 per cent. In 1957 accounts payable made up 61.4 per cent of the total capital used. The second most important item of current liabilities was notes payable (short-term). Other items listed as current liabilities were of minor importance. It is obvious that the current debt situation has gotten out of hand and steps should be taken by management to improve this situation as soon as possible.

No fixed liabilities (long-term notes payable) are shown in the financial records of organization A-1 during the period under observation. If at all possible, the management of this organization should use more long-term liabilities as a source of capital to alleviate some of the current debt pressure.

Organization A-2 appeared to be in a somewhat better position to meet current debts (Table XXXVIII, group A). However, current liabilities increased from 22.7 per cent of total capital in 1953 to 51.9 in 1956, then declined to 48.8 per cent in 1957. Accounts payable increased from 7.3 per cent of total capital to 45.5 per cent during the five-year period studied and was the most important component of current liabilities. Short-term notes payable were relatively important for the first three years of observation, but none were shown for the remaining years. The financial records of this organization did not indicate any fixed liabilities for the period under observation.

From the standpoint of liabilities, organization A-3 showed an apparent improvement in financial condition during the period under

observation. In 1957 the current liabilities were 20.4 per cent of total liabilities, while fixed liabilities in the form of long-term notes payable amounted to 22.6 per cent (Table XXXVIII).

Liabilities, group B. The second group of organizations studied, in general, used a much smaller proportion of total capital supplied by outside sources (liabilities).

Liabilities, group C. Organization C-1 had a greater proportion of liabilities in the form of notes payable than in any other form during the period of observation (Table XXXVIII). In 1953 short-term notes payable equalled 11.1 per cent of total capital, and proportion remained very much the same during the five-year period. Total current liabilities remained at approximately 20 per cent of total capital during this period. Long-term notes were relatively important after 1953, averaging approximately 7 per cent for the last four years of the period studied. Total liabilities increased from 24.9 per cent of total capital to 28.6 per cent during this same period. Organization C-2 showed a better balance of the various components of total liabilities for the last three years under observation than it did for the first two years. In 1957 accounts payable, short-term notes payable, and long-term notes payable were the most important liabilities, with the percentages in relation to total capital being 5.0, 8.9, and 17.4 per cent, respectively (Table XXXVIII, group C). Organization C-3 showed trends similar to those of organization C-2.

Net worth, group A. The financial records of organization A-1 reflected a poor financial condition for the entire period under

observation. The trend indicated an almost constant deterioration. The net worth fluctuated from 38.7 per cent of total capital in 1953 to 13.1 per cent in 1957. The outstanding preferred stock, which was the most important component of total capital for the entire period under observation in 1957 amounted to 116.9 per cent of total capital. This high figure was due to a current and prior year loss of over 100 per cent of total capital (Table XXXVIII, group A).

Organization A-2 showed a steady decrease in net worth from approximately 78 per cent to 51 per cent of total capital during the period studied. As in most all cooperative organizations, the outstanding preferred stock was the most important item of net worth, amounting in 1957 to 40.2 per cent of total capital used (Table XXXVIII, group A). A current loss was shown for three of the years studied, the loss being 19.0 per cent of total capital in 1957.

Organization A-3 showed a slight decline in net worth from 1956 to 1957. Outstanding preferred stock remained relatively stable in relation to total capital during the period under observation.

Net worth, group B. Organization B-1 showed an increase in net worth from 49.2 per cent of total capital in 1953 to 76.3 per cent in 1957 (Table XXXVIII, group B). The current financial records indicate a relatively sound financial condition for this organization. However, judging from the relatively small amount of total capital used, it seems logical that a better service could be rendered to patrons if available capital sources could be expanded. Outstanding preferred stock, which is a very important source of capital for cooperatives, decreased

from 34.1 per cent of total capital to 23.1 per cent for the five-year period studied.

Organizations B-2 and B-3 were comparatively large and showed apparent financial strength throughout the period of observation.

Net worth, group C. Organization C-1 had a decrease in net worth from 75.1 per cent of total capital to 71.4 per cent during the period studied. The most important items of net worth were outstanding preferred stock and allocated reserves. However, in relation to total capital the outstanding preferred stock decreased from 63.7 per cent in 1953 to 41.3 per cent in 1957. Since the total almost doubled during this period, this means that a relatively small amount of additional preferred stock was issued. Organizations C-2 and C-3 showed decreases in the proportions of net worth to total capital over the five-year period. This was due to a shift to long-term liabilities as an added source of capital as well as a substantial increase in total capital. Both organizations made use of long-term credit as a source of capital during the last three years observed in this study.

Relative Solvency and Long-Term Financial Condition as Reflected in Balance Sheets

Relative solvency of working capital position is reflected by the relationship of current assets to current liabilities, while the long-term financial condition is reflected by the relationship of net worth to total liabilities, which measures debt pressure on owners.²

²The relationship of net worth to total capital (total net worth plus total capital) may also be used for this purpose.

In general, as shown in Tables XXXVII and XXXVIII and in Figures 2 and 3, organization A-1 allowed its current financial structure to deteriorate gradually during the period of observation. In 1957, the last year of the five-year period studied, the ratio of current assets to current liabilities was 0.66:1 and indicated an extremely low current solvency or working capital position (Table XXXVI). The long-term financial strength, as indicated by the relationship between net worth and total liabilities, deteriorated consistently during this period. Presently, creditors are almost in complete control of the organization as indicated by a net worth ratio of 0.15:1.

Organization A-2 had more current liabilities than current assets during the first three years observed, then showed some improvement in 1956 and 1957. However, the ratio of current assets to current liabilities still was only 1.04:1 in 1957. Although this organization had a somewhat sounder current financial condition than did organization A-1, both were far below the desirable standard adopted for this study (Table XXV). From the standpoint of long-term financial strength, organization A-2 showed a decline from 1953 to 1956, then increased slightly in 1957. The ratio of current net worth to total liabilities was 1.05:1 in 1957, the last year observed. This low ratio denotes heavy debt pressure on owners and a decreased margin of safety for creditors.

Cooperative A-3 was found to be in a somewhat better working capital position than the preceding organizations discussed. Improvement was shown in the relation between current assets and current liabilities for the five years studied. Although the current ratio of 1.69:1 for the last of

the five years studied was somewhat low, the evidence presented denotes an improvement in financial condition. In 1953 this cooperative obtained 56.8 per cent of its capital from owners. Then only 53.6 per cent was furnished by owners in 1954. An increase in net worth was noted in the next two years observed, but declined to 57.0 per cent of total capital in 1957. The ratio of net worth to total liabilities was 1.32:1 for the 1957 and final year of observation.

Cooperatives in the second group of organizations (Group B) were among the strongest of all associations analyzed in this study. Organization B-1 was relatively weak in 1953 from the standpoint of current solvency or working capital position, but showed consistent improvement in the relationship between current assets and current liabilities throughout the period studied (Tables XXXVII and XXXVIII). In 1957 the ratio of current assets to current liabilities was 2.59:1. The per cent of net worth capital increased consistently from 49.2 per cent of total capital in 1953 to 76.3 per cent in 1957 and showed a favorable relationship to total liabilities during this period. The ratio of net worth to total liabilities for this last year was a favorable 3.23:1.

Cooperative B-2 showed a relatively consistent increase in current solvency throughout the period studied. In 1957 the ratio of current assets to current liabilities was 3.19:1. In 1953 the per cent of net worth in relation to total capital was 98.3 per cent. An undivided prior year savings of 5.7 per cent and an undivided current year savings of 14.4 per cent contributed to the high percentage of net worth. For the following year, however, this organization had no prior year savings and

undivided current year savings was only 6.7 per cent of total capital. The net worth, in relation to total capital, was 83 per cent in this same year, leaving only 17 per cent in liabilities. Undivided current savings increased to 24.9 per cent of total capital in 1955, then decreased to about 12.0 per cent for the next two years. Net worth increased and decreased almost directly with undivided current savings. Undivided savings are an important source of owner capital and should be used when needed. Favorable relationships were noted between net worth and total liabilities for all years studied. The ratio of net worth to total liabilities in 1957 was 6.17:1.

Organization B-3 was found to be relatively solvent throughout the period studied. In 1957, the last year studied, the ratio of current assets to current liabilities was 3.08:1. Also, as indicated by the relationship between net worth and total liabilities, this organization indicated long-term financial strength for all years observed. The 1957 ratio of net worth to total liabilities was 2.98:1.

From the standpoint of current solvency or working capital position, organization C-1 (group C) showed fluctuating relationships between current assets and current liabilities during the period under observation. However, it remained relatively solvent at all times. In 1957, the last year studied, the ratio of current assets to current liabilities was 2.57:1. The relationship between net worth and total liabilities also showed a fluctuating trend for the five-year period. The ratio of net worth to total liabilities was 3.43 in 1957, indicating long-term financial strength.

Although cooperative C-2 showed a ratio of 3.06 in 1957, which indicates a relatively good condition in relation to current solvency, the trend showed a consistent decline from 1953 up until this time. Moreover, the relationship between net worth and total liabilities became consistently less favorable for the first four years studied, then improved in 1957. The ratio of net worth to total liabilities for this last year studied was 2.00:1, which is just below the standard adopted in this study. Evidence indicates that the degree of control by farmer owners decreased considerably during the period studied. However, this does not necessarily mean that outside sources of capital should not be used.

The last of the nine organizations analyzed (C-3) showed fluctuations throughout the period in relation to current solvency. However, the relationships were favorable for all years except for 1956, when liabilities amounted to over half as much as current assets. In 1957 the ratio of current assets to current liabilities was 3.27:1, indicating a favorable degree of solvency at the end of the period studied. The relationship between net worth and total liabilities was also favorable except for 1956. For this year net worth equalled less than twice the amount of total liabilities. In 1957 the ratio of net worth to total liabilities was 2.93:1.

TRENDS OF OPERATING STATEMENTS

Sales

An increasing volume of sales does not necessarily indicate an increase in services rendered by an organization. Whether or not the

actual volume of business has increased depends largely on the general price levels of the items sold. During the period observed in this study, the index of prices paid by farmers for all farm supplies decreased from 120 per cent in 1953 to 117 in 1956 (1947-49 = 100); then increased 5 per cent from 1956 to 1957.³ At the same time the index for fertilizer decreased from 110 in 1953 to 105 in 1956. From 1956 to 1957 the index increased 1 per cent. The prices paid by farmers for feed decreased 8 per cent from 1953 to 1954, but showed very little change for the remainder of the period. Therefore, caution should be observed in drawing conclusions from the relative changes in sales of cooperatives studied, particularly for the last two years under study.

Group A. The total sales of organization A-1 decreased from \$135,537 to \$75,667 during the period of observation. Organization A-2 showed an increase of approximately \$30,000 from 1953 to 1955, but had a decrease of approximately \$20,000 by 1957. Considering the changes in the general price level for farm supplies during this period, this organization has almost reached a plateau and remained there. Organization A-3 had alternating periods of increasing and decreasing sales. As shown in Table XXXIX, group A, the total sales amounted to \$292,381 in 1957, which without considering price changes amounted to an increase of approximately \$27,000 over 1953.

Group B. It was noted that only one organization in group B (B-3) showed a consistent increase in total sales from 1953 to 1957. Both

³U. S. Department of Agriculture, The Farm Cost Situation, ARS 43-75 (FCS-24) (Washington: Government Printing Office, May 1958), p. 2.

TABLE XXXIX

TRENDS OF OPERATING STATEMENTS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

Item	Per cent of sales				
	1953	1954	1955	1956	1957
GROUP A					
<u>Organization A-1:</u>					
Sales	100.0	100.0	100.0	100.0	100.0
Less cost of goods	98.2	88.1	92.5	88.5	90.8
Gross margin on sales	1.8	11.9	7.5	11.5	9.2
Service income	0.1	-	0.9	a	a
Total operating margin	1.9	11.9	8.4	11.5	9.2
Operating expenses	11.0	9.5	14.0	14.1	22.0
Operating savings (loss) ^b	(9.1)	2.4	(5.6)	2.6	(12.8)
Other income	1.1	0.8	3.2	1.9	3.2
Total savings (loss)					
for period	(8.0)	(3.2)	(2.4)	(0.7)	(9.5)
Less dividend paid on stock	-	-	-	-	-
Net savings (loss)	(8.0)	(3.2)	(2.4)	(0.7)	(9.5)
Total Sales	\$135,537	\$104,664	\$75,367	\$92,313	\$75,667
<u>Organization A-2:</u>					
Sales	100.0	100.0	100.0	100.0	100.0
Less cost of goods	97.3	90.3	94.9	93.0	90.6
Gross margin on sales	2.7	9.7	5.1	7.0	9.4
Service income	1.0	1.9	0.3	0.1	0.1
Total operating margin	3.7	11.6	5.4	7.1	9.5
Operating expenses	11.3	11.8	11.6	12.9	10.8
Operating savings (loss)	7.6	0.2	6.2	(5.8)	1.3
Other income	1.3	1.6	4.3	0.1	3.3
Total savings (loss)					
for period	6.3	1.4	1.9	(5.7)	2.0
Less dividend paid on stock	-	0.3	-	-	0.4
Net savings (loss)	6.3	1.1	1.9	(5.7)	1.6
Total Sales	\$113,590	\$116,913	\$143,401	\$128,605	\$123,445

TABLE XXXIX (CONTINUED)

TRENDS OF OPERATING STATEMENTS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

Item	Per cent of sales				
	1953	1954	1955	1956	1957
<u>Organization A-3:</u>					
Sales	100.0	100.0	100.0	100.0	100.0
Less cost of goods	89.8	91.0	88.6	88.5	89.2
Gross margin on sales	10.2	9.0	11.4	11.5	10.8
Service income	1.9	3.4	2.7	2.1	2.5
Total operating margin	12.1	12.4	14.1	13.6	13.3
Operating expenses	11.7	13.1	12.2	12.4	12.8
Operating savings (loss)	0.4	(0.7)	1.9	1.2	0.5
Other income	1.7	1.2	2.4	2.1	2.8
Total savings (loss) for period	2.1	0.5	4.3	3.3	3.3
Less dividend paid on stock	-	0.5	1.0	1.1	1.2
Net savings (loss)	2.1	0.0	3.3	2.2	2.1
Total Sales	\$265,008	\$235,525	\$262,048	\$251,046	\$292,381
GROUP B					
<u>Organization B-1:</u>					
Sales	100.0	100.0	100.0	100.0	100.0
Less cost of goods	86.9	90.9	87.4	86.3	83.9
Gross margin on sales	13.1	9.1	12.6	13.7	16.1
Service income	a	a	a	0.3	0.1
Total operating margin	13.1	9.1	12.6	14.0	16.2
Operating expenses	11.6	11.3	10.0	10.3	9.7
Operating savings (loss)	1.5	(2.2)	2.6	3.7	6.5
Other income	0.9	0.6	4.0	2.2	2.9
Total savings (loss) for period	2.4	(1.6)	6.6	5.9	9.4
Less dividend paid on stock	0.5	0.5	0.3	0.4	0.4
Net savings (loss)	1.9	(2.1)	6.3	5.5	9.0
Total Sales	\$76,508	\$78,092	\$97,589	\$95,091	\$113,035

TABLE XXXIX (CONTINUED)

TRENDS OF OPERATING STATEMENTS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

Item	Per cent of sales				
	1953	1954	1955	1956	1957
<u>Organization B-2:</u>					
Sales	100.0	100.0	100.0	100.0	100.0
Less cost of goods	92.2	94.1	92.2	91.7	90.7
Gross margin on sales	7.8	5.9	7.8	8.3	9.3
Service income	0.2	-	-	-	a
Total operating margin	8.0	5.9	7.8	8.3	9.3
Operating expenses	6.2	5.5	6.0	6.5	8.3
Operating savings (loss)	1.8	0.4	1.8	1.8	1.0
Other income	1.7	1.1	6.2	3.4	5.1
Total savings (loss) for period	3.5	1.5	8.0	5.2	6.1
Less dividend paid on stock	0.4	-	0.6	0.7	0.9
Net savings (loss)	3.1	1.5	7.4	4.5	5.2
Total Sales	\$212,394	\$243,623	\$247,566	\$239,176	\$248,020
<u>Organization B-3:</u>					
Sales	100.0	100.0	100.0	100.0	100.0
Less cost of goods	89.7	87.1	88.1	86.9	85.1
Gross margin on sales	10.3	12.9	11.9	13.1	14.9
Service income	0.6	0.6	0.8	2.9	0.9
Total operating margin	10.9	13.5	12.7	16.0	15.8
Operating expenses	7.7	8.2	10.2	10.5	10.7
Operating savings (loss)	3.2	5.3	2.5	5.5	5.1
Other income	1.7	1.5	4.0	2.4	2.7
Total savings (loss) for period	4.9	6.8	6.5	7.9	7.8
Less dividend paid on stock	0.9	0.8	0.7	0.7	0.6
Net savings (loss)	4.0	6.0	5.8	7.2	7.2
Total Sales	\$572,069	\$675,109	\$750,951	\$876,078	\$1,130,018

TABLE XXXIX (CONTINUED)

TRENDS OF OPERATING STATEMENTS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

Item	Per cent of sales				
	1953	1954	1955	1956	1957
GROUP C					
<u>Organization C-1:</u>					
Sales	100.0	100.0	100.0	100.0	100.0
Less cost of goods	92.2	86.5	91.2	86.2	88.4
Gross margin on sales	7.8	13.5	8.8	13.8	11.6
Service income	0.2	0.1	2.5	0.1	0.2
Total operating margin	8.0	13.6	11.3	13.9	11.8
Operating expenses	9.7	10.3	10.1	12.9	13.8
Operating savings (loss)	1.7	3.3	1.2	1.0	(2.0)
Other income	1.9	1.3	3.2	3.9	4.7
Total savings (loss)					
for period	(0.2)	4.6	4.4	4.9	2.7
Less dividend paid on stock	0.9	1.0	0.9	1.0	1.0
Net savings (loss)	(0.7)	3.6	3.5	3.9	1.7
Total Sales	\$274,670	\$255,389	\$295,451	\$286,740	\$298,558
<u>Organization C-2:</u>					
Sales	100.0	100.0	100.0	100.0	100.0
Less cost of goods	91.8	88.4	87.0	83.2	84.0
Gross margin on sales	8.2	11.6	13.0	16.8	16.0
Service income	-	-	2.9	3.1	2.4
Total operating margin	8.2	11.6	15.9	19.9	18.4
Operating expenses	7.3	8.9	12.6	18.6	18.7
Operating savings (loss)	0.9	2.7	3.3	1.3	(0.3)
Other income	1.8	0.9	2.9	1.9	2.8
Total savings (loss)					
for period	2.7	3.6	6.2	3.2	2.5
Less dividend paid on stock	0.5	0.6	0.8	0.8	0.8
Net savings (loss)	2.2	3.0	5.4	2.4	1.7
Total Sales	\$195,354	\$253,518	\$273,005	\$359,198	\$377,058

TABLE XXXIX (CONCLUDED)

TRENDS OF OPERATING STATEMENTS, SELECTED LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1953 THROUGH 1957

Item	Per cent of sales				
	1953	1954	1955	1956	1957
<u>Organization C-3:</u>					
Sales	100.0	100.0	100.0	100.0	100.0
Less cost of goods	87.0	87.7	88.1	85.7	87.3
Gross margin on sales	13.0	12.3	11.9	14.3	12.7
Service income	0.4	0.4	2.2	0.7	0.9
Total operating margin	13.4	12.7	14.1	15.0	13.6
Operating expenses	9.4	8.3	9.6	11.1	11.9
Operating savings (loss)	4.0	4.4	4.5	3.9	1.7
Other income	1.5	1.7	4.1	3.3	4.2
Total savings (loss) for period	5.5	6.1	8.6	7.2	5.9
Less dividend paid on stock	-	0.3	0.4	0.5	0.6
Net savings (loss)	5.5	5.8	8.2	6.7	5.3
Total Sales	\$321,720	\$389,530	\$369,431	\$371,919	\$385,121

^aReporting less than 0.1 per cent.^bParentheses denote loss.

organizations B-1 and B-2 showed a decrease in total sales in 1956, then increased again in 1957. However, with due consideration to the rise in the general price level for this year, no apparent change was noted in the actual amount of supplies sold by organization B-2 (Table XXXIX, group B).

Group C. Organization C-1 showed an alternating increase and decrease in sales throughout the period studied. An increase of approximately \$12,000 was noted from 1956 to 1957. However, considering the rise in prices during this period, there was very little change in physical volume. Organization C-2 showed a total increase in sales of approximately \$182,000. Considering the changes in the general price level for farm supplies, organization C-3 reached its peak in 1954 at \$389,530 total sales, then decreased to \$369,431 in 1955 and remained on this plateau for the last two years observed in this study.

Gross Margin

As indicated in Table XXXIX, group A, organizations A-1 and A-2 showed considerable variation in gross margins during the period observed in this study, but organization A-3 had a steady gross margin of approximately 10 per cent of sales. In general, all organizations in groups B and C had relatively high gross margins for the period under observation.

Operating Expenses

Operating expenses are one of the most important components of the operating statement. The success or failure of a cooperative is often determined by the efficiency of management in handling these expenses.

Group A. Organization A-1 showed an increase in operating expenses from 11.0 per cent of sales in 1953 to 22.0 per cent in 1957

(Table XXXIX, group A). It is obvious that these expenses have gotten out of control; therefore, the management of this cooperative should examine every item in an effort to determine possible means of relieving the critical situation. Organization A-2 appeared to have operating expenses under control, but lacked a sufficient gross margin on sales to result in a desirable amount of operating savings for most of the period studied. Organization A-3 showed a slight increase in operating expenses from 11.7 per cent of sales to 12.8 per cent from 1953 to 1957.

Group B. Organization B-1 had a decrease in operating expenses from 11.6 per cent of sales to 9.7 per cent for the period under observation. This organization had some operating savings for every year except 1954, in which an operating loss of 2.2 per cent of sales was indicated (Table XXXIX, group B). Organizations B-2 and B-3 appeared to have kept operating expenses under control during the period studied.

Group C. Cooperative C-1 had an increase in operating expenses of 4.1 per cent during the period under observation. In 1957 operating expenses equalled 13.8 per cent of sales and resulted in an operating loss of 2 per cent. As was the case in organization A-1, operating expenses of organization C-2 also appeared to be getting out of control. In 1957 these expenses amounted to 18.7 per cent of total sales. For the same year this organization had an operating loss of 0.3 per cent of total sales. Organization C-3 appeared to have operating expenses under control. Operating expenses did increase consistently for all but one of the years studied; however, the increase was relatively small.

Net Savings

Group A. Organization A-1 had a net loss during most of the period under observation (Table XXXIX, group A). No dividends were paid out by this organization during the five-year period. Cooperative A-2 paid out a small percentage of dividends in 1953 and 1957. This organization showed some net savings for every year except 1956, when a loss of 5.7 per cent was reported. Organization A-3 showed a net savings for all years except 1954, in which year it broke even. A small percentage was paid out in the form of dividends from 1954 through 1957.

Group B. In general, the organizations analyzed in this group showed an increase in net savings during the period studied. One organization (B-1), however, did show a net loss of 2.1 per cent of sales in 1954. In most instances efficient financial management is reflected in the operating statements of these three organizations.

Group C. Both organizations C-1 and C-2 showed first an increase, then a decrease in net savings during the period under observation. Although the net savings for these organizations was low in relation to total sales during most of the five-year period, a loss was indicated for only one year. Organization C-1 had a loss of 0.7 per cent of sales in 1953 (Table XXXIX, group A). Organization C-3 indicated a net savings of not less than 5 per cent of sales for all five years studied. Dividends of approximately 0.5 per cent were paid on stock for the last four years under observation.

CHAPTER V

FACTORS PERTAINING TO RELATIVE EFFICIENCY AND ABILITY OF MANAGERS OF 55 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Importance of Qualified Managers

In a survey of farmers' selling and purchasing cooperatives in Tennessee, 1938, it was found that over 22 per cent of the associations were reported out of business largely because of poor management.¹ Often managers are hired who have had very little, or no, previous experience or training. It is the policy of many cooperative directors to hire managers on the basis of salary rather than on qualifications in their desire to keep operating expenses as low as possible, but those responsible for hiring managers should exercise extreme caution in attempting to cut these expenses in the area of salaries. It has long been recognized by financial authorities that management is the backbone of a business; therefore, it seems logical that by investing a little extra capital in salaries for qualified managers, local cooperatives could increase their future returns.

Tenure of Managers

According to information reported by managers of 55 local farmers cooperatives in Tennessee at the close of the 1957 fiscal year, over half of the managers had been employed by the same cooperative for five or more

¹Charles E. Allred and B. D. Raskopf, Survey of Farmers' Selling and Purchasing Cooperatives in Tennessee, 1938, Monograph 113, Tennessee Agricultural Experiment Station, September, 1940.

years (Table XXXX). Twenty-four had been employed as managers for a period of five to ten years, while six had been serving the same cooperative for over ten years. Eight of the 55 managers had been employed by their respective organizations for less than one year, and eleven had served as manager from one to three years. The remaining six organizations have had the same manager for three to five years. Only five of the 55 had served as assistant managers before becoming managers of their organizations. Also six of the managers had served their organizations in other capacities, such as bookkeeper, general employee, or as trainee.

Previous Work Experience

In many instances men having no formal training in the area of cooperation have been hired as managers of local farmers cooperatives. Since cooperatives are operated differently from most businesses, this often creates problems that affect the operational efficiency of an organization. However, managers have often had previous experience with other businesses which contributes to their managerial ability.

Data in Table XXXXI show the number of managers that have had previous business experience, including experience with other cooperatives, and the average number of years experience with each business. Some types of experience that technically could not be classified as business experience were entered as a source of general information. Out of the 55 managers reporting 35 indicated previous experience other than farming. Six of them had been previously employed by a similar supply cooperative and two had worked for other cooperatives. The largest number

TABLE XXXX

NUMBER OF YEARS PRESENT MANAGERS HAVE BEEN EMPLOYED AS MANAGER,
 ASSISTANT MANAGER, AND OTHER, 55 LOCAL FARMERS
 COOPERATIVES, TENNESSEE, 1957

Years employed	Present managers	Managers previously employed as	
		Assistant manager	Other
	Number	Number	Number
Under 1	8	-	1
1 - 3	11	2	2
3 - 5	6	2	1
5 - 10	24	1	2
10 and over	6	-	-
Total	55	5	6

TABLE XXXXI

PREVIOUS WORK EXPERIENCE OF MANAGERS, 55 LOCAL FARMERS COOPERATIVES,
TENNESSEE, 1957

Type of nonfarm experience	Number of managers		Average years
	Major experience	Plus other experience ^a	
Supply cooperatives	6	-	3.7 ^b
Other cooperatives	2	-	6.5
Farm equipment, supplies, and service operations	5	-	5.2 ^c
Merchandising and retailing	9	-	5.6
Manufacturing	1	-	3.0
Clerical and kindred work	3	1	3.7
Trucking	2	-	8.5
Insurance	1	-	2.0
Agricultural field man	1	-	3.0
Automobile supply and repair	2	1	4.0
Teaching	1	1	4.0
Managed college cafeteria	1	-	4.0
Live produce buyer	1	-	5.0
TOTAL AND AVERAGE	35	3	4.5 ^d
NUMBER WITHOUT EXPERIENCE	20	-	-
TOTAL NUMBER OF MANAGERS	55	-	-
Farming	55		
Now own and/or operate a farm	32		

^aOther experience includes grocery clerk, dairy field man, and contractor.

^bAverage of four, two not reporting years of experience.

^cAverage of four, one not reporting years of experience.

^dAverage of the 32 reporting years of experience.

of managers had previous experience in the two areas of merchandising and retailing and of farm equipment, supplies, and services (Table XXXXI).

All of the 55 managers indicated previous farming experience, while currently 32 were farm owners or were actively engaged in farming. Previous work experience of managers, other than farming, averaged four and one-half years.

Selected Relationships Affecting Operational Efficiency

Relationship of Managers' Earnings to Sales

The salary ranges and commissions received by managers of local farmers cooperatives in relation to volume of sales are shown in Table XXXXII. In general, as the volume of sales increased the earnings of managers increased. Of the ten organizations with sales of less than \$100,000, four managers received straight salaries of less than \$2,500 while two received a salary in this range plus an average of \$875 in commissions. The remaining four managers in this sales group received salaries ranging from \$3,500 to \$4,499, two of whom received an average commission of \$1,175.

Only one of the seven managers in the largest sales group received a salary of less than \$2,500. However, he also received a commission of \$5,100. One manager in this group received a salary ranging from \$3,500 to \$4,499 and one received a salary in this range plus a commission amounting to \$2,500. Three others received a salary between \$4,500 to \$5,499, with two of them also receiving commissions averaging \$2,694. The last of the seven managers in this sales group received a salary within

TABLE XXXXII

RELATIONSHIP OF MANAGERS' EARNINGS TO VOLUME OF SALES, 55 LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Salaries and commissions					
	Under \$2,500			\$2,500-\$3,499		
	Without commission	Plus commission	Average commission	Without commission	Plus commission	Average commission
Under \$100,000	4	2	\$ 875	-	-	\$ -
100,000-199,999	-	5	775	5	2	593
200,000-299,999	1	-	-	2	-	-
300,000-399,999	-	-	-	1	1	3,045
400,000 and over	-	1	5,100	-	-	-
\$3,500-\$4,499				\$4,500-\$5,499		
Under \$100,000	2	2	\$1,175	-	-	\$ -
100,000-199,999	4	3	669	-	-	-
200,000-299,999	2	2	550	-	-	-
300,000-399,999	1	4	1,356	4	-	-
400,000 and over	1	1	2,500	1	2	2,694
\$5,500-\$6,494						
Under \$100,000	-	-	\$ -			
100,000-199,999	-	-	-			
200,000-299,999	1	-	-			
300,000-399,999	-	-	-			
400,000 and over	-	1	250			

the range of \$5,500 to \$6,499 plus a bonus of \$250.

Relationships of Managers' Earnings to Selected Factors

Managers' earnings, including salaries plus commissions, were analyzed in relation to sales, gross margins, operating expenses, net worth, and net savings. As shown in Table XXXXIII, about half of the managers received salaries in the range of \$3,500 to \$4,499. Twelve of these received commissions averaging \$1,116. In general, as earnings increased the average dollar amount of each of the selected factors increased consistently except for the managers in the \$5,500 to \$6,499 salary range. There were two managers receiving salaries in this range. One received a salary plus a \$250 commission. The average sales for these two organizations was \$452,082, while the net savings averaged \$12,362. However, one of these organizations showed dollar amounts almost three times greater than the other in all areas except operating expenses. In this area the amount was less than twice as great. This means that one of these organizations was operating more efficiently than the other one. As salaries increased from under \$2,500 to the \$4,500-\$5,499 range, the average sales increased from \$138,910 to \$476,059. At the same time net savings increased from an average of \$8,877 in the lower range to \$25,528 in the higher. The information shown in Table XXXXIII clearly indicates a close relationship of salaries to operational efficiency.

Relationship of Managers' Education to Sales

When the 55 local cooperatives were divided into groups according to volume of sales, not too much consistency was noticed in relation to level of education. The group of organizations with sales of less than

TABLE XXXXIII

RELATIONSHIP OF MANAGERS' EARNINGS TO SELECTED FACTORS AFFECTING OPERATIONAL EFFICIENCY,
55 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Salary range	Salaries and commissions					Average	Operating expenses	Gross margin	Sales	Net worth	Net savings
	Salary without commission	Salary plus commission	Number	Average commission	Number						
Under \$2500	5	8		\$1,339	\$138,910	\$17,123	\$12,622	\$ 45,313	\$ 8,877		
2500-3499	8	3		1,410	202,075	21,968	19,219	58,633	10,146		
3500-4499	10	12		1,116	241,857	30,237	26,778	72,188	12,612		
4500-5499	5	2		2,694	476,059	61,910	52,995	158,097	25,528		
5500-6499	1	1		250	452,082	47,144	55,652	221,381	12,362		
All organizations	29	26		1,485	345,909	40,826	37,086	122,302	16,324		

\$100,000 had managers with all levels of education except graduate work (Table XXXXIV). It was noted, however, that the largest sales group did not have any managers with less than a high school education.

Relationship of Managers' Education to Selected Factors

Education alone is not necessarily an indication of managerial efficiency or ability, nor is experience. However, when education is supplemented by experience, in general, higher efficiency often results, as indicated in Table XXXXV. There are exceptions, of course. For the 55 organizations reporting, six managers had only an eighth grade education. The volume of sales for these organizations ranged from \$35,073 to \$322,405, or an average of \$167,393. Net savings ranged from \$1,465 to \$28,147 and averaged \$12,408. The average age of these managers was fifty and seven-tenths years, while the average tenure was six and six-tenths years. For the organizations having managers with nine to eleven years education, the average sales increased over the foregoing level of education, but the gross margins showed a decrease. This is an indication that the latter group of organizations possibly were not taking advantage of buying most of their supplies from the regional wholesale agency, which sells to all locals, usually at lower costs. Relatively few consistent differences were noted for the next two levels of education. However, when education reached the college level, increasing managerial efficiency and ability were reflected in all areas analyzed, as shown in Table XXXXV. For the organizations having managers with business school training, weaknesses were again noted, particularly in the area of gross margins. The

TABLE XXXIV

RELATIONSHIP OF EDUCATIONAL TRAINING OF MANAGERS TO VOLUME OF SALES, 55 LOCAL
FARMERS COOPERATIVES, TENNESSEE, 1957

Sales group	Level of education					Number of managers in group		
	Grades in primary and secondary schools		Years in colleges and/or universities				Business school	
			8	9-11	12			
	1-3	4	5 or more					
	Number of managers							
Under \$100,000	1	1	4	2	1	-	1	10
100,000-199,999	3	2	4	5	4	-	1	18
200,000-299,999	1	-	5	-	1	-	1	8
300,000-399,999	1	1	6	-	1	1	1	11
400,000 and over	-	-	4	2	1	-	-	7
Total	6	4	23	9	8	1	4	55

TABLE XXXIV

RELATIONSHIP OF EDUCATIONAL TRAINING OF MANAGERS TO SELECTED FACTORS AFFECTING OPERATIONAL EFFICIENCY, 55 LOCAL FARMERS COOPERATIVES, TENNESSEE, 1957

Level of education attained	Number of managers	Years tenure	Average		Gross margin	Operating expenses	Net worth	Net savings
			Range	Average				
Grades in primary and secondary schools								
8	6	3.5-9	6.6	50.7	\$167,393	\$16,337	\$64,671	\$12,408
9-11	4	3.0-12	7.6 ^a	43.2	176,564	15,194	58,136	8,630
12	23	0.5-13	4.4 ^b	39.4	272,828	29,736	90,813	13,036
Average								
Years in colleges and/or universities								
1-3	9	0.6-10	5.5 ^c	41.0	211,479	20,468	61,794	12,840
4	8	0.3-7	3.5	28.3	311,863	32,712	88,924	18,088
5 or more	1	-	6.0	63.0	385,120	45,908	154,959	20,451
Business school	4	3.0-8	6.0	36.2	204,185	24,036	56,650	9,123
All organizations	55	0.3-13	5.8 ^d	43.1	172,062	26,859	82,271	13,511

^aAverage of three, one not reporting years' tenure.

^bAverage of 22, one not reporting years' tenure.

^cAverage of six, three not reporting years' tenure.

^dAverage of the 51 reporting years' tenure.

average net savings for this group was \$9,123.

According to evidence presented, the younger managers having a higher education were doing the most efficient job.



CHAPTER VI

SUMMARY AND CONCLUSIONS

Farmers cooperatives have become increasingly more important as a source of farm supplies for Tennessee farmers. The gross value of farm supplies handled by all cooperatives in Tennessee during 1954-55 fiscal period was \$33,962,000, an increase of 12.9 per cent over the \$30,072,000 volume handled in 1953-54. The net value of these supplies increased from \$19,181,000 in 1953-54 to \$20,626,000 in 1954-55, or an increase of 7.5 per cent. During 1957, the 77 local farmers cooperatives investigated in this study handled a volume of business totaling \$19,866,924 with a net savings of \$1,012,165. The average volume and net savings per organization was \$258,012 and \$13,145 respectively. How well these farmer-owned organizations continue to serve their members depends to a great extent upon their operational structure and the relative efficiency and ability of management. The primary objectives of this study were: to describe and analyze the current financial structure and determine the relative financial condition of 77 local farmers cooperatives; to study trends of selected organizations for relationships affecting operational efficiency; and to describe and compare factors relative to managerial efficiency and ability.

The primary data were obtained from annual audit reports of the 77 cooperatives analyzed. Additional information related to the efficiency and ability of managers was obtained by means of mail questionnaires.

The capital used (total assets) in the 77 cooperatives averaged \$106,440 per organization at the close of the 1957 fiscal year. Current assets averaged \$53,297, or 50 per cent of the total capital used. Of the remaining capital used, fixed assets averaged 28 per cent, investments 14 per cent, and other assets, comprised largely of equity in the Tennessee Farmers Cooperative, 8 per cent. Fixed assets and inventory were the most important uses of capital, equalling 28 per cent and 23 per cent, respectively, of total assets. When analyzed by groups according to volume of sales, it was found that, in general, the smaller organizations used a larger percentage of capital in the form of current assets. According to evidence presented, it was found that the percentage of capital used in the form of inventories varied inversely with the volume of sales. This relationship is an indication that the organizations having the larger volume of sales were utilizing their working capital more efficiently.

Seventy-six per cent of the capital was from owner, or net worth sources, and 24 per cent was from creditors. When analyzed according to volume of sales, it was found that there was a larger degree of ownership control among the larger organizations and, in general, a better balanced financial structure. Outstanding preferred stock was found to be the most important source of capital, averaging \$35,176, or 33 per cent of the capital used by the 77 local cooperatives in 1957. Some organizations, however, showed relatively small amounts of outstanding preferred stock. These organizations could strengthen their financial position by issuing more stock to farmer patrons. The success of these and other cooperatives depends on membership support. It is possible that members need more education in the area of cooperation. More education would better inform

members of the financial problems faced by their organizations and should, therefore result in greater support from farmer patrons.

The gross margins averaged 11.9 per cent of total sales and operating expenses averaged 10.5 per cent for the 1957 fiscal year. No consistent differences were noted in these margins among the organizations with different volumes of business. This can be explained by the fact that the majority of the organizations were purchasing a major portion of their supplies from their regional wholesale agency at approximately the same per unit costs.

Salaries and labor, by far the largest expense item, averaged \$13,740 or 50.4 per cent of total operating expenses in 1957. It was found that the organizations doing a volume of business of less than \$100,000 had somewhat higher operating costs. No consistent differences were noted for the different sales group above this level.

Net savings ranged from 0.6 to 10.0 per cent and averaged 5.1 per cent. It was found that net savings increased consistently as volume of sales increased. This finding clearly indicates that smaller cooperatives should work toward a larger volume of business so that fixed costs would be spread over a larger area and result in higher net savings. Another means of increasing savings by these organizations would be to keep an adequate amount of cash on deposit with the Tennessee Farmers Cooperative to insure a 1 per cent discount on sales. Twelve organizations in the two lowest sales groups reported no advances and deposits, but all but four reported cash on hand and in banks. The average cash reported by them was approximately 12 per cent of total assets, which was considerably higher than the proportions held by the three larger sales groups.

Part of this cash could have been used more profitably in the form of advances and deposits.

The data were summarized to provide ten standard financial ratios as a basis for comparison for the 1957 fiscal year. All organizations studied indicated a relatively high degree of current solvency, except the lowest sales group which showed a median ratio of current assets to current liabilities of 1.93:1. The median ratio for all organizations studied was 3.06:1. From the long-run viewpoint the smallest sales group was again the weaker group among the 77 cooperatives studied. The median ratio of net worth to total liabilities was 1.87:1 for this group. In general, the net worth ratios indicated an increasing degree of ownership control as volume of business increased. The ratio for all organizations was 2.98:1. As a whole the cooperatives were relatively efficient in the collection of accounts as indicated by the median of 19.50 days' sales in accounts receivable. However, the high ranges among the various sales groups indicated some organizations were not enforcing very strict credit policies. This indicates the need for directors to formulate more stringent credit policies and insist that managers keep members well informed regarding the necessity for such policies.

In general, an adequate inventory turnover was maintained by the 77 cooperatives in 1957. The median turnover was 10.50 times. No consistent relationships were noted among the different sales groups.

Nine organizations were selected for trend study. According to comparative standards adopted in this study, a first group of three organizations was selected because they showed apparent weaknesses, and a second group of three was chosen because of their relatively strong

financial condition. A third group of three organizations was selected at random. It is believed by the writer that managers and directors of the 77 cooperatives analyzed in this manuscript could profitably spend some time studying trends of both weak and strong organizations. By using the information in this study as a comparative guide, directors and managers of these organizations should be able to revise and improve their financial policies wherever applicable. By re-examining their financial policies and making changes wherever possible, in all probability the overall financial condition of the relatively weak organizations could be improved.

It was found that a large number of cooperative managers had no previous training or experience in cooperative organizations. Mary, however, had previous experience in other types of employment.

With one exception, the cooperatives doing the largest volume of business and with the greatest net savings were also paying the highest salaries to managers. Moreover, up to the highest salary range sales and net savings increased consistently as salaries increased. In relation to level of education it was noted that, in general, the younger men having a higher education were managing the organizations with the strongest financial structures.

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