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Farmer Cooperatives' Financial Profile, 1997

Abstract

This study is based on a survey of the financial characteristics of U.S. farmer cooperatives at the end of their 1997 fiscal years. Useful financial information is provided to cooperative managers, directors, educators, and others interested in cooperatives' financial performance and practices. Specifically, this report analyzes the distribution of net income and losses, per-unit capital retain deductions, financial structure, composition of equity capital, and sources of borrowed capital. Financial ratio analysis is conducted to analyze the general financial condition of cooperatives. Cooperatives are classified by principal product or service, asset size, and geographical location. A comparison is also made with data from prior financial profile studies which have been conducted periodically over the past 45 years.

Key words: Cooperatives, financial structure, balance sheet, equity capital, borrowed capital, ratio analysis, net income, per-unit capital retains.

Farmer Cooperatives' Financial Profile, 1997

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Preface

This publication reports the results of the latest comprehensive financial profile study of farmer cooperatives in the United States conducted by the Rural Business-Cooperative Service (RBS) and predecessor agencies of the U. S. Department of Agriculture. It is based on a survey of the financial characteristics of farmer cooperatives at the end of their 1997 fiscal years. Previous financial profile studies have been based on data collected for the fiscal years 1954, 1962, 1970, 1976, and 1987. These studies are conducted periodically to determine the changes taking place with cooperative financial structure and to provide an in-depth look at financial performance for the survey years.

This report provides useful financial information to managers and directors, so they can compare their cooperatives' financial performance with those of others, and to educators and others interested in cooperative finance. The value of this study is based on the willingness of the cooperative community to respond to the survey. We appreciate the effort of those who responded.

This study differs from previous financial studies in several ways. Product or service classifications differ from those in the 1987 study in that there is no breakdown between local and regional cooperatives. Also, the category of diversified is not used. This study also reports data for only those cooperatives responding to the survey by completing the questionnaire or by submitting financial reports.

Special thanks to RBS staff members who assisted with the extensive and lengthy data entry process—David Chesnick, Eldon Eversull, and Beverly Rotan—and the RBS statistical staff—Charles Kraenzle, Ralph Richardson, Celestine Adams, Jacqueline Penn, and Katherine DeVille—for computer support and editing assistance.

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Highlights

Information from a survey of agricultural cooperatives' fiscal 1997 financial practices and performance is provided in this report. Information on net income distribution, financial structure, balance sheet composition, sources of borrowed funds, and financial ratios is presented by cooperative type and size. Information by geographic region is included for selected information.

General business conditions affect cooperatives as any other business organization. Hindsight reveals the importance of the difficult periods of the 1980s on cooperative financial practices. The 1987 financial study reported sharp changes in distribution of net income from earlier studies. The 1987 study was conducted after a series of difficult years and reflected adjustments made in response to operating losses. Results of the 1997 survey indicates a return to earlier trends.

The distribution of net income demonstrates the cooperative nature of these organizations. Seventy-eight percent of net income was distributed to users of cooperatives' products and services as patronage refunds in 1997. Dividends paid on net worth were only 1.7 percent of net income. Income taxes and additions to unallocated equity represented the remaining 20 percent of net income.

Federations formed by cooperatives are an important element of their structure. The 1997 net income of those surveyed showed about one-third was patronage refunds from one cooperative level to another. When investments in Banks for Cooperatives were included with other federated cooperatives, investments in other cooperatives represented about 10 percent of total assets.

Equity was equal to 40.9 percent of total assets, but equity levels varied from less than 30 percent to more than 60 percent by cooperative type. Borrowed capital was 29.6 percent compared with total assets. Borrowed capital varied by cooperative size from 11.9 percent of assets for cooperatives with less than $1 million in assets to 33.8 percent for cooperatives with more than $1 billion in assets. Banks for Cooperatives provided 53.9 of the surveyed cooperatives' borrowed funds. Commercial banks, bonds and notes, and other credit sources were used about equally for the remainder of borrowed funds. The larger cooperatives use a wider range of borrowing sources than other cooperatives. Bonds and notes, commercial banks, Banks for Cooperatives, and other sources were relatively equal credit sources for the largest cooperatives.

Farmer Cooperatives' Financial Profile, 1997

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Agricultural Economists

Introduction

This report presents the results of a comprehensive financial profile study of farmer cooperatives in the United States conducted by the Rural Business-Cooperative Service (RBS) of the United States Department of Agriculture. Financial data was collected from farmer cooperatives for their 1997 fiscal year. This report seeks to help managers and boards of directors assess their cooperatives' financial performance compared with similar types and sizes of cooperatives. The report provides researchers, educators, and others with information on how cooperatives are financed and how financial activities have changed over time. Similar studies have been conducted in the past, the most recent based on 1987 information. When comparable, information from prior studies will be presented to show changes.

This report covers (1) distribution of net income, (2) distribution of net losses, (3) balance sheet composition, (4) sources of equity and borrowed capital, and (5) selected financial ratios. Where appropriate, this information is presented based on principal product or service of the cooperative, asset size, and/or geographic region.

Relationship to Other Studies

Previous financial profile studies of U.S. farmer cooperatives were based on data for fiscal years 1954, 1962,1970,1976, and 1987 [1-51.1 USDA's RBS, also prepares annual financial profiles of the 100 largest farmer cooperatives. RBS also collects and publishes yearly statistics on the number, membership, and business volume of farmer cooperatives, including net income and balance sheet information and selected financial ratios. Detailed reports analyzing financial data on grain marketing and farm supply cooperatives are also published periodically.

This report updates previous financial profile studies, but differs from them in several important ways. Although previous studies collected data in a similar fashion, for this report no estimates were made for nonrespondents. Respondents for the 1997 study were estimated to represent more than 80 percent of total assets and total business volume of all farmer cooperatives.

Basic net income and balance sheet data presented are similar to those published in RBS' 1997 annual farmer cooperative statistics [6]. Differences occur because this study is limited to actual cooperatives reporting (1,936 cooperatives versus 3,791 accounted for in the annual statistics report). Cooperatives classified in the tobacco, wool, and storage categories were excluded from the study because of the small number of cooperatives reporting. This brought down the number of cooperatives represented in this report to 1,929.

Also, prior studies compared financial performance by Farm Credit District, but because of substantial restructuring in the Farm Credit System since 1988, this type of comparison for 1997 data is not meaning ful. Also, previous studies involved a different categorization of cooperatives based on their principal product or service. Because of the changing financial profile of cooperatives, different asset size categories were used and the ranges for ratio analysis were changed.

1 Numbers in brackets refer to publications cited in References section

Cooperative Classifications

RBS classifies cooperatives in 22 categories according to their principal product or service. Eighteen categories were used for this study, with some classifications combined to correspond with the treatment in the annual farmer cooperative statistics report. Artificial insemination, transportation, and rice drying cooperatives were placed in "Other Services" and fishery and dry beans and peas cooperatives in "Miscellaneous Marketing." In addition, selected analysis is made of larger cooperatives, particularly in the grain marketing, farm supply, and dairy categories, to differentiate the effect size has on certain financial relationships.

Principal Product or Service

Fourteen classifications were used to group cooperatives by principal product or service. Each includes cooperatives primarily involved in marketing and/or processing the designated commodity(s) or, in the case of service cooperatives, identifies the enterprise which generates the majority of business volume:

Cotton (cotton & cotton products)
Cotton ginning
Dairy
Fruit and vegetable
Grain and oilseed
Livestock
Nuts
Poultry (chicken, eggs, turkeys, ratites, etc.)
Dry beans and peas (dry edible beans and peas)
Rice
Sugar (sugar beets, sugar cane, honey, and related products)
Miscellaneous marketing (products not otherwise classified including aquatic)
Farm supply (distribution of fertilizer, fuel, seed, feed, and plant protection materials)
Other services (storage, transportation, drying, artificial insemination, or similar services)

Total Assets Size Categories

Eight "total assets" size categories are used in this study. The breakdown is shown in the tables reporting financial characteristics by asset size. Cooperatives with total assets of less than $1million was the smallest size category used, while cooperatives with total assets of $1 billion or more was the largest. This compares to the 1987 study in which the smallest category included cooperatives with total assets of less than $500,000 and the largest asset size category was $500 million or more. The increase in size categories was necessary to get a representative group of cooperatives in each category.

Geographical Regions

Ten regions are used in this report to analyze geo graphical differences in financial performance. The regions are referred to as "farm production regions" and were in general use by agencies of the U.S. Department of Agriculture (USDA) such as the

Economic Research Service (ERS) and the National Agricultural Statistics Service WASS) in 1997. The regions and the States in each are listed below. The map in figure 1 also depicts the regions.

Northeast	ME, NH, VT, NY, CT, MA, RI, NJ, MD, DE, PA
Appalachia	VA, WV, NC, KY, TN
Southeast	SC, GA, AL, FL
Lake States	MI, WI, MN
Corn Belt	IA, IL, IN, OH, MO
Delta States	AR, LA, MS
Northern Plains	ND, SD, NE, KS
Southern Plains	OK, TX
Mountain	MT, ID, WY, UT, NV, CO, NM, AZ
Pacific	WA, OR, CA, AK, HI

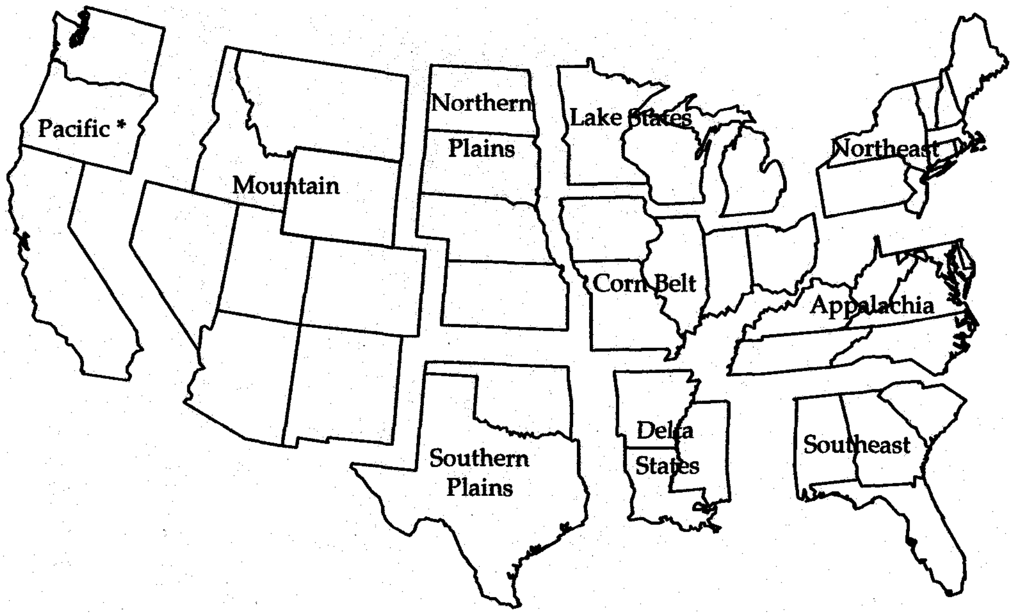
Methodology

The 1997 RBS annual statistical survey of farmer cooperatives was used to collect detailed financial information from selected cooperatives. Recipients were sent questionnaires about financial data on distribution of net income or loss, patronage refunds received from other cooperatives, sources of borrowed funds, per-unit capital retain deductions, and individual balance sheet items. As an alternative or supplement to completing the financial profile section of the questionnaire, cooperatives were asked to submit annual or audit reports.

Long-term Trends

Before presenting a detailed analysis of 1997 data, this section presents selected trends of agricultural cooperative financial structures and practices based on information collected for this study and for previous survey years (1954, 1962, 1970, 1976, and 1987).

Figure I-US. Farm Productlon Regions



* Includes Alaska and Hawaii

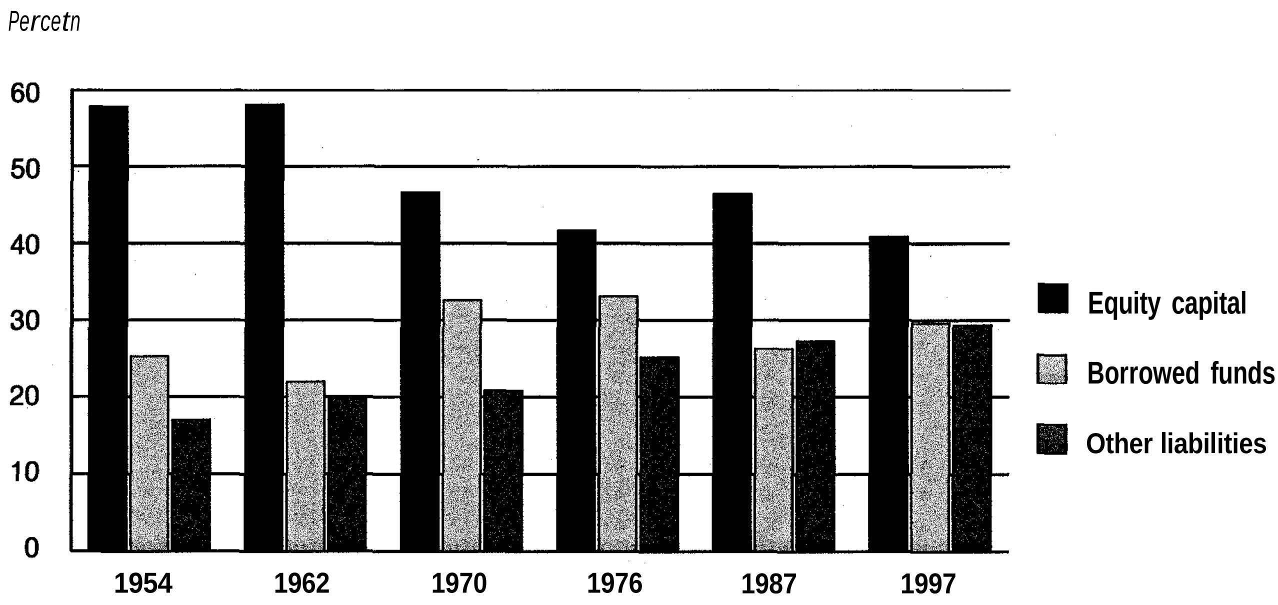
Financial Structure

All organizations need financial resources to operate. How they are assembled gives a business its financial structure. Financial resources in a cooperative consist of (1) equity capital which is derived primarily from net income, (2) funds borrowed from specialized and other lenders, and (3) obligations due suppliers and others. Equity levels are influenced by decisions of the board of directors on distribution of net income, equity redemption, and the amount of assets financed by debt versus equity capital. The amount of obligations due suppliers is influenced by the type of business conducted. For example, marketing cooperatives that process cyclical commodities such as fruits and vegetables may have large accounts payable outstanding for raw product and supplies during the processing season and low amounts the remainder of the year. Dairy marketing cooperatives, with a fairly steady supply of product throughout the year, would not have as much fluctuation in the amount due suppliers. Farm supply cooperatives maintain relatively consistent year-round inventories, but experience some fluctuations during the planting and growing season because of purchases of seed and fertilizer.

Figure 2 shows changes in financial structure for the years covered by the financial surveys. Equity levels were highest in 1954 and 1962 at 58 percent of total equity and liabilities. During the 1970s, equity levels generally declined. Equity capital showed an increase in 1987, but decreased again in 1997. The proportionate use of borrowed funds increased until 1976, declined in 1987, and increased slightly again in 1997. The one component of financial structure that has increased consistently since 1954 is the "Other Liabilities" category which consists primarily of obligations due suppliers. Several possible reasons may explain this steady increase. First, many cooperative types have developed more complex business operations such as a trend to more processing that requires purchasing more inputs. This steady increase may also indicate a change over time in the use of more trade credit at the expense of traditional borrowing sources. It may also be an indication of a more competitive marketplace wherein suppliers are offering more liberal payment terms to garner business.

As indicated in the preceding paragraph, the use of debt capital through the 1970s increased and equity levels declined. The 1987 survey showed a reversal of this trend and a fundamental change in many cooperatives' financial structure occurred. The early- and mid-1980s was a difficult period financially for many cooperatives. Low net income levels and accumulating losses forced cooperatives to make adjustments that significantly changed financial structure. These changes will be discussed in the following section on distribution of net income.

Figure 2-Financial Structure, by Fiscal Year



Distribution of Net Income

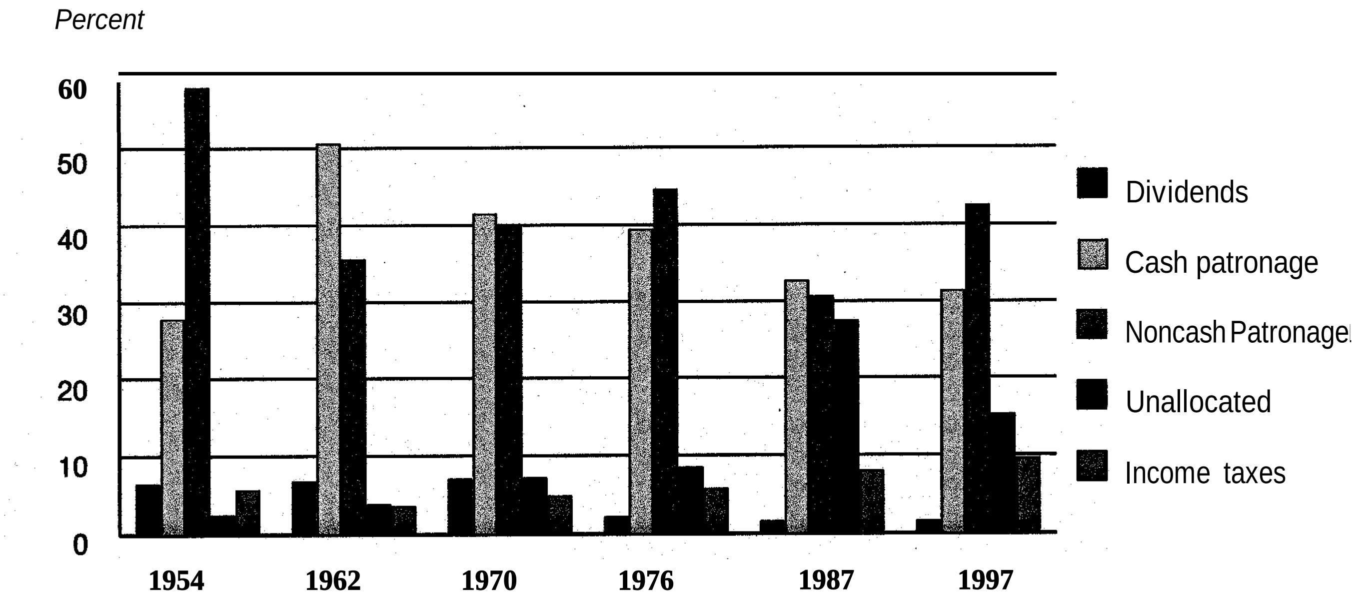
In an investor-owned firm, net income distribution is usually limited to some portion being paid as stock dividends. The remainder stays in the business as retained earnings. In a cooperative, however, distribution of net income is generally more complex and distinguishes how they operate. Net income may be (1) paid as dividends on equity, (2) allocated in the form of cash and noncash patronage refunds, and/or (3) retained as unallocated equity. For the survey years, Figure 3 shows most net income was distributed as cash and noncash patronage refunds. The percentage ranged from a high of 86 percent in 1954 to a low of 63 percent in 1987. The highest percentage of cash distribution occurred in 1962 at 51 percent of net income, and the lowest, 28 percent, was in 1954.

The amount of net income paid out as dividends became relatively insignificant over the survey years. Net income distributed as unallocated equity was a relatively limited amount for all survey years except for 1987. The change in 1987 is explained by the losses experienced by many cooperatives prior to 1987. In 1986, for example, farm supply cooperatives collectively lost $60 million [7]. Total cooperative net income in 1986 was only $700 million for all cooperatives. In 1987, the amount doubled to $1.4 billion 181. In years with high net income, following years of low net income or losses, large portions of net income are distributed as unallocated equity to offset losses charged against the unallocated account in previous years.

Table 1 lists the distribution of net income by principal product or service for each survey year except 1954. Survey information for the 1954 study on net income distribution by product or service did not provide comparable classification data. The product or service classifications used for Table 1 differ from the others in this report because different classification systems were used for various survey years. In some years, classifications were adjusted from survey to survey to reflect changes in organizational structure and business activities or to focus on financial issues or concerns at the time of the study. The classifications in this table were chosen to provide the greatest amount of continuity between studies given the classification disparities between survey years.

Some survey classifications exhibit more continuity from year to year than others, such as those in cotton and cotton ginning, dairy, fruits and vegetables, grain, and farm supply. Sugar cooperatives were not classified separately until 1976, but were added because of increased sugar processing and the associated large amount of assets required.

Figure 3-Distribution of Net Income, by Fiscal Years



Among cooperatives in diversified, livestock and poultry, and miscellaneous marketing categories, definitions changed and different groupings were used from survey to survey. These classifications are included in Table 1 to show their contribution to the overall totals, but no meaningful survey-to-survey comparisons can be made because of the inconsistencies between survey years.

The "diversified" classification included cooperatives with significant farm supply and marketing operations. The survey category was originally added to highlight the range of products and functions handled by these cooperatives, many of them the largest in the country. Although these diverse cooperatives still exist, the classification became arbitrary and variable and was not included in the 1997 survey.

Dividends Paid on Net Worth

From 1967 to 1997, the level of dividends paid on net worth declined for most classifications (Table 1). Except for isolated cooperatives, payment of dividends on equity has reached a very low level. For the 1987 and 1997 survey years, only 1.5 percent of total net income of cooperatives was distributed as dividends on equity. A dividend increase between 1987 and 1997 in the cotton classification represented a major change in distribution methods of a large cooperative. An innovative arrangement relating members' equity and dividend payments to cooperative use was adopted. This was a much different approach than the traditional method of paying dividends based solely on equity held.

Patronage Refund Distribution

The distribution of patronage refunds may vary greatly from year to year due to operating results, changes in the business situation, and a cooperative's equity capital needs. In its fiduciary role, the board of directors considers all of these factors when deciding how to distribute net income, particularly the part allocated as cash and noncash patronage refunds. This variability is illustrated in Table 1, particularly as it relates to allocation decisions made in 1987 because of the difficult financial period that preceded it. In 1987, farm supply and fruit and vegetable cooperatives allocated less than half of net income as patronage refunds. Grain cooperatives allocated only 51 percent of net income as patronage refunds. These low patronage refund levels were in contrast to higher levels in all other survey years for these three cooperative types.

The patronage refunds allocated by a cooperative to its members are important. They represent an

Table **1-Distribution of net income of cooperatives with net Income, by principal product or service, selected years**

Product or service	Year	Dividends paid on equity	Cash patronage refunds	Noncash patronage refund allocations	Additions to Unallocated Equity	Income taxes
				Percent		
Cotton and Cotton Ginning	1962	3.6	36.2	59.1	0.7	0.4
	1970	2.7	54.0	43.0	0.2	0.1
	1976	0.6	70.2	24.9	2.9	1.4
	1987	0.4	82.1	17.0	7.4	(6.9)
	1997	9.9	57.6	29.0	2.8	0.7
Dairy	1962	5.2	31.5	55.8	6.7	0.8
	1970	6.4	33.8	50.3	8.2	1.3
	1976	1.3	28.6	57.0	10.1	3.0
	1987	0.5	31.8	46.2	16.9	4.6
	1997	0.3	35.9	39.3	13.9	10.6
Fruits and Vegetables	1962	2.1	72.4	25.0	0.2	0.3
	1970	5.7	71.0	20.5	1.9	0.9
	1976	1.7	79.6	12.5	3.6	2.6
	1987	2.6	31.6	11.0	33.4	21.4
	1997	3.8	20.1	37.7	22.6	15.8
Grain	1962	7.9	20.6	56.5	8.6	6.4
	1970	6.2	25.5	54.1	10.1	4.1
	1976	1.9	26.6	53.9	11.3	6.3
	1987	1.4	16.9	34.1	36.5	11.1
	1997	0.4	23.4	48.1	18.3	9.8
Livestock And Poultry	1962	7.7	14.5	73.1	3.0	1.7
	1970	4.3	24.6	56.1	11.8	3.2
	1976	0.9	30.9	53.8	10.9	3.5
	1987	0.7	45.1	39.7	9.2	5.3
	1997	0.2	46.3	34.7	8.8	10.0
Sugar	1976	1.6	87.1	7.0	3.7	0.6
	1987	-	11.3	63.2	8.5	17.0
	1997	-	12.1	86.9	(5.3)	6.3
Diversified	1962	20.9	22.3	44.7	3.4	8.7
	1970	12.5	23.1	45.2	9.0	10.2
	1976	4.8	29.2	42.6	10.2	13.2
	1987	3.2	23.8	42.8	14.3	15.9
Other Marketing	1962	8.1	53.0	38.1	0.5	0.3
	1970	9.1	68.6	19.1	1.1	2.1
	1976	6.1	63.8	27.0	1.6	1.5
	1987	0.8	42.7	1.4	89.9	15.2
	1997	0.6	24.8	57.3	5.1	12.2

Continued

Table 1-**Distribution of net income of cooperatives with net Income, by principal product or service, selected years** (continued)

Product or service	Year	Dividends paid on equity	Cash patronage refunds	Noncash patronage refund allocations	Additions to Unallocated Equity	Income taxes
				Percent		
Farm supply	1962	7.0	25.9	55.6	5.8	5.7
	1970	6.0	40.2	37.2	9.5	7.1
	1976	1.4	35.9	50.6	7.1	5.0
	1987	2.6	20.4	28.4	38.3	10.3
	1997	0.9	27.7	44.5	17.8	9.2
Other Services'	1962	7.0	14.2	67.1	14.7	7.0
	1987	1.0	19.8	43.7	25.2	10.3
	1997	-	30.2	32.9	23.8	13.1
All products/ Services	1962	6.7	50.5	35.5	3.8	3.5
	1970	7.0	41.4	39.7	7.1	4.8
	1976	2.1	39.3	44.5	8.4	5.7
	1987	1.5	32.6	30.6	27.4	7.9
	1997	1.5	31.3	42.4	15.2	9.5

The "Other services classification was not used in the 1970 and 1976 studies.

important source of equity capital for the cooperative in the form of retained patronage refunds, and the cash and noncash portions taken together are a primary source of benefits to members. For the survey years shown in Table 1, the percentage of allocated patronage refunds paid in cash was as follows:

Year	*Percent of patronage refund paid in cash*
1962	59
1970	51
1976	47
1987	52
1997	42

While the tabulation depicts the average amount of the patronage refund paid in cash for all types of cooperatives, considerable variability existed. This variability was evidenced not only between different product or service categories, but also within some categories between survey years. This variability was most noticeable in certain marketing types. Care must be taken, however, in interpreting results of a limited number of years' observations as being representative of a general change in payment practices. Distribution patterns of a few large cooperatives in a given product or service category can strongly influence the results reported in a given survey year.

Fruit and vegetable and sugar cooperatives displayed similar patterns. Sugar cooperatives paid 90 percent of allocated patronage refunds in cash in 1976 and less than 20 percent in 1987 and 1997. From 1962 through 1987, fruit and vegetable cooperatives maintained an approximate 75 percent rate of cash payments as a percentage of allocated patronage refunds. In 1997, the cash payment rate fell to 35 percent.

Other marketing cooperatives, such as cotton and cotton ginning and dairy, showed increases from year to year in the percentage of allocated patronage refunds paid in cash. Grain cooperatives, on the other hand, maintained a steady cash patronage percentage of about one-third in each survey year.

Unallocated Equity

Distribution of net income as unallocated. equity increased from 1962 to 1997 (Table 1) in most product or service classifications. The large 1987 increase was related to prior years' losses. Grain, farm supply, and other services classifications had the highest average percentage of net income added to unallocated. equity for the survey years. The increase in additions to unallocated equity, particularly in certain classifications, is related to the amount of non-member or non-patron age business these categories conduct and the resulting non-patronage net income.

Income Taxes

There is normally a correlation between the amount of income taxes paid by cooperatives and the net income distributed as unallocated equity (Table 1). For most classifications, in the more recent survey years, a larger percentage of net income has been distributed as unallocated. equity with a corresponding increase in net income paid as income tax. This was particularly true in 1987 when larger amounts were distributed to unallocated equity to restore the amount depleted by prior losses. The trend to more net income being distributed as unallocated income continued for 1997.

Sources of Borrowed Funds

Figure 4 shows the sources of borrowed funds for cooperatives for 1954 through 1997. Banks for cooperatives have been the principal lenders to agricultural cooperatives for all survey years.[2] The share of borrowed funds provided by banks for cooperatives ranged from 45 percent in 1954 to more than 60 percent in 1970 and 1976.

In early survey years, bonds and notes issued to members and others comprised the second largest source of borrowed funds. They were represented by a variety of certificate types some of which had characteristics of both equity and debt [2]. Use of bonds and notes as a borrowing source has declined in recent survey years.

Commercial banks provided the least amount of borrowed funds from 1954 to 1987, but that proportion increased in 1997 to about equal bonds and notes and the "Other" category. The "Other" category consists primarily of loans from other cooperatives or their financing subsidiaries, the Small Business Administration, and private party financing. The "Other" category contained a small amount of cooperative borrowing until 1987. The increase that year was probably related to the financial difficulties cooperatives experienced in the early and mid-1980s as mentioned in the Distribution of Net Income section. Large federated cooperatives either directly, or through their finance subsidiaries, extended credit to their local cooperatives during this difficult period when it was needed and may not have been as readily available from other sources in the amounts necessary to meet the challenges of that time.

2 0ver the period of time covered by the survey years, there have been a series of consolidations among the banks for cooperatives of the Federal Farm Credit System. In 1997, the year of the most recent financial profile survey, there were two banks for cooperatives. In 1999, they merged. The National Bank for Cooperatives (CoBank), ACB, headquartered in Denver, CO, is the surviving entity.

Detailed Analysis of 1997 Survey Data

The remainder of the report focuses specifically on analyzing 1997 survey data collected on the 1,929 cooperatives in the study.

Cooperatives Included In Study

Table 2 shows the number of cooperatives in each of the 13 principal product or service categories. Total sales and total asset amounts are actual data submitted by the 1,929 farmer cooperatives included in the study. The frequency distribution of total sales and total assets for these cooperatives is also shown in Figure 5 and 6 respectively.

Farm supply and grain and oilseed cooperatives dominate the numbers, total sales and total assets. Combined they represent 76 percent of the cooperatives in the study, 46 percent of total sales, and 48 percent of total assets. Dairy and livestock cooperatives, respectively, were next in total sales, but represented a significantly lower percentage by number.

Comparing the relationship between total sales and total assets contrasts the differences between product or service categories in terms of dollars of assets employed. For example, service cooperatives such as those in cotton ginning, artificial insemination, transportation, and rice drying have a larger investment in assets relative to sales. By contrast, marketing cooperatives in general had a lower investment relative to sales. Among different types of marketing cooperatives, however, different relationships existed. Sales by cooperatives performing extensive product processing such as fruit and vegetable and nuts were almost double the amount of assets. Marketing cooperatives which may perform less product processing, such as dairy, had sales closer to four times asset values.

Sources of Equity Capital

Cooperatives use a variety of methods for acquiring equity capital. Patrons may contribute to equity by direct investment through the purchase of stock or other forms of equity, a portion of net income may be kept in the business as retained (or noncash) allocated patronage refunds, or deductions may be made from sales proceeds in the form of per-unit capital retains. In addition, some net income may be retained as unal-

Table **2-Number of cooperatives, sales, total assets, by principal product or Service, fiscal 1997**

Principal product or service	Cooperatives	Total sales	Total assets
	Number	- - - - - - - Million dollars------	
Cotton	**14**	**2,950.8**	**790.2**
Cotton ginning	**126**	449.0	**312.2**
Dairy	**67**	**19,386.7**	**4,155.6**
Farm supply	**859**	**22,117.4**	**11,254.5**
Fruit & vegetable	**110**	**9,173.2**	**4,590.l**
Grain & oilseed	**609**	**24,847.6**	**6,409.4**
Livestock	**22**	**12,394.4**	**3,030.4**
Misc. marketing[1]	**20**	**3,747.7**	**1,651.6**
Nuts	**8**	**1,040.g**	**477.4**
Other services[2]	**51**	**277.5**	**233.7**
Poultry	**6**	**3,555.6**	**1,233.2**
Rice	**6**	**1,262.7**	**544.7**
Sugar	**11**	**1,666.6**	**l&33.5**
All products/services	**1,929**	**102,869-g**	**36,516.4**

[1] Includes dry beans and peas, fishery, and miscellaneous products.
[2] Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

Figure **4-Sources of Borrowed Funds, by Fiscal Year**

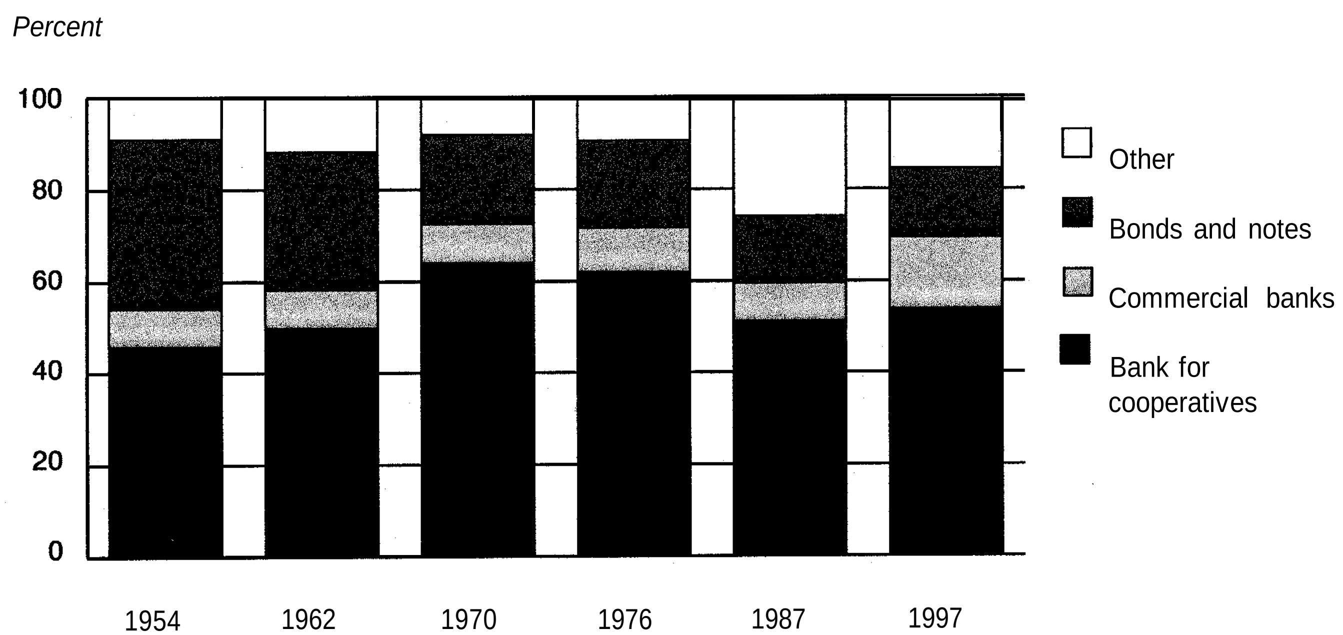


Figure 5-Frequency Distribution of Cooperatives by Total Sales, Fiscal 1997

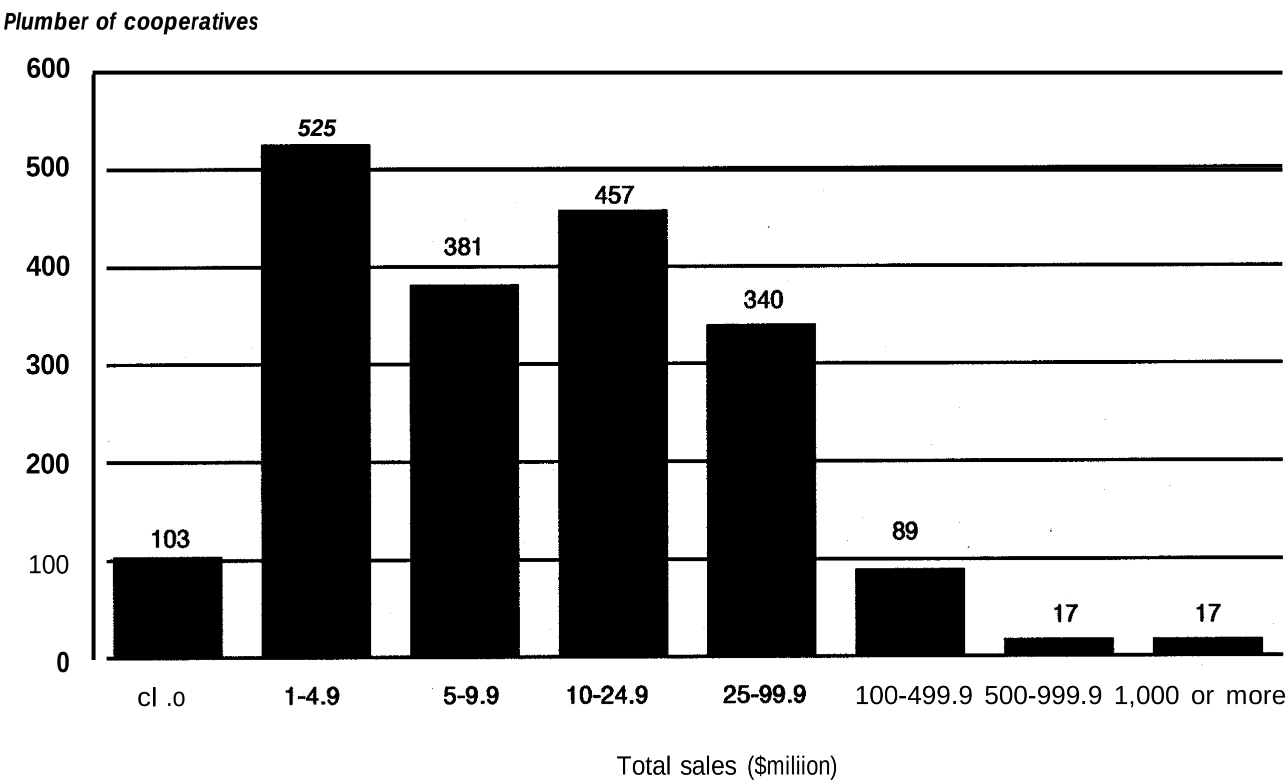
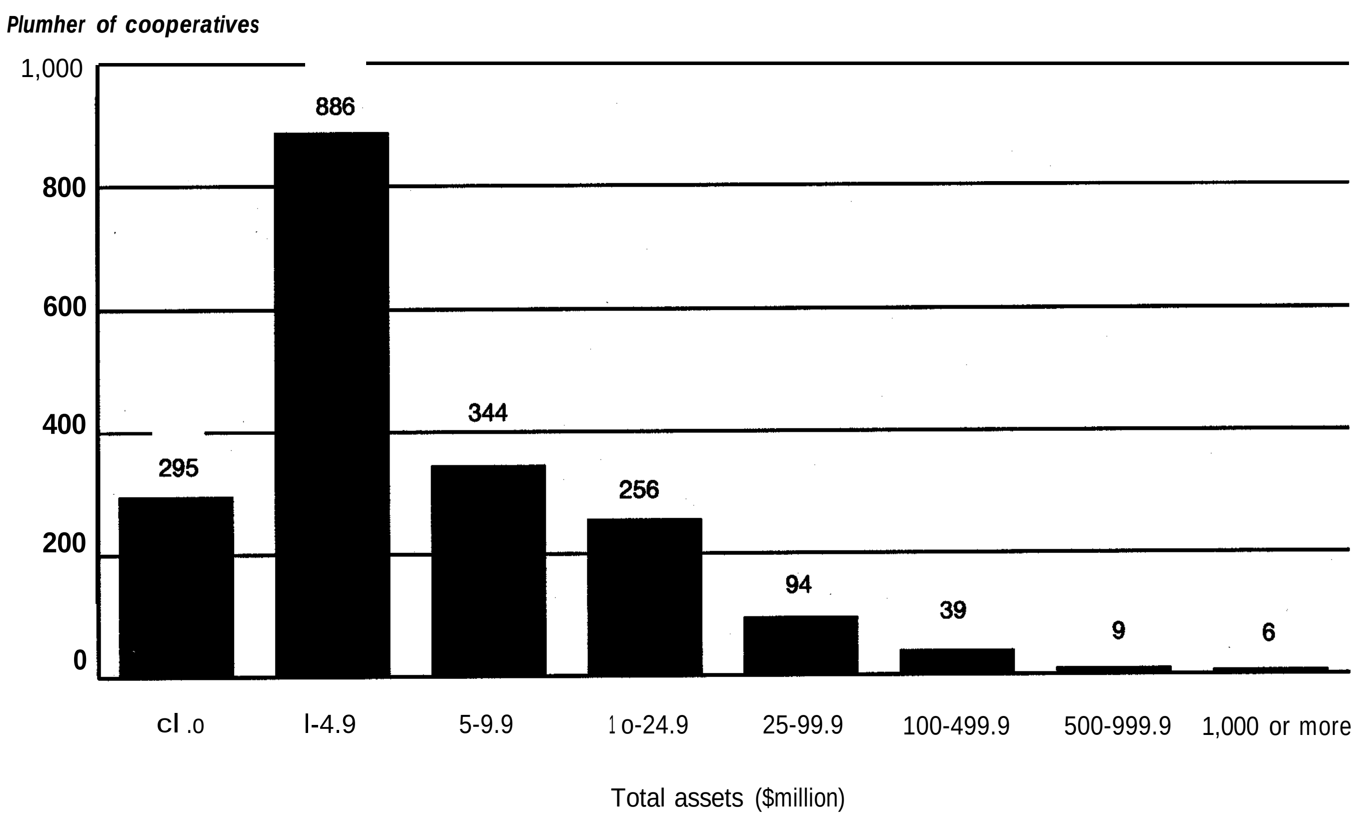


Figure 6-Frequency Distribution of Cooperatives by Total Assets, Fiscal 1997



located equity. This section examines the methods used by different types of cooperatives, including the distribution of net income and net losses.

Distribution of Net Income and Losses

Patronage refunds received from other cooperatives are an important component of net income. Table 3 shows the total amount of net income reported by cooperatives included in the study. Of the $1.9 billion in net income, $590 million or 31 percent was patronage refunds received from other cooperatives. Patronage refunds were particularly important to farm supply, grain, and poultry cooperatives, comprising 41 percent, 49 percent, and 64 percent respectively, of net income.

The relationship that results in patronage refunds being received from other cooperatives differs among cooperatives. For example, local farm supply cooperatives receive much of the products they sell to members from federated cooperatives. These federated cooperatives, in turn, may be members of cooperatives that manufacturer basic farm production inputs such as fertilizer, chemicals, and petroleum products. Patronage refunds flow from the manufacturing cooperative to the federated to the local cooperative. Ultimately, at least some of these patronage refunds are distributed to the farmer members of the local farm supply cooperative. Many grain and oilseed cooperatives also have major farm supply operations and receive a significant amount of patronage refunds from other cooperatives with a flow of funds similar to farm supply cooperatives.

Table 4 shows the distribution of net income and net losses by principal product or service. Patronage refund allocations were the dominant distribution method used, demonstrating the focus of cooperatives on distributing net income on use rather than on the level of investment. The combination of cash and non cash patronage refund distributions accounted for 73.7 percent of net income. The amount of net income distributed as unallocated equity was 15.2 percent, but amounts varied widely by type of cooperative. Those in the nuts, other services, poultry, and rice categories reported the highest percentage of net income distributed as unallocated equity.

Twelve percent of the cooperatives reported losses. Eighty-two percent of these losses were charged against unallocated equity, with only 16 percent offset against allocated equity accounts.

Table 5 shows the number of cooperatives using each income distribution method. A total of 1,692 cooperatives in the survey reported net income in 1997. A total of 310, or 18.5 percent reported paying dividends on equity. This compares with only 1.5 per-

Table 3--Net Income and patronage refunds received from other cooperatives, by principal product or service, fiscal 1997

Principal product or service	Net income	Patronage refunds from other cooperatives	Net income from own operations
		Thousand dollars	
Cotton	63,858.8	2,672.8	61,186.0
Cotton ginning	88,648.6	19,631.9	69,016.7
Dairy	311,074.5	54,909.9	256,164.6
Farm supply	720,889.5	298,965.8	421,923.7
Fruit & vegetable	165,116.7	10,452.6	154,664.1
Grain & oilseed	356,448.9	175,672.9	180,775.9
Livestock	162,160.8	3,757.0	158,403.8
Misc. marketing [1]	4,718.6	3,601.0	1,117.6
Nuts	10,493.3	744.1	9,749.2
Other serviceS2	20,655.2	841.3	19,813.9
Poultry	20,560.1	13,174.2	7,385.9
Rice	7,155.3	318.3	6,836.9
Sugar	(2,721.6)	5,374.7	(8,096.4)
All products/services	1,929,058.5	590,116.6	1,338,941.9

[1] Includes dry beans and peas, fishery, and miscellaneous products.
[2] Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

Table **4-Distribution of net Income and net losses, by principal product or service, fiscal 1997**

Principal product or service	Cooperatives	Net income and (losses)	Dividends paid on net worth	Cash patronage refunds	Noncash patronage refund allocations	Additions to unallocated equity	Income taxes
			Percentage of net income or losses distributed as				
	Number	*Dollars*	*Percent*				
Cotton							
Net income	12	64,217,226	21.7	55.5	19.3	2.6	0.9
Net losses	2	(15,196)	-	-	-	-	100.0
Total	14	64,202,030	21.7	55.5	19.3	2.6	0.9
Cotton ginning							
Net income	104	90,227,279	1.5	59.2	35.9	2.9	0.5
Net losses	22	(1,578,711)	(0.1)	(1.0)	8.8	91.5	0.7
Total	126	88,648,568	1.5	60.3	36.4	1.3	0.5
Dairy							
Net income	77	316,014,197	0.3	35.9	39.3	13.9	10.6
Net losses	10	(4,939,699)	-	-	45.7	54.7	(0.5)
Total	87	311,074,498	0.3	36.5	39.2	13.3	10.7
Farm Supply							
Net income	769	756,811,149	0.9	27.7	44.5	17.8	9.2
Net losses	90	(35,921,606)	(1.3)	(0.8)	33.9	55.8	12.4
Total	859	720,889,543	1.0	29.1	45.0	15.9	9.0
Fruit and vegetable							
Net income	86	166,927,364	3.8	20.1	37.7	22.6	15.8
Net losses	24	(1,807,672)	(26.6)	0.7	29.3	73.5	23.0
Total	110	165,119,692	4.1	20.3	37.8	22.1	15.7
Grain & oilseed							
Net income	539	378,519,236	0.4	23.4	48.1	18.3	9.8
Net losses	70	(22,070,376)	(0.1)	(1.7)	29.1	67.2	5.5
Total	609	356,448,860	0.4	25.0	49.3	15.2	10.1
Livestock							
Net income	20	162,385,886	0.2	47.3	37.6	1.6	13.2
Net losses	2	(225,102)	-	-	-	60.2	39.8
Total	22	162,160,784	0.2	47.4	37.7	1.5	13.2
Misc. marketing [1]							
Net income	12	65,930,727	-	26.9	69.1	(6.3)	10.2
Net losses	8	(51,212,175)	-	-	-	100.1	(0.1)
Total	20	4,718,552	-	319.4	819.6	(1,161.3)	121.9
Nuts							
Net income	7	10,811,522	-	30.2	32.9	23.8	13.1
Net losses	1	(318,205)	-	-	-	100.0	-
Total	8	10,493,317	-	31.1	33.9	21.5	13.5

Continued

Table **4--Distribution of net Income and net losses, by principal product or service, fiscal 1997** (continued)

Principal product service or	Cooperatives	Net income and (losses)	Dividends paid on net worth	Percentage of net income or losses distributed as: Cash patronage refunds	Noncash patronage refund allocations	Additions to unallocated. equity	Income taxes
	Number	*Dollars*	*Percent*				
Other services [2]							
Net income	46	22,163,378	-	35.1	32.2	29.3	3.4
Net losses	5	(1,508,189)	-	-	27.7	71.2	1.1
Total	51	20,655,189	-	37.7	32.5	26.2	3.6
Poultry							
Net income	6	20,560,100	-	38.2	11.4	66.0	(15.5)
Net losses	-	-	-	-	-	-	
Total	6	20,560,100	-	38.2	11.4	66.0	(15.5)
Rice							
Net income	6	7,155,264	6.6	0.3	0.7	65.8	26.7
Net losses	-	-	-	-	-	-	-
Total	6	7,155,264	6.6	0.3	0.7	65.8	26.7
Sugar							
Net income	8	15,868,366	-	12.1	86.9	(5.3)	6.3
Net losses	3	(18,589,998)		-	-	109.3	(9.3)
Total	11	(2,721,632)	-	(70.6)	(506.5)	777.5	(100.5)
All products/services							
Net income	1692	2,067,591,694	1.5	31.3	42.4	15.2	9.5
Net losses	237	(138,186,929)	(0.7)	(0.5)	15.9	82.1	3.2
Total	1929	1,929,404,765	1.7	33.6	44.3	10.4	10.0

1Includes dry beans and peas, fishery, and miscellaneous products.

2 Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

cent of net income being paid out in dividends as shown in Table 4. Cash patronage refunds were paid by 80 percent of cooperatives with non-cash patronage refund allocations distributed by 73 percent. Eighty-five percent of cooperatives made additions to unallocated equity, although only 15 percent of net income was distributed in such a fashion (Table 4). Income tax was paid by 81 percent of cooperatives that had net income.

From Table 5, the following tabulation combines the distribution methods used by the grain and oilseed and farm supply classifications and compares them with all other product or service categories as a group.

The grain and oilseed and farm supply classifications include a range of associations from large federated cooperatives to small local cooperatives. Numerically, more in this group are the smaller cooperatives operating in their local service area and providing a range of products and services to member and non-member patrons. The distribution methods used reflect this diverse clientele and the existence of

	Percent of Cooperatives with net income: *Grain and farm supply*	*All other types*
Dividends on equity	21	10
Cash patronage refunds	83	70
Non-cash patronage refunds	80	57
Additions to unallocated equity	92	61
Income taxes	89	57

Table **5---Methods used to distribute net income, by principal product or service, fiscal 1997**

Principle Product or service	Cooperatives net income	Cooperatives with. net income distributed as			
		Dividends on patrons' equity	Cash patronage refunds	Noncash patronage refunds allocation	Additions to unallocated equity
	- -------- - - - ----- - ----------------- - ------- *Number*	------- - ----- - -----	- ----- -	----------- - ------	
Cotton	12	2	8	6	8
Cotton ginning	104	15	94	69	42
Dairy	77	5	56	48	55
Farm supply	769	173	627	594	686
Fruit & vegetable	86	8	49	36	63
Grain & oilseed	539	99	453	425	611
Livestock	20	4	8	9	13
Misc. marketing [1]	12	2	11	6	8
Nuts	7	-	3	2	3
Other services [2]	46	1	29	29	34
Poultry	6	-	4	4	6
Rice	6	1	1	2	3
Sugar	8	-	5	6	1
All products/services	1,692	310	1,348	1,236	1,432

[1] Includes dry beans and peas, fishery, and miscellaneous products.
[2] Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

Table **6-Per-unit capital retains deducted, by principal product or service, fiscal 1997**

Principal product or service	Cooperatives		Per-unit retains deducted
	Total	Deducting per-unit capital capital retains	
	------- *Number* - -----		*$1,000*
Cotton	14	7	50,451.0
Cotton ginning	126	4	930.0
Dairy	87	8	10,244.5
Farm supply	859	6	280.2
Fruit & vegetable	110	32	27,165.6
Grain & oilseed	609	8	1,156.0
Livestock	22	2	846.2
Misc. marketing [1]	20	3	1,432.8
Nuts	8	3	20,230.0
Other services [2]	51	2	636.7
Poultry	6	2	794.6
Rice	6	1	2,352.0
Sugar	11	5	24,898.8
All products/ services	1,929	83	141,418.2

Includes dry beans and peas, fishery, and miscellaneous products.
[2] Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

non-member business, the net income from which is added to unallocated equity after income taxes have been paid.

Cooperatives in the other group tended to pro vide more specialized services, primarily to member patrons, so there was less use of the range of distribution methods. Also, per-unit capital retains are used by some marketing cooperatives as an equity source.

Per-Unit Capital Retains

Use of the per-unit capital retain is a distinctive cooperative method of accumulating equity through a direct investment by members. Bylaw provisions or member marketing agreements establish the authority for the cooperative to deduct the retain from product payment. The per-unit capital retains are deducted either as an amount per quantity of product delivered or as a percentage of the value of the product.

Table 6 shows the number of surveyed cooperatives that used per-unit capital retains to accumulate equity capital. Only 4 percent of surveyed cooperatives used this method. Per-unit capital retains were used

almost exclusively by marketing cooperatives. Only about 1 percent of farm supply, service, and grain and oilseed marketing cooperatives used per-unit capital

retains. Excluding grain marketing cooperatives, 22 percent of marketing cooperatives used diem.

For those cooperatives using per-unit capital retains, they accounted for more retained equity in 1997 than those same cooperatives acquired from retained patronage refunds. Also, these cooperatives, on average, paid a greater percentage of net income as cash patronage refunds than other cooperatives.

Intercooperative Investments

Table 7 reports total assets, total equity capital, intercooperative investments, net assets, and net equity capital by principal product or service. Net assets and net equity capital were obtained by subtracting intercooperative investments from total assets and total equity to eliminate the double counting of assets and equity that occurs when intercooperative investments are included in both the assets of one set of cooperatives and as equity capital of another.

Table 7 shows intercooperative investments for the 1,929 cooperatives included in the study were $3.2 billion, or about 8.6 percent of total assets. The proportion of assets represented by intercooperative investments varied widely between product or service classifications, but some investment in other cooperatives existed in all groups. In addition to the intercooperative investments shown, cooperatives in the study also had an additional $559 million invested in banks for cooperatives in 1997.

On average, the cotton, miscellaneous marketing, rice, and sugar classifications had less than 1 percent of total assets in intercooperative investments. In contrast, cotton ginning, farm supply, grain and oilseed cooperatives on average held more than 10 percent of total assets as investments in other cooperatives.

Condensed Balance Sheets

Table 8 presents condensed balance sheet information by principal product or service group. Table 9 shows condensed balance sheet information by the eight size **categories selected for the study.**

Balance sheet composition by principal product or service (Table 8) demonstrates that the mix between balance sheet categories is a function of the business function performed. For example, in marketing coop eratives, current assets as a percentage of total assets are generally higher than in other types of cooperatives because of a larger investment in inventories and accounts receivables.

In 1997, current assets averaged 51.4 percent. of total assets for all cooperatives in the survey.

Table 7-Net assets, net equity capital, and intercooperative investments, by principal product or service, fiscal 1997

Principal product or service	Cooperatives	Total assets	Total equity capital	Intercooperative investments	Net assets	Net equity capital
	Number			----------------------------------*$1'000*	---------------------------	
Cotton	*14*	*790,219.4*	*366,807.0*	*3,067.2*	*787,152.1*	*363,739.8*
Cotton ginning	*126*	*312,152.8*	*193,928.2*	*44,050.7*	*268,102.1*	*149,877.5*
Dairy	*87*	*4,155,606.8*	*1,672,467.4*	*377,875.6*	*3,777,731.2*	*1,294,591.8*
Farm supply	*859*	*11,254,456.2*	*5,249,796.2*	*1,543,140.1*	*9,711,316.1*	*3,706,656.1*
Fruit & vegetable	*110*	*4,590,107.7*	*1,454,921.2*	*63,578.4*	*4,526,529.3*	*1,391,342.8*
Grain & oilseed	*609*	*6,409,439.4*	*2,955,240.6*	*822,399.8*	*5,587,039.6*	*2,132,840.8*
Livestock	*22*	*3,030,386.2*	*898,674.3*	*224,444.3*	*2,805,941.9*	*674,230.0*
Misc. marketing	*20*	*1,651,631.0*	*664,976.2*	*5,714.7*	*1,645,916.3*	*659,261.6*
Nuts	*8*	*477,424.0*	*203,984.6*	*14,593.5*	*462,830.5*	*189,391.1*
Other serviceS2	*51*	*233,661.6*	*160,368.1*	*9,364.4*	*224,297.2*	*151,003.6*
Poultry	*6*	*1,233,190.4*	*389,315.9*	*31,725.0*	*1,201,465.4*	*357,590.9*
Rice	*6*	*544,688.8*	*225,173.1*	*2.4*	*544,686.4*	*225,170.6*
Sugar	*11*	*1,833,460.5*	*515,414.4*	*12,372.4*	*1,821,088.1*	*503,042.0*
All products/services	*1,929*	*36,516,424.8*	*14,951,067.0*	*3,152,328.5*	*33,364,096.3*	*11,798,738.5*

1 Includes dry beans and peas, fishery, and miscellaneous products.
2 Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

Table **8--Condensed balance sheet data, by principal product or service, fiscal 1997**

Principal product or service	Cooperatives	Total assets	Current assets	Fixed assets	Other assets	Current liabilities	Long-term liabilities	Equity capital
			Percentage of total assets represented by					
	Number	*Million dollars*	*Percent*					
Cotton	14	790.2	65.1	28.2	6.7	40.8	12.8	46.4
Cotton ginning	126	312.2	43.2	40.4	16.4	29.1	8.7	62.1
Dairy	87	4,155.6	57.5	26.9	15.5	44.4	15.4	40.2
Farm supply	859	11,254.5	46.8	30.1	23.1	32.2	21.1	46.6
Fruit & vegetable	110	4,590.1	57.5	30.2	12.3	41.7	26.6	31.7
Grain & oilseed	609	6,409.4	55.3	26.4	18.3	43.9	10.0	46.1
Livestock	22	3,030.4	55.8	27.2	17.0	46.3	24.0	29.7
Misc. marketing [1]	20	1,651.6	33.5	55.5	11.0	47.3	12.4	40.3
Nuts	8	477.4	66.9	19.1	14.0	34.1	23.1	42.7
Other serviceS2	51	233.7	45.0	40.2	14.7	20.3	11.1	68.6
Poultry	6	1,233.2	57.5	27.2	15.3	39.3	29.2	31.6
Rice	6	544.7	59.6	33.8	6.6	46.3	12.3	41.3
Sugar	11	1,833.5	32.4	47.5	20.0	28.5	43.4	28.1
All products/ services	1929	36,516.4	51.4	30.8	17.7	39.1	20.0	40.9

[1] Includes dry beans and peas, fishery, and miscellaneous products.

[2] Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

Cooperatives marketing cotton, dairy, fruit and vegetable, grain and oilseed, livestock, nuts, and rice, had current assets that exceeded the average. Farm supply cooperatives had a much higher than average investment in other assets because they are normally part of a federated structure and have a large investment in their federated cooperatives. For presentation purposes, this investment is included as part of other assets.

Equity capital in the survey averaged 41 percent, but varied significantly between cooperative types. The relationship between equity capital and long-term liabilities also should be noted. Higher than average equity capital levels generally resulted in lower than average long-term liabilities. Cooperatives in the fruit and vegetable, livestock, sugar, and poultry classifications had the lowest equity capital levels and the highest long-term liabilities.

In Table 9, comparisons by size resulted in less overall variation for most balance sheet components. The exception is in the equity capital and long-term liabilities categories. As cooperative size increased, equity capital as a percent of total assets decreased. Inversely, the percentage of long-term liabilities increased as cooperative size increased.

Financial Structure

Financial structure shows the relative amount of equity capital, borrowed capital, and other liabilities. Comparisons are made by principal product or service (Table 10) and asset size (Table 11).

Borrowed capital for all cooperatives surveyed was 29.6 percent of total assets. In Table 10, cotton ginning and other services cooperatives had the lowest level of borrowed funds at 13.3 percent and 11.1 per cent of total assets respectively. Five classifications of marketing cooperatives-fruits and vegetables, live stock, poultry, rice, and sugar-reported average borrowed capital that exceeded average equity capital. Two classifications of marketing cooperatives, dairy and grain and oilseed, had borrowed capital levels well below the average for all cooperatives in the study despite reporting among the highest levels of total assets for all marketing cooperative classifications.

Financial structure by size in Table 11 parallels information in Table 9 which showed consolidated balance sheet components. Specifically, the level of borrowed funds as a percent of total assets increased with cooperative size. Other liabilities generally increased with size as reported in Table 9, while equity capital as a percent of total assets declined as size increased.

Cooperative Equity

Cooperatives distributed most of their net income as patronage refunds. The noncash portion provides the principal source of allocated equity. For cooperatives in the study, the proportion of allocated and unallocated equity is shown by principal product or service in Table 12. Allocated equity for all cooperatives was 76.5 percent, but the variation between different product or service categories was significant. The sugar classification was highest with 100 percent, while those in cotton ginning, livestock, and miscellaneous marketing cooperatives exceeded 90 percent. The lowest was poultry with only 60.3 percent. Those in farm sup ply, grain and oilseed, and other services had below average allocated equity.

Table 9**--Condensed balance sheet data, by size of cooperative, fiscal 1997**

Size (total assets)	Cooperatives	Total assets	Percentage of total assets represented by: Current assets	Fixed assets	Other assets	Current liabilities	Long-term liabilities	Equity capital
Million dollars	*Number*	*Million* dollars	Percent					
Less than 1.0	*295*	*156.7*	*55.1*	*25.6*	*19.3*	*26.4*	*6.0*	*67.6*
1-4.9	*886*	*2,335.6*	*50.7*	*28.0*	*21.2*	*30.3*	*6.9*	*62.8*
5-9.9	*344*	*2,409.7*	*50.5*	*28.4*	*21.1*	*35.9*	*8.5*	*55.6*
10-24.9	*256*	*3,876.2*	*54.2*	*27.9*	*17.9*	*41.1*	*9.6*	*49.2*
25-99.9	*94*	*4,128.1*	*57.9*	*29.2*	*12.9*	*47.6*	*13.3*	*39.1*
100-499.9	*39*	*7,528.9*	*55.8*	*30.1*	*14.1*	*41.1*	*19.0*	*39.9*
500-999.9	*9*	*6,459.1*	*44.1*	*35.7*	*20.2*	*38.9*	*28.8*	*32.3*
1,000 and over	*6*	*9,622.2*	*49.4*	*31.3*	*19.3*	*36.3*	*28.1*	*35.6*
All sizes	*1,929*	*36,516.4*	*51.4*	*30.8*	*17.7*	*39.1*	*20.0*	*40.9*

Table 10**-Financial structure, by principal product or service, fiscal 1997**

Principal product or service	Cooperatives	Total assets	Percentage of total assets represented by: Borrowed capital	Other liabilities	Equity capital
	Number	*Million* dollars	Percent		
Cotton	*14*	*790.2*	*30.1*	*23.5*	*46.4*
Cotton ginning	*126*	*312.2*	*13.3*	*24.6*	*62.1*
Dairy	*87*	*4,155.6*	*20.9*	*38.8*	*40.2*
Farm supply	*859*	*11,254.5*	*27.0*	*25.5*	*46.6*
Fruit & vegetable	*110*	*4,590.1*	*34.8*	*33.5*	*31.7*
Grain & oilseed	*609*	*6,409.4*	*20.5*	*33.4*	*46.1*
Livestock	*22*	*3,030.4*	*40.7*	*29.7*	*29.7*
Misc. marketing [1]	*20*	*1,651.6*	*38.8*	*20.9*	*40.3*
Nuts	*8*	*477.4*	*33.8*	*23.5*	*42.7*
Other serviceS2	*51*	*233.7*	*11.1*	*20.2*	*68.6*
Poultry	*6*	*1,233.2*	*43.8*	*24.6*	*31.6*
Rice	*6*	*544.7*	*46.0*	*12.7*	*41.3*
Sugar	*11*	*1,833.5*	*42.2*	*29.7*	*28.1*
All products/services	*1,929*	*36,516.4*	*29.6*	*29.4*	*40.9*

1 Includes dry beans and peas, fishery, and miscellaneous products.
2 Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

Table 13 shows a breakdown of allocated and unallocated. equity by size of cooperative. In general, the level of allocated equity was much higher in the larger-sized cooperatives compared to those with total assets of less than $500 million. This size distinction is further illustrated by organizational structure. This structure breakdown serves as a proxy for asset size and clearly shows why the proportion of allocated equity increases as size increases. The four organizational types are: (1) centralized local cooperatives that serve producer patrons in their surrounding area; (2) centralized regional cooperatives that operate in a multi-state territory; (3) federated cooperatives whose members are other cooperatives; and (4) mixed membership cooperatives that serve both producer patrons and other cooperatives.

This tabulation also relates to Table 12, which shows the breakdown of allocated and unallocated equity by principal product or service. Certain product or service classifications dominate the organizational type in which they are classified and influence the relationship between allocated and unallocated equity for that type. The following tabulation shows the per cent of total assets represented by the predominant product or service classifications in each organization al type.

Organizational	*Number*	*Average assets cooperative*	*Allocated equity*	*Unallocated equity*
		Million dollars	*Percent of total equity*	
Centralized local	1,732	6.4	71.6	28.4
Centralized regional	120	69.7	77.1	22.9
Federated	39	134.3	81.0	19.0
Mixed membership	36	338.6	80.3	19.7

Organizational type	*Principal product or service*	*Type's share organizational of type assets*
		Percent
Centralized local	Farm supply, grain and oilseed	77
Centralized regional	Dairy, fruit & vegetable, and sugar	60
Federated	Farm supply	68
Mixed membership	Dairy, farm supply, and livestock	74

Table 11-**Financial structure, by size of cooperative, fiscal 1997**

Size (total assets)	Cooperatives	Total assets	Borrowed capital	Other liabilities	Equity capital
			Percent of total assets represented by		
Million dollars	*Number*	*Million dollars*	*Percent*		
Less than 1.0	295	156.7	11.9	20.5	67.6
1-4.9	886	2,335.6	14.0	23.2	62.8
5-9.9	344	2,409.7	18.8	25.7	55.6
10-24.9	256	3,876.2	21.1	29.7	49.2
25-99.9	94	4,128.1	26.1	34.8	39.1
100-499.9	39	7,528.9	32.0	28.1	39.9
500-999.9	9	6,459.1	38.2	29.5	32.3
1,000 and over	6	9,622.2	33.8	30.6	35.6
All sizes	1,929	36,516.4	29.6	29.4	40.9

Sources of Borrowed Funds

Cooperatives in the survey reported total borrowed funds of $10.8 billion of which 54 percent was provided by banks for cooperatives (see footnote #2 on page 8). Commercial banks, bonds and notes issued by cooperatives, and other sources provided the remainder in almost equal shares. A great deal of variability existed, however, when each of these sources was examined by cooperative size and by principal product or service classifications.

Table 14 shows sources of borrowed funds by asset size. While banks for cooperatives on average provided the majority of loan funds, this was not true for the smallest cooperatives (total assets of less than $1 million) or the largest cooperatives (total assets of $1 billion or more). The smallest cooperatives used commercial banks as their main source of borrowed funds, providing 53.7 percent. Banks for cooperatives and other sources provided most of the rest. Other sources for smaller cooperatives were the Small

Table **12-Allocated and unallocated equity capital, by principal product or service, fiscal 1997**

Principal product or service	Cooperatives	Total equity capital	Percentage of equity represented by: Allocated equity	Unallocated equity
	Number	*Million dollars*	*Percent*	
Cotton	14	366.8	86.2	13.8
Cotton ginning	126	193.9	91.5	8.5
Dairy	87	1,672.5	78.1	21.9
Farm supply	859	5,249.8	72.7	27.3
Fruit & vegetable	110	1,454.9	77.1	22.9
Grain & oilseed	609	2,955.2	69.3	30.7
Livestock	22	898.7	96.1	3.9
Misc. marketing [1]	20	665.0	92.4	7.6
Nuts	8	204.0	75.8	24.2
Other services [2]	51	160.4	67.1	32.9
Poultry	6	389.3	60.3	39.7
Rice	6	225.2	71.3	28.7
Sugar	11	515.4	100.6	(0.6)
All products/services	1,929	14,951.1	76.5	23.5

[1] Includes dry beans and peas, fishery, and miscellaneous products.
[2] Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

Table **i3--Allocated and unallocated equity capital, by size of cooperative, fiscal 1997**

Size (total assets)	Cooperatives	Total equity capital	Percentage of equity represented by: Allocated equity	Unallocated equity
Million dollars	*Number*	*Million dollar*	*Percent*	
Less than 1.0	295	106.0	70.5	29.5
1-4.9	886	1,467.9	67.5	32.5
5-9.9	344	1,338.9	70.1	29.9
10-24.9	256	1,908.5	69.8	30.2
25-99.9	94	1,613.5	75.3	24.7
100-499.9	39	3,005.0	74.3	25.7
500-999.9	9	2,085.3	86.2	13.8
1,000 and over	6	3,425.8	83.4	16.6
All sizes	1,929	14,951.1	76.5	23.5

Business Administration, other cooperative financial institutions, finance subsidiaries of regional cooperatives, and private sources.

The largest cooperatives relied in about equal shares on all four borrowing sources shown in Table 14. For the largest cooperatives, other sources consisted primarily of insurance and leasing companies. The Farm Credit Leasing Corporation was one of the major lease financing sources. These largest cooperatives were also the biggest issuers of bonds and notes to members and others.

The rest of the surveyed cooperatives, with total asset sizes from $1 million to $999.9 million, were much bigger borrowers from banks for cooperatives at 67 percent than the overall 53.9 percent average reported. Commercial banks provided about 11 percent of borrowed capital and other sources provided 13 percent.

Comparing borrowed funds sources by principal product or service (Table 15) shows a more complex picture than the asset size comparison. Cooperatives in six product or service classifications borrowed a significantly higher percentage of funds from banks for cooperatives than the 53.9 percent average for all cooperatives. They were the cotton, dairy, fruit and vegetable, grain and oilseed, miscellaneous marketing, and rice categories. The cotton ginning, livestock, and poultry classifications were the smallest users of banks for cooperatives.

Cotton ginning, livestock, nuts, and poultry were the largest users of commercial banks. Livestock cooperatives also relied heavily on bonds and notes issued to members and others for borrowed funds. Other sources was a major borrowing category for cotton ginning, farm supply, other services, and sugar. For farm supply cooperatives, the predominant other sources of borrowed funds were the finance subsidiaries of their regional cooperatives. For the other classifications of cooperatives, the other sources was a cross-section between the Small Business Administration, capitalized leases, and other cooperative financial institutions.

Financial Ratios

Three financial ratios-current ratio, net worth to total assets, and return on a 8~sets-are analyzed in this section. The current ratio-calculated by dividing current assets by current liabilities-is a standard measure of liquidity or an organization's ability to meet current obligations. Net worth to total assets is calculated by dividing a firm's total net worth by total assets. It measures solvency and shows how much of the cooperative is owned by its members compared with its creditors. Return on assets is measured by dividing net income before taxes by total assets. It shows what type of return is received on the assets used in the business. Comparisons for each of these ratios are made by principal product or service, by asset size, and by geographical region.

Table 16 shows the financial ratios by principal product or service classification. The average current ratio for all cooperatives in the study was 1.3. Marketing-type cooperatives (cotton, dairy, fruit & vegetable, grain and oilseed, livestock, miscellaneous

Table **14-Sources of borrowed funds, b y size of cooperative, fiscal 1997**

Size (total assets)	Cooperatives	Total borrowed funds	Percentage of borrowed funds represented by: Borrowed from banks for cooperatives	Borrowed from commercial banks	Bonds and notes issued by cooperatives	Other sources
Million dollars	Number	Million dollars	Percent			
Less than 1.0	295	18.7	20.7	63.7	5.4	20.2
1-4.9	886	326.7	52.1	17.6	6.3	25.1
6-9.9	344	462.3	67.2	10.2	4.8	17.9
10-24.9	266	816.6	63.8	12.8	8.3	16.2
25-99.9	94	1,079.4	78.8	9.7	7.1	4.6
100-499.9	39	2,411.6	69.6	13.1	8.6	8.9
600-999.9	9	2,467.4	62.2	9.8	11.0	17.0
1,000 and over	6'	3,254.1	23.7	25.0	29.9	21.4
All sizes	1,929	10,826.6	63.9	15.6	16.1	16.4

Table **15-Sources of borrowed funds, by principal product or service, fiscal 1997**

Principal product or service	Cooperatives	Total borrowed funds	Borrowed from banks for cooperatives	Borrowed from commercial banks	Bonds and notes issued by cooperatives	Other sources
			Percentage of borrowed funds represented by			
	Number	*Million dollars*	*Percent*			
Cotton	14	237.9	74.5	22.9	0.7	1.9
Cotton ginning	126	41.6	35.1	31.0	10.0	24.0
Dairy	87	869.9	65.1	21.4	1.3	12.2
Farm supply	859	3,139.8	52.1	4.6	18.7	24.6
Fruit & vegetable	110	1,599.4	57.2	12.3	20.3	10.2
Grain & oilseed	609	1,312.5	73.6	9.1	9.5	7.9
Livestock	22	1,232.9	24.2	34.2	36.6	5.1
Misc. marketing 1	20	641.4	81.5	13.5	1.2	3.9
Nuts	8	161.1	48.8	32.2	12.2	6.8
Other services 2	51	26.1	46.9	28.2	-	25.1
Poultry	6	539.9	9.1	52.4	18.6	19.9
Rice	6	250.6	86.4	10.9	-	2.8
Sugar	11	773.6	49.2	13.2	0.2	37.4
All products/services	1,929	10,826.6	63.9	15.6	15.1	15.4

1 Includes dry beans and peas, fishery, and miscellaneous products.
2 Includes artificial insemination, transportation, rice dryers, and other miscellaneous services

Table **1"elected financial ratios, by principal product or service, fiscal 1997**

Principal product or service	Current ratio	Net worth to total assets	Return on assets
	Number	*Percent*	
Cotton	1.6	46.4	8.1
Cotton ginning	1.5	62.1	28.4
Dairy	1.3	40.2	7.5
Farm supply	1.5	46.6	6.4
Fruit & vegetable	1.4	31.7	3.6
Grain & oilseed	1.3	46.1	5.6
Livestock	1.2	29.7	5.4
Misc. marketing 1	0.7	40.3	0.3
Nuts	2.0	42.7	2.2
Other services 2	2.2	68.6	8.8
Poultry	1.5	31.6	1.7
Rice	1.3	41.3	1.3
Sugar	1.1	28.1	(0.1)
All products/services	1.3	40.9	5.3

1 Includes dry beans and peas, fishery, and miscellaneous products.
2 Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

marketing, nuts, rice, and sugar) tended to have lower current ratios than farm supply and service cooperatives. The highest average current ratio was in other services, the lowest was miscellaneous marketing.

Net worth to total assets averaged 40.9 percent (Table 16). Cotton ginning and other services cooperatives had net worth to total assets well above the aver age because they have less invested in fixed assets than other types. Also in many cases with cotton gin ning cooperatives, these assets have also been significantly depreciated. This same situation explains why cotton ginning cooperatives had a return on assets of 28.4 percent compared to the average of 5.3 percent for all cooperatives in the study.

Table 17 presents the three ratios by total asset size of cooperatives in the study. Generally, the small er-sized cooperatives demonstrated better ratio performance than larger cooperatives for the current ratio and net worth to total assets measurements. This is consistent with the more conservative financial structure depicted in Table 11. The return-on-asset ratio did not show a consistent relationship between size categories. Return on assets is based on one year's results and is more reflective of the cooperative product or Service types that make up each size group.

Table 17-**Selected financial ratios, by size of cooperative, fiscal 1997**

Size on	Current		Net worth to
(total assets)	ratio	total assets	assets
Million dollars	*Number*	--------*Percen*---------------	
Less than 1.0	2.1	67.6	6.5
1-4.9	1.7	62.8	8.0
5-9.9	1.4	55.6	7.4
10-24.9	1.3	49.2	7.1
25-99.9	1.2	39.1	4.9
100-499.9	1.4	39.9	4.3
500-999.9	1.1	32.3	2.7
1,000 and over	1.4	35.6	6.1
All sizes	1.3	40.9	5.3

Table 18.-**Selected financial ratios by geographical region, fiscal 1997**

Return on	Geographical	Current	Net worth toReturn
region	ratio	total assets	assets
	Number	-------------*Percent*------------	
Appalachia	1.7	48.9	8.5
Corn belt	1.3	43.8	6.5
Delta states	1.4	42.4	1.3
Lake states	1.2	40.7	5.1
Mountain	1.2	30.1	4.2
Northeast	1.3	24.3	3.2
Northern plains	1.3	50.5	5.2
Pacific	1.3	37.7	5.1
Southeast	1.5	35.9	2.2
Southern plains	1.8	61.3	11.9
All regions	1.3	40.9	5.3

The geographical comparison of financial ratios shown in Table 18 demonstrates the diversity of cooperative types within regions. The highest performing regions, Appalachia and Southern Plains, reflect the composition of cooperatives in those regions, such as cotton ginning, which showed the best performance for product or service categories.

Tables 19 through 22 show the distribution, by number of cooperatives and total assets, according to the their equity-to-assets ratio and return on equity. In Tables 19 and 21, these two ratios are shown by principal product or service. Tables 20 and 22 depict these ratios by total asset size. The purpose of these tables is to give individual cooperatives information for comparison with their own operations.

The equity-to-assets ratio by principal product or service is shown in Table 19. Except for the Other Services category, every other cooperative type had the largest percentage of assets in the 0.24 to 0.49 equity-to-assets range. The distribution by number of cooperatives was more varied across the range of ratio values than for total assets, but the largest percentage of cooperatives by number fell in the 0.50 to 0.74 equity-to-assets range. Smaller cooperatives generally had higher equity-to-assets ratios as evidenced by the larger number represented in the higher equity-to-assets ratio columns. Exceptions to this include cotton, fruit and vegetable, nuts, and sugar because larger cooperatives dominate these product or service categories.

Size of assets and equity levels were inversely related for cooperatives in this survey. This relationship is quantified in the total line of Table 20. Cooperatives in the lowest two equity-to-assets ratio categories represent less than one-third of the cooperatives in the survey, but held 75 percent of total assets. Cooperatives in the two highest categories of equity to-assets ratios had more than two-thirds of the number of cooperatives, but only 24 percent of total assets.

Also from Table 20, cooperatives with less than $1 million in total assets had more than 50 percent of the number of cooperatives and nearly 50 percent of total assets represented in the highest equity-to-assets ratio category. In contrast, cooperatives with $1 billion or more in total assets had no cooperatives in the highest equity-to-assets range.

Cooperatives showed a wide variation in performance as measured by return on assets by principal product or service (Table 21). For all cooperatives, the largest proportion both by number of cooperatives and total assets fell in the 5 to 7.49-percent return on asset level. Cotton ginning cooperatives had the largest percentage by number of cooperatives and total assets in the highest return on assets category, 15 percent or more. In contrast, the sugar category had more than 90 percent of total assets held by cooperatives in the two lowest return on assets levels. The performance of cot ton cooperatives was mixed. Half of them reported return on assets of less than 2.5 percent, but more than 20 percent of total assets were in the 15 percent or higher asset return category. The major share of assets of both grain marketing and farm supply cooperatives fell in the 5 to 10 percent return on assets range.

Table 22 reports the frequency distribution of cooperatives and total assets, by return on assets, by size of cooperative. Those with less than $1 million in total assets showed the highest percentage, both by number of cooperatives and asset totals, in the classifi-

Table 19--**Frequency distribution of cooperatives and total assets according to equity/total assets, by principal product or service, fiscal 1997**

Principal product or service	Equity to total assets ratio			
	Less than .26	.25 to .49	.50 to .74	.75 to 1.0
	Percent			
Cotton				
Cooperatives	35.7	28.6	28.6	7.1
Total assets	27.2	31.3	21.3	20.2
Cotton ginning				
Cooperatives	4.0	20.6	39.7	35.7
Total assets	2.4	25.0	42.7	29.9
Dairy				
Cooperatives	20.7	34.5	24.1	20.7
Total assets	4.3	82.0	13.1	0.6
Farm supply				
Cooperatives	2.0	19.1	45.8	33.2
Total assets	13.6	44.7	35.3	6.4
Fruit & vegetable				
Cooperatives	22.7	38.2	21.8	17.3
Total assets	26.8	67.4	5.0	0.8
Grain & oilseed				
Cooperatives	4.6	35.8	44.8	14.8
Total assets	7.5	58.8	29.3	4.4
Livestock				
Cooperatives	22.7	27.3	9.1	40.9
Total assets	10.1	89.5	0.1	0.3
Misc. marketing [1]				
Cooperatives	15.0	40.0	30.0	15.0
Total assets	0.3	94.1	0.6	5.0
Nuts				
Cooperatives	12.5	50.0	12.5	25.0
Total assets	0.2	98.9	0.5	0.4
Other services [2]				
Cooperatives	2.0	19.6	21.6	56.9
Total assets	0.4	22.4	18.7	58.4
Poultry				
Cooperatives	-	83.3	16.7	-
Total assets	-	99.9	0.1	-
Rice				
Cooperatives	-	50.0	-	50.0
Total assets	-	99.9	-	0.1
Sugar				
Cooperatives	9.1	54.5	36.4	-
Total assets	38.5	52.6	8.8	-
All products/services				
Cooperatives	5.7	27.3	41.0	26.1
Total assets	12.8	63.4	19.6	4.2

Includes dry beans and peas, fishery, and miscellaneous products.

[2] Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

Table 20**--Frequency distribution of cooperatives and total assets according to equity/total assets, by size of cooperative, fiscal 1997**

Size (total assets)	Equity to total assets ratio			
	Lessthan.25	.25 to .49	.50 to .74	.75 to 1.0
Million dollars	*Percent*			
Less than 1.0				
Cooperatives	8.1	14.2	25.1	52.5
Total assets	7.5	14.5	28.6	49.5
1-4.9				
Cooperatives	4.0	18.6	44.8	32.6
Total assets	3.3	20.5	46.6	29.6
5-9.9				
Cooperatives	2.9	29.9	55.5	11.6
Total assets	3.1	30.2	55.7	11.0
10-24.9				
Cooperatives	6.3	44.5	43.0	6.3
Total assets	6.7	45.1	42.2	6.0
25-99.9				
Cooperatives	14.9	69.1	12.8	3.2
Total assets	15.3	69.6	12.2	2.8
100-499.9				
Cooperatives	17.9	66.7	12.8	2.6
Total assets	14.1	69.8	14.0	2.1
500-999.9				
Cooperatives	22.2	77.8	0.0	0.0
Total assets	19.4	80.6	0.0	0.0
1,000 and over				
Cooperatives	16.7	66.7	16.7	0.0
Total assets	13.5	71.1	15.4	0.0
All sizes				
Cooperatives	5.7	27.3	41.0	26.1
Total assets	12.8	63.4	19.6	4.2

Table 21-**Frequency distribution of cooperatives and total assets according to return on assets, by principal product or service, fiscal 1997**

Principal product or service	Return on assets: Less than 0	0 to 2.49	2.5 to 4.99	5 to 7.49	7.5 to 9.99	10 tol 2.49	12.5 to 14.99	15 or more
	Percent							
Cotton								
Cooperatives	7.1	42.9	7.1	-	14.3	7.1	7.1	14.3
Total assets	0.1	37.0	13.9	-	9.3	2.2	14.7	22.8
Cotton ginning								
Cooperatives	17.5	7.9	3.2	4.0	3.2	4.8	4.8	64.8
Total assets	7.5	6.7	1.2	4.5	1.9	5.8	6.6	65.7
Dairy								
Cooperatives	11.5	17.2	8.0	13.8	19.5	8.0	6.9	14.9
Total assets	2.0	22.5	1.8	43.1	10.6	1.3	7.1	11.6
Farm supply								
Cooperatives	10.4	12.6	17.0	20.4	18.4	9.9	6.1	5.4
Total assets	7.6	15.8	8.7	20.6	25.5	16.8	3.1	1.9
Fruit & vegetable								
Cooperatives	20.0	21.8	13.6	7.3	4.5	7.3	4.5	20.9
Total assets	2.3	23.0	59.7	8.1	2.4	1.8	0.7	2.1
Grain & oilseed								
Cooperatives	11.5	14.0	19.2	23.2	17.9	7.6	4.8	2.0
Total assets	5.8	9.6	18.5	40.4	16.6	4.9	2.3	1.8
Livestock								
Cooperatives	9.1	27.3	22.7	13.6	9.1	4.5	9.1	4.5
Total assets	0.6	10.1	0.8	87.5	0.8	0.1	[3] -	[3] -
Misc. marketing [1]								
Cooperatives	25.0	15.0	15.0	15.0	5.0	5.0	-	20.0
Total assets	45.7	0.2	3.7	47.5	0.2	0.2	-	2.5
Nuts								
Cooperatives	12.5	25.0	25.0	12.5	12.5	-	-	12.5
Total assets	0.2	63.0	35.2	0.9	0.2	-	-	0.5
Other services [2]								
Cooperatives	7.8	13.7	5.9	13.7	7.8	11.8	3.9	35.3
Total assets	11.9	24.4	5.6	18.9	1.1	6.7	11.2	20.2
Poultry								
Cooperatives	-	33.3	16.7	16.7	-	-	33.3	-
Total assets	-	90.9	0.7	2.7	-	-	5.7	-
Rice								
Cooperatives	-	50.0	-	16.7	-	-	-	33.3
Total assets	-	99.9	-	3-	-	-	-	3
Sugar								
Cooperatives	18.2	45.5	27.3	9.1	-	-	-	-
Total assets	33.9	62.1	3.3	0.7	-	-	-	-
All products/services								
Cooperatives	11.8	14.3	15.9	18.6	15.7	8.3	5.4	9.9
Total assets	7.8	22.4	14.9	29.1	12.6	6.6	2.9	3.8

1 Includes dry beans and peas, fishery, and miscellaneous products.
2 Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.
3 Less than 0.1

Table **22-Frequency distribution of cooperatives and total assets according to return on assets, by size of cooperative, fiscal 1997**

Size (total assets)	Return on assets							
	Less than 0	0 to 2.49	2.5 to 4.99	5 to 7.49	7.5 to 9.99	10 to 12.49	12.5 to 14.99	15 or more
Million dollars	*Percent*							
Less than 1.0								
Cooperatives	29.5	15.6	14.9	9.2	7.5	4.7	4.1	14.6
Total assets	23.0	16.1	16.9	11.4	8.2	5.3	5.6	13.6
1-4.9								
Cooperatives		13.8	13.3	19.1	16.9	9.0	6.2	11.1
Total assets	9.4	13.3	13.6	18.9	17.7	9.4	6.7	11.0
5-9.9								
Cooperatives		11.3	19.8	20.6	17.2	10.2	5.8	7.8
Total assets	7.3	11.5	19.7	20.3	17.4	10.1	5.9	7.8
10-24.9								
Cooperatives		10.9	20.3	24.6	19.1	11.7	3.5	6.3
Total assets	3.5	10.7	20.7	24.9	19.2	10.7	3.6	6.6
25-99.9								
Cooperatives		22.3	16.0	19.1	20.2	1.1	6.4	5.3
Total assets	8.8	25.3	14.7	20.3	19.4	0.8	6.0	4.7
100-499.9								
Cooperatives		43.6	17.9	12.8	7.7	-	7.7	5.1
Total assets	9.1	39.5	16.1	15.2	9.3	-	4.8	6.1
500-999.9								
Cooperatives		11.1	33.3	33.3	-	-	-	-
Total assets	19.4	10.9	30.8	38.9	-	-	-	-
1,000 and over								
Cooperatives	-	33.3	-	33.3	16.7	16.7	0.0	0.0
Total assets	-	25.2	-	43.8	15.7	15.4	0.0	0.0
All sizes								
Cooperatives		14.3	15.9	18.6	15.7	8.3	5.4	9.9
Total assets	7.8	22.4	14.9	29.1	12.6	6.6	2.9	3.8

cation with negative returns. At the same time, this size category had the highest percentage in the 15 percent or more return on assets category. The return on assets of the smallest asset class extends over all return levels, but as size increases, the proportion of number of cooperatives and total assets tends to move away from the extremes of the return on assets level and to aggregate toward the middle. In the three size categories from $5 million to $99.9 million, more than 50 percent of cooperative numbers and total assets fell in the return on asset range of 2.5 percent to 9.9 percent.

Conclusion

This report marks the sixth survey of financial practices and performance of agricultural cooperatives. The first survey was conducted based on fiscal 1954 data. In this report, information is presented that compares previous studies with data collected for this survey. Many changes have taken place in the intervening years as agricultural cooperatives have diminished in numbers and grown in size as the result of consolidations.

Comparison of data from all six studies shows that some trends in financial structure have continued and some have reversed, particularly when 1987 and 1997 data are highlighted. For example, prior to 1987, equity capital had shown a steady decline, increased in 1987, but continued the decline in 1997. Similarly, the use of borrowed funds exhibited a steady increase until 1987 when a decline occurred, but the upward trend continued in 1997. Other liabilities, on the other hand, increased in each of the survey years. Fiscal 1987 saw some fundamental structural changes occur for agricultural cooperatives as specific responses to the financial difficulties experienced in the late 1970s into the mid-1980s. For the most part, 1997 data exhibited a return to more normal patterns.

Distribution of net income practices was also compared from survey to survey. Many product or service categories exhibited continuity in distribution practices throughout the survey years. Other categories, such as fruit and vegetable and sugar showed a significant change in the pattern of cash patronage refund payments. In addition, most categories in 1997 continued the practice established in 1987 of distributing a greater percentage of net income as unallocated equity.

A detailed analysis of 1997 data indicated that investment in other cooperatives and patronage refunds received from other cooperatives plays a significant role in the financial structure and operating results for local cooperatives, primarily those in the grain and farm supply categories.

Differences in financial structure were evidenced between different product or service categories and between cooperatives of different size. This was most apparent in equity capital levels. For instance, market ing-type cooperatives generally had lower equity levels as a percent of total assets compared to farm supply and service types. Smaller cooperatives generally had higher equity levels than large cooperatives. As coop erative size increased, equity as a percent of total assets decreased and long-term liabilities increased.

Cooperatives in general received the majority of borrowed funds from banks for cooperatives-on average 54 percent. Commercial banks, bonds and notes issued by cooperatives, and other sources were evenly split in providing the remainder. Considerable variability existed between size and product or service categories, however. For the smallest cooperatives, commercial banks were the predominant source. For the largest size category, bonds and notes provided the most borrowed funds.

By product or service category, cotton, grain and oil seed, and rice were the largest users of banks for cooperatives. The cotton ginning, poultry, and live stock categories were the smallest users.

Three financial ratios were compared for this study-current ratio, equity to assets, and return on assets. These comparisons were made by product or service category, size, and geographical region. The average current ratio for all cooperatives in the study was 1.3 to 1. Equity to total assets averaged 40.9 per cent and return on assets was 5.3 percent. As with other financial comparisons in this study, considerable variability existed between commodity types and size. Geographical comparisons tended to reflect the pre dominant product or service types in the region. The most contrast existed when size differences were com pared. Small cooperatives, on average, reported significantly higher current ratios and equity to asset relationships. Frequency distribution tables were used to reflect the variability in these ratios among commodity types and size ranges.

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Appendix table 1-Frequency distribution of cooperatives and total assets according to current ratio, by principal product or service, fiscal 1997

Principal product or service	Return on assets: Less than 1.0	1 to 1.24	1.25 to 1.49	1.50 to 1.99	2.0 to 2.99	3.00 to 4.99	5.0 or more
	Percent						
Cotton							
Cooperatives	-	36.7	7.1	28.6	14.3	14.3	-
Total assets	-	38.8	2.3	21.3	17.3	20.3	-
Cotton ginning							
Cooperatives	18.3	21.4	10.3	13.5	11.1	10.3	15.1
Total assets	17.9	27.7	8.5	16.2	15.8	7.7	6.3
Dairy							
Cooperatives	9.2	31.0	18.4	13.8	10.3	3.4	13.8
Total assets	3.3	29.6	54.7	1.9	10.3	0.1	0.1
Farm supply							
Cooperatives	5.5	14.2	18.4	19.9	17.7	13.4	10.9
Total assets	1.1	46.7	17.8	12.6	18.1	2.3	1.3
Fruit & vegetable							
Cooperatives	19.1	30.9	16.4	11.8	6.4	3.6	11.8
Total assets	2.5	29.0	12.3	54.2	0.4	0.1	1.4
Grain & oilseed							
Cooperatives	1.8	35.3	25.3	19.0	8.0	5.1	5.4
Total assets	1.5	62.9	19.0	11.2	2.7	1.7	1.0
Livestock							
Cooperatives	-	40.9	13.6	-	-	-	45.5
Total assets	-	95.6	4.1	-	-	-	0.4
Misc. marketing [1]							
Cooperatives	25.0	20.0	15.0	15.0	15.0	5.0	5.0
Total assets	40.9	3.5	50.0	0.3	0.3	2.3	2.7
Nuts							
Cooperatives	12.5	12.5	12.5	37.5	-	12.5	12.5
Total assets	0.2	0.5	25.4	38.7	-	35.0	0.2
Other services [2]							
Cooperatives	3.9	3.9	19.6	11.8	21.6	9.8	29.4
Total assets	0.7	2.4	16.5	19.7	36.2	17.0	7.7
Poultry							
Cooperatives	-	16.7	66.7	16.7	-	-	-
Total assets	-	2.0	97.9	0.1	-	-	-
Rice							
Cooperatives	-	33.3	16.7	-	-	-	50.0
Total assets	-	36.6	63.3	-	-	-	0.1
Sugar							
Cooperatives							
Total assets	9.1	46.5	18.2	27.3	-	-	-
	38.5	46.8	11.7	2.9	-	-	-
All products/services							
Cooperatives	6.2	23.5	19.9	18.1	12.8	9.1	10.4
Total assets	5.2	44.6	24.6	14.3	8.0	2.2	1.0

1. Includes dry beans and peas, fishery, and miscellaneous products.
2 Includes artificial insemination, transportation, rice dryers, and other miscellaneous services.

Appendix table 2-**Frequency distribution of cooperatives and total assets according to current ratio, by size of cooperative, fiscal 1997**

Size (total assets)	Current ratio						
	Less than 1. 1 to 1.24		1.25 to 1.49	1.50 to 1.99	2.0 to 2.99	3.00 to 4.99	5.0 or more
Million dollars	*Percent*						
Less than 1.0							
Cooperatives	12.1	6.4	9.2	12.4	13.1	15.6	31.2
Total assets	13.4	5.8	9.7	14.3	14.5	17.0	25.3
1-4.9							
Cooperatives	6.5	15.7	17.8	19.9	17.3	12.3	10.5
Total assets	6.0	17.5	19.8	21.2	16.5	10.8	8.2
5-9.9							
Cooperatives	3.8	29.4	29.9	23.0	9.6	3.5	0.9
Total assets	3.6	29.5	30.6	23.1	9.2	3.1	0.9
10-24.9							
Cooperatives	2.7	45.3	25.0	16.4	7.0	2.7	0.8
Total assets	2.7	46.1	25.2	16.2	6.8	2.4	0.6
25-99.9							
Cooperatives	5.3	59.6	21.3	7.4	3.2	1.1	2.1
Total assets	4.4	60.5	22.1	6.5	3.4	0.9	2.2
100-499.9							
Cooperatives	-	46.2	25.6	17.9	5.1	5.1	-
Total assets	-	41.1	32.3	16.7	5.6	4.3	-
500-999.9							
Cooperatives	22.2	33.3	11.1	33.3	-	-	-
Total assets	21.3	36.1	11.8	30.8	-	-	-
1,000 and over							
Cooperatives	-	50.0	33.3	-	16.7	-	-
Total assets	-	56.7	27.9	-	15.4	-	-
All sizes							
Cooperatives	6.2	23.7	20.0	18.2	12.9	9.1	9.8
Total assets	6.2	44.6	24.6	14.3	8.0	2.2	1.0

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The cooperative segment of RBS (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the \ public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs. RBS also publishes research and educational materials and issues *Rural Cooperatives* magazine.
