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HOW FARM MARKETING

COOPERATIVES RETURN

SAVINGS TO PATRONS

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FCS RESEARCH REPORT 7

FARMER COOPERATIVE SERVICE

U.S. DEPARTMENT OF AGRICULTURE

UNITED STATES DEPARTMENT OF AGRICULTURE
FARMER COOPERATIVE SERVICE
Washington, D.C. 20250

Farmer Cooperative Service conducts research; advises directly with cooperative leaders and others; promotes cooperative organization and development through other Federal and State agencies; and publishes results of its research, issues *News for Farmer Cooperatives*, and other educational material.

This work is aimed (1) to help farmers get better prices for their products and reduce operating expenses, (2) to help rural and small-town residents use cooperatives to develop rural resources, (3) to help these cooperatives expand their services and operate more efficiently, and (4) to help all Americans understand the work of these cooperatives.

December 1969

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HIGHLIGHTS

The Nation's farmer-owned marketing associations have adhered to the operation-at-cost principle—and managed to save their patrons millions of dollars in the process.

Information from 107 marketing regionals contacted in 1966 indicated 87 percent were providing services at cost and had returned savings of \$164 million over a recent 5-year period. This was a 38 percent sample of the 280 regional marketing cooperatives in the country.

These Farmer Cooperative Service (FCS) findings refute the charge that farmer-owned marketing concerns are drifting away from the service-at-cost principle, that they really differ little from noncooperative businesses. Instead, the study revealed that these marketing regionals adhered to the basic cooperative principle of providing service to patrons on a nonprofit basis, while contributing substantially to the economic well-being of their patrons.

Half of the 107 marketing regionals had centralized membership structures. To operate at cost, most of the centralized associations returned net savings on hand at yearend directly to individual farmers in the form of patronage refunds. The others used pool accounting methods that returned all net proceeds to patrons after marketing their products and deducting operating expenses.

Federations operated at cost by distributing end-of-year savings on a patronage basis to other cooperatives, their member associations. These cooperatives in turn made refunds to individual producers. Regionals with both cooperative and farmer memberships refunded savings to both types of their mixed memberships.

"Net margins" and "net savings," as used in this study, are not synonymous. Dividends paid on capital stock at going interest rates, or less, and Federal and State income taxes were regarded as deductions from net margins before arriving at net savings. Thus,

regionals paying such dividends and taxes had smaller net savings than net margins.

This FCS study defines patronage refunds—also referred to as patronage dividends—as savings distributed to patrons based on their volume of business with the cooperative. Such refunds were made after the close of a fiscal year or other accounting period. They included net amounts left after cost of products sold to, or marketed for, patrons and all operating expenses had been paid.

In providing services to patrons, 92 of the 107 marketing regionals operated mainly or entirely on a net margins basis. Only 15 used pool accounting methods. It was readily apparent that the pooling cooperatives operated at cost because after the close of an accounting period they retained no net margins or savings.

The pooling regionals did not separate payments to patrons into market value plus savings. They made no separate determination of any savings realized from their marketing activities but included these savings in total payments to patrons. They acquired capital from members who invested a fixed amount per unit of product the cooperative marketed for them.

Of the 92 marketing regionals operating on a net margins basis, 75 reported net margins and 16 net losses; one broke even.

The 75 marketing regionals used 10 different methods in disposing of net margins. Most of the methods resulted in operations on a cost basis. A few did not.

A method of distributing net margins, as classified in this study, consisted of only one element or procedure—distributing all margins as refunds on a patronage basis or as dividends on a stock basis; or of several elements or procedures—paying refunds, Federal and State income taxes, and treating a part of margins as retained earnings.

The cooperatives were judged to be truly operating on the basis of services-at-cost if they distributed all net savings to all patrons, or a specified group of patrons, based on their use of the cooperatives' services.

The 10 methods the 75 marketing regionals used to distribute net margins—listed in order of their importance on a dollar volume basis—included: (1) patronage refunds only, (2) refunds, dividends, and taxes, (3) refunds and dividends, (4) refunds, dividends, retained earnings, and taxes, (5) refunds and taxes, (6) refunds, retained earnings, and taxes, (7) absorption of prior years' losses, (8) retained earnings and taxes, (9) refunds, dividends, and contributions to employee margin-sharing plan, and (10) dividends only.

Patronage refunds were the basic element in seven of the 10 methods. Twenty-four cooperatives used patronage refunds only in returning to patrons 100 percent of their yearend net margins. Altogether, 57 of the 75 marketing regionals used margin distribution methods based primarily or completely on patronage refunds. Eighteen used methods that did not include refunds.

Patronage refunds accounted for about 92 percent of the \$38.1 million of total net margins the 75 regionals reported for that year. Dollarwise, margins distributed on a stock basis were relatively unimportant, amounting to about 4 percent of total margins.

Likewise, the regionals had little or no taxable income because patronage refunds, for the most part, met certain Federal income tax law requirements. These permitted cooperatives to exclude patronage refunds in figuring gross income. Unallocated margins kept by the marketing regionals as retained earnings were also a small percent of total net margins.

Sixty-nine percent of the 75 marketing regionals operated at cost by using methods which resulted in 100 percent of net savings being refunded on a patronage basis. Of the other 31 percent, six refunded 91 percent or more of their net savings. Seventeen regionals rated zero on operations at cost although five completed the year at about the break-even, or cost, level with very small net savings.

Altogether, 52 of the 75 regionals, the one break-even regional, and the 15 pooling regionals—for

a total of 68—operated completely at cost. They represented 75 percent of the 91 regionals. If the six regionals with operation-at-cost ratings in the 90's and the five with net savings near the break-even level are included with the regionals with 100 percent ratings, then 87 percent of the marketing regionals operated at, or very close to, the cost level in providing services to patrons.

These regionals used five different methods in calculating refunds: (1) by total business, (2) by departments, (3) by divisions, (4) by subsidiaries, and (5) by combination of methods.

The total business method calls for calculation of refunds based upon a single refund rate. Sixty-two percent of the regionals used this method in computing refunds.

The departmental method groups together sub-functions within a major function—such as marketing or farm supplies—to obtain closer similarity of margins on transactions. A refund rate is computed for each department, based on its net savings and patronage. Twenty-one percent of the associations used the departmental method.

Only eight of the cooperatives used patronage within a major function or division—such as marketing products or selling farm supplies—as the base for determining average unit savings above cost. In each case, the cooperatives performed two major functions, which they did not further divide into departments because (1) only one or similar kinds of products or services were included in the function, and (2) the volume of patronage in a function was too small to justify the additional cost of departmentalizing it.

The parent-subsidiary arrangement in computing average unit savings to be returned to patrons was used by only one of the regionals. The parent cooperative controlled and coordinated four major functions conducted by four subsidiaries. In refunding net savings to individual farmers, the parent association computed rates of refund by major function, returning a subsidiary's savings to patrons using that service.

Six percent of the cooperatives used a combination of these methods.

The 107 regionals reported on the amount of cash and noncash refund annually from 1961 through 1965. During these 5 years, 78 of the 107 paid refunds. Forty-five of the 78 paid patronage refunds annually for each of the 5 years. Eleven missed only 1 year in 5; nine missed 2 years; six missed 3 years; and seven cooperatives made only one payment during the 5-year span. Altogether, the 78 marketing regionals made 315 yearly payments out of a possible 382. The resulting score of 82 percent indicates a fairly high degree of consistency in payment of annual refunds.

Total patronage refunds the 78 regionals paid annually during the 5-year period fluctuated between \$30 million and \$35 million. Notwithstanding a drop in 1962, the overall trend in total dollar volume of refunds distributed over the 5 years was upward.

Altogether, total savings returned to patrons as patronage refunds during the 5 years amounted to \$164 million. Thirty-eight percent of the refunds were paid in cash and 62 percent in noncash forms. This money represents income or savings farmers would have lost without their cooperatives.

HOW FARM MARKETING COOPERATIVES RETURN SAVINGS TO PATRONS

By Donald R. Davidson

Business Organization Division

Cooperative marketing of farm products generally results in net margins or savings at the end of the year. Such savings accrue to the farmer, in addition to the market value he has received for his product. While methods for disposing of yearend net margins or savings vary, the patronage refund has long represented one of the most practical ways a cooperative operates on a cost-of-doing-business basis.

Simply stated, patronage refunds are a basic tool with a three-fold purpose: operating at cost, returning savings to patrons, and financing operations. Even such a basic cooperative procedure, however, should be subject to periodic reevaluation. Therefore, Farmer Cooperative Service (FCS) has studied farm

marketing cooperatives on a nationwide basis to find answers to such questions as:

- How widely are patronage refunds used?
- What proportion of net margins do they represent?
- How are refunds (or average unit savings) computed?
- What part of the refund reaches the farmer as cash?
- What percentage of refunds do patrons invest in cooperatives?
- What changes are occurring in refund practices?
- With what consistency are refunds paid?
- What are the trends in size and makeup of refunds?

PREVIEW OF PROBLEM

A study of patronage refunds is especially valuable today when the Department of Agriculture and other public and private agencies are increasingly emphasizing the significance of the cooperative form of business organization in improving farm income. Because of the traditional importance of the patronage refund in increasing farm earnings, FCS has studied today's regional marketing associations to evaluate how effectively they are using refunds to achieve the goal of providing services at cost.

This FCS study defines patronage refunds—also referred to as patronage dividends—as savings distributed to patrons based on their volume of business with the cooperative. Such refunds, usually made after the close of a fiscal year or other accounting period, include net amounts left after cost of products sold to, or marketed for, patrons and all operating expenses have been paid.

Patronage refunds are paid (1) in cash; (2) in capital stock, revolving-fund certificates, letters of advice, and the like; or (3) by crediting patrons' equity accounts without giving written notices of such allocations.

OBJECTIVES AND PROCEDURES OF STUDY

This report represents the second phase of the FCS study into methods and procedures farmer cooperatives use in distributing net margins and making patronage refunds.

The first part of this study, *Methods and Policies Used in Making Patronage Refunds by Selected Farmer Co-operatives* (General Report 137), was issued in October 1966. It covered personal interview data obtained from 18 regional cooperatives including

some of the nation's major farm supply and marketing associations. These initial findings provided the foundation and benchmarks necessary for subsequent phases of this work.

Need for Study

Major objectives of this study were to determine present-day importance of patronage refunds in operating at cost, distributing savings, and financing operations of regional marketing cooperatives; to identify and classify different methods individual regionals use in distributing net margins or savings; and to analyze and evaluate effectiveness of these methods in providing services on a cost basis.

FCS sought specific information on (1) disposition of net margins for the fiscal year association last realized such margins, (2) methods used in calculating refunds on a patronage basis, (3) recent changes in methods or procedures of allocating or distributing net margins to patrons on a business volume basis, (4) procedures used in distributing refunds, and (5) trends in composition and size of patronage refunds from 1961 through 1965.

Findings in this report will provide farmer members and other patrons of cooperatives with information that will help them gain a better understanding of the true meaning of operation at cost—a basic cooperative principle. This study shows the importance of organization and accounting procedures that enable an equitable determination and distribution of costs and savings. Moreover, it points up the use of patronage refunds in financing and owning a cooperative business.

The report should enable cooperative management to make better decisions about patronage refund policies. It should also be useful to people interested in the cooperative way of doing business, and to State and Federal workers in the cooperative field.

Scope

FCS records indicate that 280 marketing regionals operated in the United States in 1965. In January 1966, we mailed questionnaires to a sample of 122 associations. We received 107 responses from coop-

eratives marketing seven major types of commodities, as follows:

| <i>Type of marketing cooperative</i> | <i>Number of respondents</i> |
|--------------------------------------|------------------------------|
| Grain and soybean | 14 |
| Fruit, vegetable, and nut | 18 |
| Special crops | 24 |
| Cotton and oilseed | 10 |
| Dairy | 18 |
| Livestock and wool | 19 |
| Poultry and eggs | 4 |
| Total | 107 |

The 107 respondents represent a 38 percent sample of the 280 regional associations. (See appendix table 1 for details on sampling procedure used.) Figure 1 shows business volume and membership characteristics of these cooperatives. Figure 2 shows their location.

The 107 sample cooperatives presented a wide variation in business volume—ranging from \$65,000 to \$357 million with a median of \$13.4 million. The largest number (63 percent) were in the \$1 million - \$29.9 million volume-of-business class. Of these, 35 were centralized associations; 19, federated; and 13, centralized-federated (or mixed) cooperatives.

Half (54) of the 107 marketing regionals were centralized in membership structure. To operate at cost, most of the centralized regionals returned net savings on hand at the end of the year directly to individual farmers in the form of patronage refunds. Several used pool accounting methods that returned all net proceeds to patrons after marketing their products and deducting operating expenses. Business volumes of centralized associations ranged from \$541,000 to \$218 million with a median of \$6 million.

The other half of the regionals were about evenly divided between federated (29) and mixed-type (24) memberships. Federations distributed savings on a patronage basis to other cooperatives which in turn made refunds to individual producers. Their business varied from \$1.4 million to \$233 million with a median of \$22 million.

Mixed-member associations had the smallest (\$65,000) and largest (\$357 million) business volumes in the sample of 107. Median volume of business for this group was \$13.2 million. They refunded savings to individual growers and other cooperatives as well.

FIGURE 1.--107 REGIONAL MARKETING CO-OPS

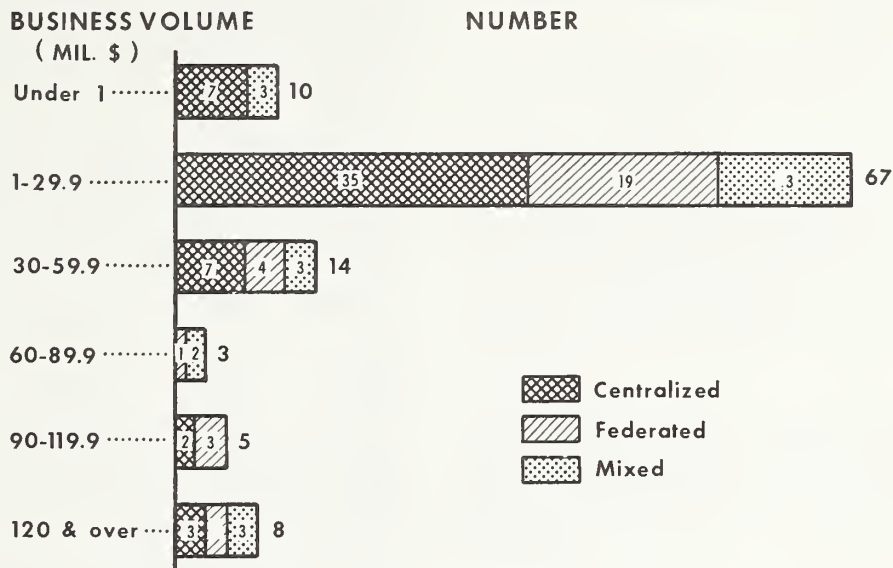


FIGURE 2.--LOCATION OF THE 107 REGIONAL FARM MARKETING CO-OPS PROVIDING DATA FOR THIS STUDY, MARCH 1966



Based on type of product marketed, class of members served, and volume of business transacted, the 107 respondents were a representative sample of all marketing regionals.

NET MARGINS VS. POOLING

As used in this study, “net margins” and “net savings” are not synonymous. Dividends paid on capital stock at going interest rates, or less, and Federal and State income taxes were regarded as deductions from net margins before arriving at net savings. Thus, net savings of regionals paying such dividends and taxes were smaller than their net margins.

In providing services to patrons, 92 of the 107 marketing regionals operated mainly or entirely on a net margins basis. Only 15 used pool accounting methods, operating at cost and retaining no net margins or savings after the close of an accounting period.

The pooling regionals acquired capital from members who invested a fixed amount per unit of product the cooperative marketed for them. They did not separate payments to patrons into market value and savings. Any savings realized from marketing activities were not determined separately but were included in total payments to patrons.

Of the 92 marketing regionals operating on a net margins basis, 75 reported net margins, 16 net losses, and one broke even for their fiscal year ending in 1965.

Distributing Net Margins

A method of distributing net margins, as defined in this study, consisted of only one element or procedure (such as distributing all margins as patronage refunds or distributing all margins as dividends on stock) or of several elements or procedures (such as making refunds, paying income tax, and keeping margins as retained earnings).

Classification of Methods—Before being able to evaluate how effectively the 75 associations provided services at cost, FCS first had to identify the different methods they used in disposing of 1965 net margins. According to FCS classification, they used 10 different methods. The 10 methods used are discussed in detail under Overview of Ways Cooperatives Operate at Cost.

That section of the study summarizes methods the co-ops used in computing average unit savings and distributing patronage refunds. It also ascertains trends in size and makeup of refunds. Throughout, it stresses the broader, functional approach, eliminating commodity differences.

The remainder of the report uses the commodity approach, giving an in-depth evaluation of how effectively each of the major marketing groups provided services at cost.

Evaluation of Methods—In evaluating a cooperative’s method of distributing yearend net margins, we considered the following main points:

1. If a cooperative distributed margins on a stock basis, did the dividends represent payment for use of capital—at going interest rates or less—needed to provide services for patrons?
2. When a cooperative used net margins to pay income tax, were such payments regarded as a cost item, not a distribution of savings?
3. If a cooperative had retained earnings, did this capital represent a part of yearend savings or of nonpatronage or incidental income? Or, in associations paying refunds to members only, did retained earnings come from savings attributable to nonmember business?
4. If margins were used to absorb a prior year’s operating loss, were margins or losses credited or charged to patrons on a current year patronage basis to assure greatest equitability?

An association may retain unallocated savings for several reasons. Some cooperatives pay patronage refunds to members only. Savings resulting from nonmember business are retained as income to the cooperative and used for capital purposes. Small refunds—less than \$1, for example—may not be returned to patrons because of the high cost of making such refunds in relation to their value.

Moreover, some State laws require cooperatives to maintain reserves of a certain amount as additional security to creditors, and some cooperatives have construed this to mean unallocated reserves. Finally, a cooperative may sometimes allow itself to drift away from the operation-at-cost principle.

Computing Refunds

Because of the size and complexity of a cooperative's operation, it would be highly impractical to determine net savings of each individual transaction. Therefore many cooperatives figure a rate of refund by dividing savings to be distributed as patronage refunds by total volume of patronage—measured, generally, either in dollars or in physical units (such as bushels, tons, or pounds). This rate is then used to determine each patron's refund. As long as all transactions between the cooperative and its patrons result in relatively similar savings, this method is equitable.

However, the situation may change if cooperatives expand their operations—for example, when a marketing cooperative adds supplies or a dairy bargaining cooperative diversifies its activities to include egg marketing. Then the equitability of patronage refund distribution usually is improved by determining net savings on a divisional or departmental basis. Separate refund rates are computed for distributing net savings from each operational unit to patrons on a patronage basis.

For this study, FCS grouped methods of computing refunds into five major classifications: (1) On

a total business basis; (2) on a divisional basis; (3) on a departmental basis; (4) on a parent-subsidiary basis; and (5) a combination of methods.

Distributing Refunds

Not only do marketing regionals use different methods of computing patronage refunds, but they also follow different procedures in distributing these refunds. Cooperatives generally distribute patronage refunds in the form of cash, written notices of allocation, or book credits without written notification to patrons.

Written notices of allocation include any capital stock, revolving fund certificates, or other notices that disclose to the patron the stated dollar amount allocated to him by the cooperative as a patronage refund.

For a written notice of allocation to be "qualified" and therefore not taxable to the cooperative, the cooperative must have paid the patron 20 percent or more of his patronage refund in cash. The patron must then consent to include the noncash refund in his gross income for the year in which he received it.

OVERVIEW OF WAYS COOPERATIVES OPERATE AT COST

During the 1960's, farmer cooperatives have continued to merge and consolidate, diversify, modernize, and computerize. Many have grown in membership, goods and services offered, and areas served.

In becoming better businesses, however, have these farmer-owned organizations become better cooperatives? In the midst of change, how well have they kept their unique cooperative character—providing services at cost? Or, as some critics maintain, do these associations now really differ little from other businesses?

Before considering how various types of marketing regionals—grain and soybean; special crops; fruit, vegetable and nut; cotton and oilseed; dairy; livestock and wool; and poultry and egg—return savings to

patrons, let us analyze the overall importance of patronage refunds to these associations.

DISPOSITION OF NET MARGINS

Of the 107 regional marketing cooperatives in the sample, 75 reported net margins or savings for fiscal years ending in 1965. Sixteen reported net losses and 15 used pool accounting methods that did not recognize yearend savings or losses.

One cooperative with several departments used both pooling and nonpooling methods in accounting to patrons for products marketed. Its grain department, operated on a net margins (or nonpooling) basis, broke even for the last several years—including 1965—showing neither savings nor losses.

Table 1.—Disposition of net margins, 75 regional marketing cooperatives, fiscal year ending in 1965

| Item | Amount | Proportion |
|--|----------------------|------------------|
| | <i>1,000 dollars</i> | <i>Percent</i> |
| Total net margins | 38,054 | 100.0 |
| Less: | | |
| Patronage refunds | 34,891 | 91.7 |
| Dividends on capital stock | 1,413 | 3.7 |
| Income taxes | 796 | 2.1 |
| Retained earnings | 629 | 1.7 |
| Net loss carryovers | 320 | 0.8 |
| Allotments to employee margin-sharing plan | 5 | (¹) |
| Total disposition | 38,054 | 100.0 |

¹ Less than 0.05 percent.

Table 1 shows total 1965 net margins of the 75 regionals, how they disposed of them, and significance of the different procedures used.

Since patronage refunds accounted for almost 92 percent of total net margins, distributing such margins on a patronage (or business volume) basis was clearly the dominant method of returning yearend savings to patrons. Dollarwise, margins distributed on a stock basis were relatively unimportant as were unallocated margins withheld as retained earnings.

Income taxes paid were insignificant because patronage refunds, for the most part, met Federal income tax law requirements permitting cooperatives to deduct them in computing taxable income. Although several cooperatives offset prior years' losses against current year margins, overall this practice had minor effect on 1965 savings. Sharing net margins with employees was a very limited practice.

In distributing 1965 net margins or savings, the 75 regionals used 10 different methods. These methods are listed in table 2 in order of importance from the standpoint of total dollars distributed. This table will clarify the meaning of "operation at cost" and provide a framework for evaluating how effectively each of the 75 marketing regionals performed services on a cost basis.

Patronage refunds was the basic procedure used in seven of the 10 methods. Altogether, 57 of the 75 associations used margin distribution methods based primarily—or completely—on patronage refunds. The other 18 used Methods VII, VIII, and X that did not include refunds. Percentage-wise, these three methods

Table 2.—Method of distribution and dollar value of net margins or savings, 75 cooperatives, 1965

| Method | Cooperatives | Net margins or savings | |
|--|-----------------|------------------------|------------------|
| | <i>Number</i> | <i>1,000 dollars</i> | <i>Percent</i> |
| I Refunds only | 24 | 12,960 | 34.1 |
| II Refunds, dividends, and taxes | 2 | 7,656 | 20.1 |
| III Refunds and dividends | 11 | 5,934 | 15.6 |
| IV Refunds, dividends, retained earnings, and taxes | 5 | 4,919 | 12.9 |
| V Refunds and taxes | 3 | 4,333 | 11.4 |
| VI Refunds, retained earnings, and taxes | 11 | 1,644 | 4.3 |
| VII Absorption of prior years' net operating losses | 4 | 320 | 0.8 |
| VIII Retained earnings and taxes | 13 | 222 | 0.6 |
| IX Refunds, dividends, and contributions to employee margin-sharing plan | 1 | 54 | 0.2 |
| X Dividends only | 1 | 12 | (¹) |
| Totals | ² 75 | 38,054 | 100.0 |

¹ Less than 0.05 percent.

² Of the 107 marketing regionals making up the sample, 75 reported net margins for 1965.

accounted for a very small amount—1.4 percent of the \$38.1 million of net margins resulting from 1965 operations.

This criterion was used to determine if the method of accounting for net margins resulted in services to patrons on a cost basis: *Did the method return all savings on transactions with all patrons, or a specified group of patrons, above the cost of performing such transactions in 1965 based on that year's patronage?*

Method I—Patronage Refunds Only

The most popular method of disposing of net margins proved to be total distribution as patronage refunds (Method I). Twenty-four of the 75 cooperatives used this method which clearly meets our criterion for operating at cost.

Net margins of the 24 were nearly twice as large, on the average, as net margins for the whole group. Net margins of the 24 ranged from \$6,000 to \$4 million with a median of \$250,000. Yearend margins of the 75 varied from \$300 to \$7.4 million with a median of \$130,000.

Of the 24 cooperatives using patronage refunds only, about 70 percent operated under Section 521 of the Internal Revenue Code as "exempt" cooperatives and 30 percent as so-called "nonexempt" cooperatives. In the total sample of 107, about the same proportion fell into these two categories (see appendix table 2).

(The terms "exempt" and "nonexempt" are commonly used but actually are misnomers. Both types of associations do pay Federal income tax on all taxable income, just as any other corporation does. The qualifying or "exempt" cooperatives are allowed to deduct dividends paid on capital stock and nonpatronage income allocated to patrons; non-qualifying or "nonexempt" cooperatives may not.)

Among the 24 regionals, neither type had taxable income because they distributed all margins as qualified patronage refunds which patrons agreed to include in their individual income tax returns.

Half of the 24 cooperatives were federated as compared to 27 percent of the 107. Centralized associations made up 51 percent of the total sample, but only 21 percent of the 24 cooperatives. Mixed organizations accounted for about the same percentage in each group.

Method II—Refunds, Dividends, and Taxes

Only two cooperatives used Method II disposing of their net margins as patronage refunds, dividends, and taxes. One of them, a mixed membership dairy cooperative, was the third largest marketing regional in the sample of 107 and reported the highest net margins for 1965 of any of the 75. This cooperative distributed on a patronage basis 99 percent of its end-of-year net margins.

Stock dividends and income taxes this cooperative paid out of 1965 net margins were small and did not impair its operation-at-cost status. Both payments may be regarded as part of the cost of providing services and not a distribution of actual savings.

Because of the regional's Section 521 status, it did not pay tax on stock dividends. The Federal income tax it paid resulted from a small portion of nonqualified refunds and charitable contributions exceeding 5 percent of taxable income.

The other cooperative employing Method II—a mixed-membership meat packing concern—also operated under Section 521. It distributed 79 percent of its 1965 net margins as patronage refunds. Although the refunds did not equal 100 percent of net margins, they represented 100 percent of net savings.

Dividends paid on stock (20 percent of margins) equal to going interest rates or less, and income taxes (1 percent) were considered part of the association's cost of providing services to patrons and not part of actual savings. Federal income taxes resulted from nondeductible items such as premiums the cooperative paid on officers' life insurance and charitable contributions exceeding 5 percent of taxable income. State income taxes resulted from stock dividends that were not deductible for State purposes.

Method III—Refunds and Dividends

Eleven cooperatives distributed nearly \$6 million of 1965 net margins as patronage refunds and dividends on stock (Method III). Patronage refunds accounted for 90 percent of these margins. Did the 10 percent of margins distributed on a stock basis jeopardize the cooperatives' cost status? They did not since they did not exceed going interest rates as payment for use of capital. Thus they could be more properly classified as part of the cost of providing services to patrons than as a distribution of savings.

All 11 organizations distributing net margins as refunds and dividends operated under Section 521 of the Internal Revenue Code. They paid no income tax because (1) cooperatives qualifying under this section may deduct dividends paid on capital stock in computing taxable income, and (2) all patronage refunds paid met the requirements for exclusion from gross income.

Net margins of the 11 cooperatives using this method ranged from a high of \$2.6 million down to \$28,000 with a median of \$442,000. The cooperative reporting \$2.6 million was a federated cooperative cottonseed oil mill; the one indicating \$28,000 was a centralized tobacco marketing association.

Six of the 11 had individual producers as member-patrons and three were federated with other member cooperatives providing the patronage. Two served individual farmers as well as other cooperatives and included both types of patrons as members.

Method IV—Refunds, Dividends, Retained Earnings, and Taxes

Five cooperatives used Method IV—composed of refunds, dividends, retained earnings, and taxes—in distributing nearly \$5 million of net margins resulting from 1965 operations. Components of the method and the percent of total margins each accounted for were as follows:

| <i>Item</i> | <i>Percent</i> |
|------------------------------|----------------|
| Patronage refunds | 77 |
| Dividends on stock | 14 |
| Retained earnings | 5 |
| Income taxes | <u>4</u> |
| Total net margins | 100 |

Dividends paid on capital stock, at going interest rates or less, and income taxes were both cost items deducted from net margins before arriving at net savings. The accompanying tabulation shows this.

| <i>Item</i> | <i>Percent</i> |
|--------------------|--------------------|
| Net margins | 100 |
| Less: | |
| Dividends on stock | 14 |
| Income taxes | <u>4</u> <u>18</u> |
| Net savings | <u>82</u> |
| Disposition: | |
| Patronage refunds | 94 |
| Retained earnings | <u>6</u> |
| Net savings | <u>100</u> |

After subtracting dividends and taxes, net savings amounted to 82 percent of net margins; patronage refunds accounted for 94 percent of net savings.

Four of the five regionals qualified under Section 521 and paid patronage refunds to all patrons (both members and nonmembers) on the same basis. The other cooperative, although nonexempt and paying refunds to members only, essentially paid refunds to all patrons because of the very nominal volume of its nonmember business. The five cooperatives, therefore, operated on a nonprofit basis for all patrons

with the exception of retained earnings as will be explained.

These five regionals had net savings amounting to \$4 million of which they put 6 percent—\$261,000—into retained earnings. *How did the retained earnings originate?* This was the key question in determining whether the five provided services to their patrons on a cost basis.

In each of the five, retained earnings came from savings resulting from transactions with all patrons. The 6 percent was retained but unallocated on a patronage basis. Therefore, these savings could not be identified with each patron as the share of savings belonging to him, based on his doing business with his cooperative. As a result, patronage refunds paid to all patrons included 94 percent of total savings above cost of performing such transactions.

Net margins of the five cooperatives using this method ranged from \$2.8 million down to \$227,000 with a median of \$571,000. Two were federations and three mixed-membership associations. A grain marketing federation reported the high margin; a tobacco marketing mixed-membership cooperative the low one.

Method V—Refunds and Taxes

Three cooperatives distributed yearend margins of \$4-1/3 million as patronage refunds and taxes (Method V). Patronage refunds accounted for 90 percent of the margins and income taxes for the rest. The three regionals deducted income taxes from net margins leaving a balance of net savings. All net savings were then refunded on a patronage basis leaving no undistributed balance. The three cooperatives operated at cost because they returned all savings based on each patron's volume of business with them.

Why did they pay income taxes? Net savings the three regionals refunded on a patronage basis included some nonpatronage income. In one case, this income came from renting a warehouse; in the other two, from investments in stock of other companies. While Section 521 regionals may deduct this type of income when distributed on the same basis as patronage refunds, so-called "nonexempt" regionals may not. Although one of the three regionals

operated under Section 521 of the Internal Revenue Code, all three paid tax on their nonpatronage income distributed on a patronage basis.

Two of the cooperatives were centralized and one mixed in membership structure. Net margins of the three ranged from small (\$2,600) to medium (\$162,000) to large (\$4.2 million). The high-margin organization was a mixed-member fruit and vegetable canning cooperative; the small one a centralized tobacco marketing association.

Method VI—Refunds, Retained Earnings, and Taxes

Eleven marketing regionals used Method VI to distribute \$1.6 million of net margins generated from 1965 operations. Patronage refunds accounted for 95 percent of the \$1.6 million.

Retained earnings, per se, did not indicate that a regional failed to provide services on a cost basis. Since bylaws of six of the 11 regionals using Method VI provided for services at cost to members only, these six operated as “nonexempt” cooperatives. Their retained earnings represented that portion of net margins coming from business with nonmembers, only a minor part of their total operations. The regionals paid income tax on these earnings.

These six associations returned to members—as savings on a patronage basis—all margins above the cost of performing services for members.

Two of the 11 associations using Method VI obtained their retained earnings from nonpatronage income—that is, income from investments and from sale of capital assets. This income did not result from margins over the cost of doing business with patrons. Patrons, therefore, received services at cost because the cooperatives refunded to them all margins on their transactions on a patronage basis.

Still another of the 11 regionals using Method VI got its retained earnings from refunds under \$5. Such refunds amounted to less than 1 percent of the cooperative’s net savings. Patrons responsible for this small amount of savings received no refunds because of the high cost of making such payments in relation to their value. All patrons doing enough business annually with the association to produce savings of

\$5 or more received patronage refunds. Thus, the cooperative did business with these patrons on a cost basis.

The final two of the 11 regionals used savings on transactions with patrons for their retained earnings. One of these, however, had a marketing agreement with members providing that those requiring a guaranteed purchase price for their raw products would not participate in any end-of-year savings attributable to their patronage. This regional kept the balance of these savings, after taxes, as retained earnings. Savings on transactions with members not requiring a guaranteed price were refunded to them according to their patronage. The regional operated at cost for the latter group.

The other regional operated under Section 521 and paid refunds to all patrons on the same basis. Its retained earnings amounted to 9 percent of net savings; its patronage refunds, 91 percent. In this case, retained earnings measured the extent of departure from service at cost in showing that 91 percent of net savings were refunded to patrons on a volume of business basis. The regionals paid Federal income tax on their retained earnings.

Method VII—Absorption of Prior Year’s Losses

Four cooperatives used Method VII to dispose of their 1965 net margins of \$320,000. As table 2 shows, only about 1 percent of total margins the 75 cooperatives reported were used in this manner. In these four cases, net margins and net savings were synonymous.

Although the four regionals completed 1965 operations with net savings, their distribution was not based on that year’s patronage. Instead, savings on transactions with 1965 patrons were used to absorb (or recover) net operating losses that occurred in earlier years. This meant that 1965 patrons did not receive 1965 services at cost.

Savings on each patron’s volume of business with the cooperative in 1965 were used to make up for less-than-cost services provided in some prior year. Such a procedure results in subsidizing another year’s patrons that received services for less than it cost the cooperative to provide them. Where possible each year’s operation should stand on its own feet.

Net margins of the four cooperatives ranged from \$6,500 to \$212,600 with a median of \$61,000. Two were mixed, one was federated, and one was centralized in membership structure. The high-margin organization was a centralized livestock marketing association—the low one, a mixed-member timber marketing concern. Two operated under Section 521 and the other two as nonexempt organizations. They paid no Federal income tax because net loss carryovers completely offset 1965 margins.

Method VIII—Retained Earnings and Taxes

Thirteen cooperatives used Method VIII in distributing 1965 net margins of \$222,000. Dollarwise, the method was not significant—accounting for only 0.6 percent of total margins the 75 cooperatives distributed.

The 13 regionals using this method had small net margins and refunded nothing on a patronage basis. Five completed operations at about the breakeven or cost level. Their net margins ranged from \$300 to \$9,600 with a median of \$1,500.

Management treated these margins, after taxes, as retained earnings because they were too small—frequently less than \$1 for an individual member—to justify the cost of distributing them on a patronage basis.

Eight of the 13 marketing regionals had net margins ranging from \$4,000 to \$68,000 with a median of \$14,700. All but one reported they had refunded savings on a patronage basis at one time or another in earlier years.

Nine of the 13 cooperatives were centralized, two were mixed, and one was federated in membership structure. Nine operated under Section 521 and four as nonexempt cooperatives.

Method IX—Refunds, Dividends, Contributions to Employee Margin-Sharing Plan; and Method X—Dividends Only

One cooperative used Method IX and one Method X in distributing \$54,000 and \$12,000, respectively, of 1965 net margins. The two regionals operated at cost for all patrons. Both qualified under Section 521

of the Code and refunded savings to members and nonmembers alike on the same basis.

Patronage refunds was the basic component of Method IX, accounting for 75 percent of net margins distributed. Dividends on stock (15 percent), and contributions to an employee margin-sharing plan (10 percent) made up the balance. The dividends and contributions represented deductions from net margins before arriving at net savings.

When a cooperative's members decide as a matter of policy to let employees share in net margins, such fringe benefits may be regarded as a part of the cost of providing services. All distributions of net margins—refunds, dividends, and payments to margin-sharing plan—qualified as deductions for income tax purposes leaving the concern with no taxable income.

Method X was used to pay preferred stockholders for capital they had invested in the cooperative. These payments, referred to as dividends, represented the cost of hiring capital needed in operating the business. The dividends were as much a part of the total cost of providing services to patrons as were depreciation, wages, and salaries. After paying its capital costs, the cooperative had no balance of savings to distribute as patronage refunds.

When Method X is used to pay for employment of capital at going interest rates, it does not represent a departure from services at cost. Such a departure arises only when distributions on a stock basis include payments that exceed the cost of obtaining needed capital. Payments in excess of cost are savings that should have been distributed on a patronage basis. The cooperative using this method paid no tax on its margins distributed on a stock basis because the dividends were deductible, leaving no taxable income.

OPERATION-AT-COST RATING

How well did the 10 methods the 75 marketing regionals used to account for net margins result in services to patrons on a cost basis? Table 3 summarizes the number of regionals using each method in 1965 and its operation-at-cost rating for that year. The percent of net savings refunded to patrons in 1965 based on their patronage for that year was used to get this rating.

Table 3.—Operation-at-cost rating for 75 cooperatives, by method of accounting for net margins, 1965

| Method | Cooperatives | Operation-at-cost rating |
|--------|-----------------|--------------------------|
| | <i>Number</i> | <i>Percent</i> |
| I | 24 | 100 |
| II | 2 | 100 |
| III | 11 | 100 |
| IV | 5 | 94 |
| V | 3 | 100 |
| VI | ¹ 10 | 100 |
| VI | 1 | 91 |
| VII | 4 | 0 |
| VIII | ² 13 | 0 |
| IX | 1 | 100 |
| X | 1 | 100 |

¹ Six of the 10 regionals operated on a cost basis for members only; 2, for patrons meeting specified conditions; and 2, for all patrons.

² Five of the 13 completed operations at about the break-even (or cost) level with very small net savings.

As the table shows, 52 (69 percent) of the 75 marketing regionals operated at cost by using methods which resulted in 100 percent of net savings being refunded on a patronage basis. Of the other 23, or 31 percent, six refunded 91 percent or more of their net savings. Seventeen rated zero although five of these completed the year at about the breakeven, or cost, level with very small net savings.

Altogether, 52 of the 75 regionals, the one break-even regional, and the 15 pooling regionals—for a total of 68—operated completely at cost. They represented 75 percent of the 91 regionals.¹ If the six regionals with operation-at-cost ratings in the 90's and the five with net savings near the break-even level are included with the 68 regionals with 100 percent ratings, we can conclude that 87 percent of the 91 marketing regionals were operating at or slightly above the cost level in providing services to patrons.

COMPUTING AVERAGE UNIT SAVINGS

In the preceding section we learned that 75 marketing regionals used 10 different methods to

¹ Sixteen of the 107 regional marketing cooperatives operated below the breakeven (or cost) level for 1965—completing the year's operation with net losses.

Table 4.—Year in which 107 cooperatives last paid patronage refunds

| Year patronage refunds last paid | Number of cooperatives |
|---|------------------------|
| ¹ 1965 | 57 |
| 1964 | 10 |
| 1963 | 6 |
| 1962 | 1 |
| 1961 | 4 |
| 1959 | 3 |
| 1958 | 1 |
| 1957 | 1 |
| 1956 | 1 |
| ² 1951 | 1 |
| ² 1944 | 2 |
| Never paid or not recognized ³ | 20 |
| Total | 107 |

¹ Most recent year for which data were obtained.

² Data not available on method used.

³ Five cooperatives operating on a net margins basis never paid refunds; 15 operating on a pool accounting basis did not recognize net savings or refunds.

distribute 1965 net margins. Seven of the methods, with patronage refunds as their major element, accounted for 98.5 percent of total margins distributed. Refunds were not a part of the other three.

How did the regionals compute average unit savings they returned on a patronage basis? Although 57 of the 107 sample cooperatives made patronage refunds in 1965, a total of 87 indicated they had paid yearly refunds at one time or another. Eighty-five reported on methods used to compute average unit refund rates when they last paid them. Years in which refunds were last paid are summarized in table 4.

In calculating patronage refunds, the 85 regionals indicated various methods that FCS classified as: (1) by total business; (2) by departments; (3) by divisions; (4) by subsidiaries; and (5) by a combination of methods.

By Total Business

Fifty-three (62 percent) of the 85 cooperatives reporting their method of computing refund rates used total patronage as the base in determining

average unit savings above cost of individual transactions. Seventeen of the 53—operating as nonexempt organizations—provided services on a cost basis for members only. They used total patronage of members (nonmember patronage excluded) in computing average unit savings to be refunded on their business.

A key characteristic of this method of calculating refunds was the determination of a single refund rate. Everyone who was to be paid a refund—only members or all patrons—received the same rate. Even though a cooperative divided its operations into departments, savings from the different departments were combined and only one rate of refund computed for returning savings to patrons.

This method appeared equitable from the standpoint of functional specialization. Each association was engaged in marketing a specific product or grouping of similar products. Such nondiversified operations did not call for functional segregation to achieve more representative and thus more equitable rates of refund.

By Departments

Eighteen (21 percent) of the 85 cooperatives calculated patronage refunds by departments. Grouping together subfunctions within a major function—such as marketing or farm supplies—to obtain closer similarity of margins on transactions appeared to be the major objective of this method. A refund rate was computed for each department based on its net savings and patronage.

Reasons the 18 cooperatives reported for dividing operations into departments included:

1. Raw products of a different nature—such as wheat and soybeans or cream and skim milk marketed for patrons
2. Finished products of different types—such as cheddar cheese and butter—marketed for patrons
3. Diversified services offered to patrons—such as hauling, trucking, warehousing, and storage
4. Farm supplies of various kinds—such as feed and fertilizer—purchased for patrons

5. Sales to different classes of patrons—such as retailing to individual members and wholesaling to cooperative members

6. Location of facilities—such as cottonseed processing and milk drying plants—in different geographical areas

The 18 regionals operated from two to 14 departments. Most of them had not more than four, as the following tabulation shows.

| Departments | Coopera- tives | Median business volume |
|---------------|-------------------|---------------------------|
| <i>Number</i> | <i>Number</i> | <i>Million dollars</i> |
| Less than 5 | 11 | 9 |
| 5 to 10 | 3 | 20 |
| 10 or more | 4 | 211 |

The tabulation also indicates a direct relationship between number of departments and volume of business—the higher the volume of business, the greater the number of departments. However, this relationship did not always hold true. For example, one association with only two departments had \$218 million sales. Because large cooperatives were sometimes more specialized, they maintained fewer departments than smaller associations with more diversified operations.

Two of the 18 regionals were nonexempt cooperatives and operated on a nonprofit basis for members only. In these two, departmental refund rates were based on member (instead of total) patronage and savings of each department.

By Divisions

Eight (9 percent) of the 85 cooperatives used patronage within a major function or division—such as marketing products or selling farm supplies—as the base for determining average unit savings over cost to be refunded to patrons. Three of these eight operated as nonexempt cooperatives and excluded nonmember patronage and savings in calculating divisional refund rates. They provided services on a cost basis to member-patrons only—the group that furnished the major proportion of the cooperative's patronage.

In each case the eight cooperatives performed two major functions, but did not divide them into departments for two principal reasons: Either only one or similar kinds of products or services were included in a function, or volume of patronage in a function was too small to justify the additional cost of departmentalizing it.

By Subsidiaries

Only one of the 85 regionals reported computing average unit savings to be returned to patrons strictly on the basis of subsidiaries. In this case, the parent cooperative did not perform any operating functions itself but controlled and coordinated four major operations (or functions) conducted by four subsidiaries. In refunding net savings to individual farmers—its patrons—the parent association computed rates of refund by major function, returning a function's (or subsidiary's) savings to patrons using that function or service.

By a Combination of Methods

Five of the 85 regionals used two methods each to compute refund rates. Three used the divisional

method to compute patronage refunds on farm supplies handled and the departmental method for products marketed. One cooperative used the divisional method for marketing and the departmental method for different services provided to patrons. Another association used departments for a part of its marketing activities and a parent-subsidiary arrangement for another part.

DISTRIBUTING PATRONAGE REFUNDS

After determining volume of yearend savings and computing average unit refund rates, management's next step is to decide on the best means for distributing patronage refunds. As reported earlier in this report, 75 of the 107 sample cooperatives finished 1965 operations with net margins and 57 of these distributed part or all of their yearend margins in the form of patronage refunds. Table 5 shows the different media used.

Altogether, patrons of the 57 regionals received 42 percent of savings exceeding cost of 1965 operations in the form of cash patronage refunds. They received the other 58 percent of savings in the form of noncash refunds, indicating the amount they invested in their cooperatives. Such investments, resulting

Table 5.—Amount of patronage refunds and media of distribution,
57 regional cooperatives, 1965

| Media | Coopera- tives | Patronage refunds | |
|--|---------------------|-------------------|---------|
| | Number ¹ | 1,000 dol. | Percent |
| Cash refunds | 56 | 14,683 | 42.1 |
| Noncash refunds: | | | |
| Qualified written notices of allocation: | | | |
| Letters of advice | 34 | 11,631 | 33.3 |
| Capital stock | 12 | 2,586 | 7.4 |
| Revolving fund certificates | 4 | 3,868 | 11.1 |
| Capital equity certificates | 1 | 1,348 | 3.9 |
| Certificates of other kinds | 4 | 504 | 1.4 |
| Nonqualified written notices of allocation: | | | |
| Letters of advice | 3 | 127 | 0.4 |
| Book credits without written notification to patrons | 1 | 144 | 0.4 |
| Total noncash refunds | | 20,208 | 57.9 |
| Total patronage refunds | | 34,891 | 100.0 |

¹ Total number exceeds 57 because 47 cooperatives paid refunds in both cash and noncash forms. Nine regionals paid cash only and one noncash only.

from 1965 yearend savings, increased assets and capitals of the 57 associations by \$20.2 million.

Less than 1 percent of the \$34.9 million of patronage refunds was taxable to the cooperatives. On the other hand, patrons agreed to include \$34.6 million (or 99.2 percent) of the patronage refunds as taxable income in the year they received the refunds. Patronage refunds taxable at the cooperative level included nonqualified written notices of allocation and book credits without written notification to patrons (table 5).

A few cooperatives had small amounts of nonqualifying refunds because some patrons did not cash the checks, representing at least 20 percent of their total refund, enclosed in letters of advice sent to them. One cooperative reported nonqualifying refunds because the letter of advice sent to each patron notifying him of the amount of his total refund contained less than 20 percent cash. Another cooperative's refunds did not qualify because it credited each patron's capital account for the amount of his refund without providing him with a written notice of such action.²

Letters of advice and certificates of various kinds accounted for 86 percent of all noncash refunds. Capital stock, including both common and preferred, made up 13 percent, and book credits without written notification to patrons, 1 percent.

Trends

To indicate changes over time in composition, size, and frequency of patronage refund payments, the sample of 107 regional marketing cooperatives reported on the amount of cash and noncash refunded annually from 1961 through 1965. During this 5-year period, 78 of the 107 paid refunds. The following

tabulation shows the number of annual payments the 78 cooperatives made during the 5-year period.

| Number of refund payments | Number of cooperatives |
|------------------------------|---------------------------|
| 5 | 45 |
| 4 | 11 |
| 3 | 1 9 |
| 2 | 2 6 |
| 1 | 1 7 |
| Total | 78 |

¹ One cooperative completed its first year's operation in 1963.

² One cooperative completed its first year's operation in 1964.

Since one cooperative in the 9 group and another in the 6 group completed first year operations in 1963 and 1964, respectively, 47 (60 percent) of the 78 paid patronage refunds every year they operated during the 5-year period.

Altogether, from 1961 through 1965, the 78 marketing regional made 315 yearly payments out of a possible 382. The resulting score of 82 percent indicates a fairly high degree of consistency in payment of annual refunds.

Total patronage refunds the 78 farm marketing regionals paid annually during the 5-year period 1961 through 1965 fluctuated between \$30 million and \$35 million (figure 3).

Notwithstanding the drop in 1962, the overall trend in total dollar volume of refunds distributed over the 5 years was upward. On the other hand, the trend in number of associations paying refunds during the period was downward. Sixty-seven of the 78 regionals refunded savings out of 1961 net margins; 64 out of 1962 and 1963 yearend margins; 63 out of 1964, and 57 out of 1965 margins. Altogether total savings returned as patronage refunds during the 5 years amounted to \$164 million. Thirty-eight percent of the refunds were paid in cash and 62 percent in noncash forms.

Cash Composition

During the 5-year period the cash portion of annual refund payments increased from 31 percent to 42 percent (figure 4).

²A discussion of qualified and nonqualified patronage refunds and the meaning of such terms as contained in the Revenue Act of 1962 appears in the following publications: Davidson, D. R., *Methods and Policies Used in Making Patronage Refunds by Selected Farmer Cooperatives*, General Report 137, October 1966; and Mischler, R. J., and Volkin, D., *How the Revenue Act of 1962 Affects Farmer Cooperatives*, General Report 105, October 1962.

FIGURE 3.--TOTAL PATRONAGE REFUNDS

IN MILLIONS OF DOLLARS

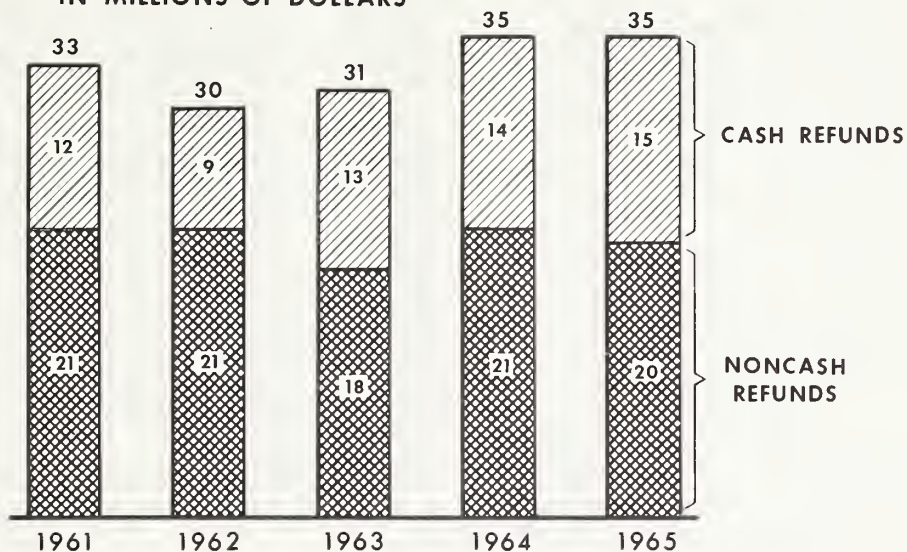
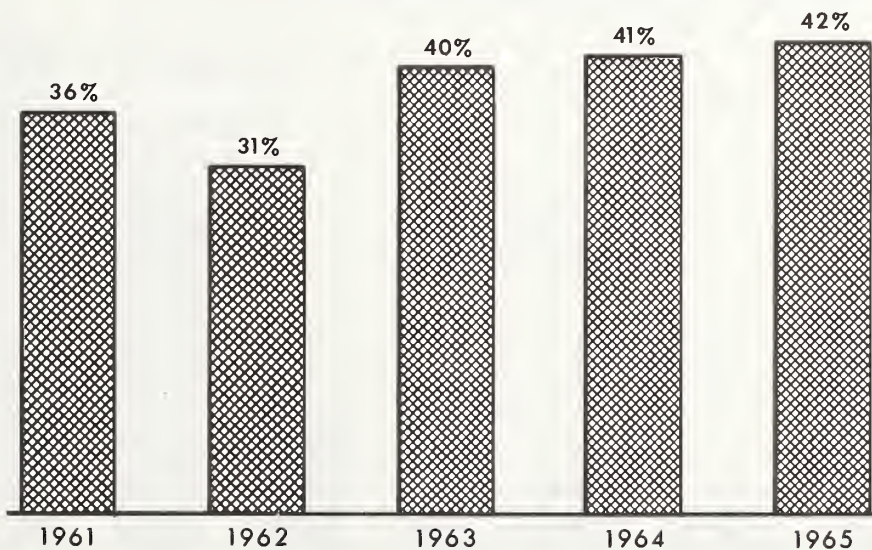


FIGURE 4.--CASH PERCENTAGE OF REFUND PAYMENTS



Because of recent changes in Federal tax laws affecting cooperatives, contained in the Revenue Act of 1962, the cash composition of patronage refunds has taken on added significance. Patronage refunds resulting from fiscal year operations beginning on or after January 1, 1963, must contain not less than 20 percent cash for the cooperative to claim them as a deduction in determining its income tax liability.

Of the 78 marketing regionals paying refunds from 1961 through 1965, 36 (46 percent) indicated they increased the cash portion of their yearly refunds to meet the new tax law requirements. Thirty (38 percent) reported they were refunding 20 percent or more of their annual savings in cash before the 1962 Revenue Act became effective.

Nine (12 percent) of the 78 regionals refunding savings of less than 20 percent cash prior to the 1962 Act revealed they did not increase the cash portion of their refunds after the Act became operative. Four of these did not want to change their refunding procedures; three had no savings to refund; one merged its operations with another cooperative; and one stopped refunding savings as a result of the new tax law.

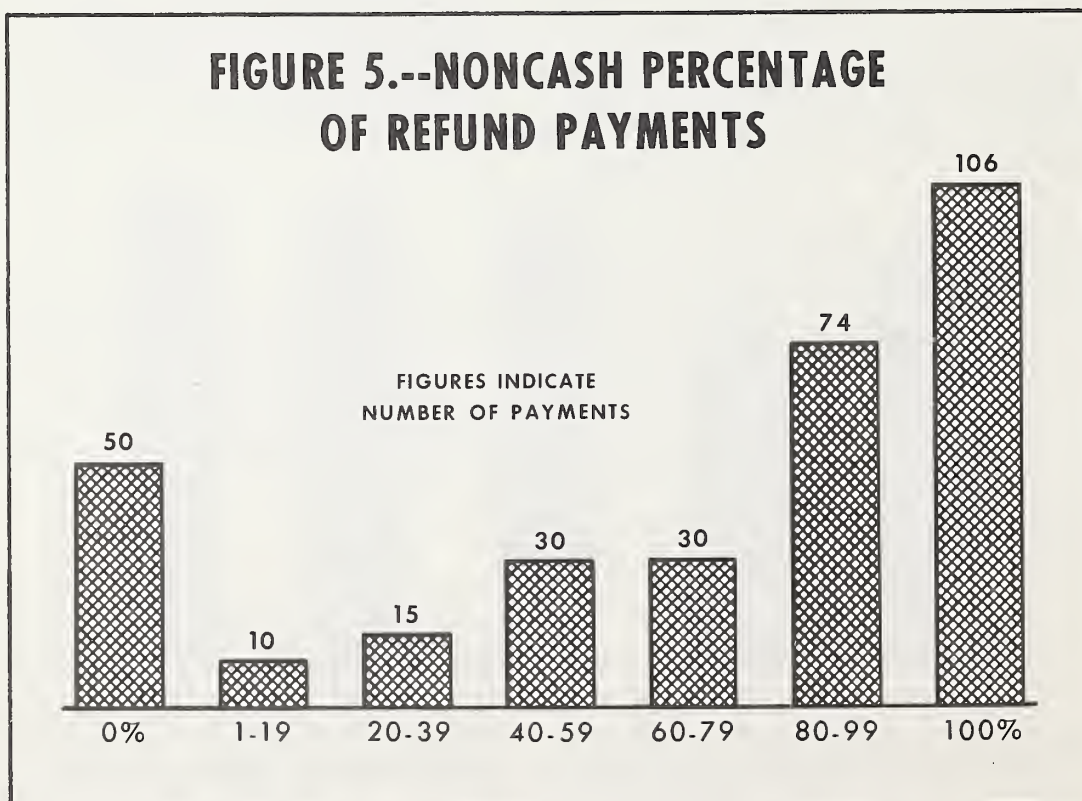
Three (4 percent) of the regionals began paying refunds after the 1962 Act. Each of these complied with the new requirements.

Noncash Composition

Returning savings to patrons in the form of noncash patronage refunds was an important means of financing regional marketing operations. The non-cash portion of total yearly refunds the 78 regionals made from 1961 through 1965 increased from 64 percent in 1961 to a high of 69 percent in 1962 and then decreased in 1963, 1964, and 1965 to 60 percent, 59 percent, and 58 percent, respectively.

The greatest number of patronage refund payments—106, or a third of the 315 made—were completely in noncash forms such as letters of advice, certificates of various kinds, stock, and so on (figure 5).

Figure 5 also reveals that 74 (nearly a fourth) of the payments contained from 80 to 99 percent noncash. Only 50 (16 percent) were entirely cash.



Size

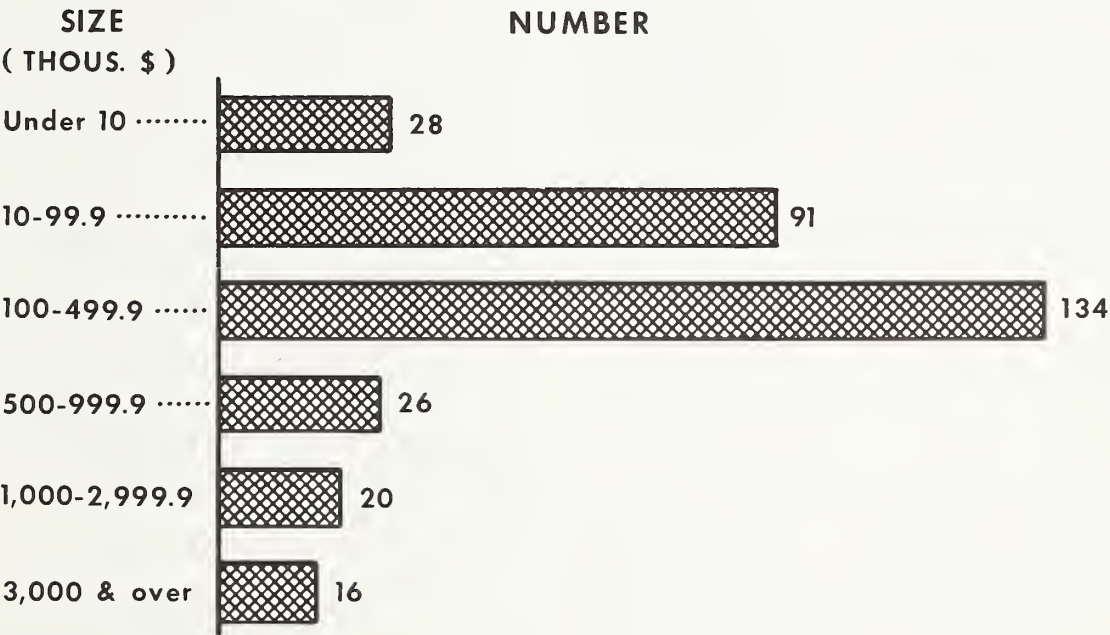
Size of patronage refund payments varied widely among the 78 cooperatives. Figure 6 presents a summary picture of the 315 payments they made during the 5 years 1961 through 1965.

The largest number of payments, 43 percent, fell in the \$100,000-\$499,999 class. Next largest was the

\$10,000-\$99,999 size group, accounting for 29 percent. Together, the two classes made up 72 percent of total yearly refund payments the 78 regionals made.

Several cooperatives made yearly refund payments of \$1 million or more in savings to patrons. During the 5-year period, the largest single refund payment a cooperative made amounted to \$7.3 million—the smallest one, \$158. The median payment equaled \$156,000.

**FIGURE 6.--SIZE OF PATRONAGE
REFUND PAYMENTS**



ANALYSIS BY TYPE OF COOPERATIVE

The preceding part of this report has used the functional approach in presenting an overview and evaluation of methods of distributing net margins on hand at the end of the year and in showing distinctions among ways employed. It has also summarized procedures followed in computing and refunding net savings to patrons based on their use of cooperative services, and indicated trends in size and

composition of patronage refunds during the 5-year period 1961 through 1965.

In the remainder of the report we shall use the commodity approach to show in more detail how each of the seven major types of marketing regionals handled net margins and computed and distributed refunds on a patronage basis.

GRAIN AND SOYBEAN COOPERATIVES

FCS records indicate 20 grain and seven soybean regional marketing cooperatives operated in the United States in 1965. Questionnaires mailed in 1966 to a sample of 14—10 grain and 4 soybean—produced a 100 percent response. The 14 respondents represent a 52 percent sample of the 27 associations. (See appendix table 1 for details on sampling procedure used.)

The following tabulation summarizes size and membership characteristics of these 14 sample cooperatives.

| Annual Business Volume | Centralized | Federated | Mixed | Total |
|------------------------|-------------|---------------|-------|-------|
| <i>Million dollars</i> | | <i>Number</i> | | |
| 10 - 59.9 | 1 | 5 | 3 | 9 |
| 60 - 109.9 | 0 | 3 | 0 | 3 |
| 110 and over | 0 | 1 | 1 | 2 |
| Total | 1 | 9 | 4 | 14 |

The 14 grain and soybean regional marketing cooperatives had business volumes ranging from \$10 million to \$357 million with a median of \$46 million. None of the regionals could be classified as small.

The majority of the 14 were federations with other cooperatives providing the patronage. Only one regional in the sample had membership composed solely of individual farmers; it was the only cooperative in the population of 27 with a centralized membership.

DISPOSITION OF NET MARGINS

Of the 14 cooperatives in the sample, nine reported net margins or savings for fiscal years ending in 1965 and four indicated net losses. One cooperative—marketing soybeans, wheat, and oats on a multiple-pool basis—indicated neither yearend savings nor loss. It primarily acted as an agent for members in its selling activities.

Table 6 shows how the nine associations handled net margins from their 1965 operations.

About 83 percent of the nearly \$7 million of total net margins the nine regionals distributed was based on each patron's volume of business. Less than a fifth (17 percent) of the margins was not returned to patrons based on use of cooperative services. Dividends on stock—the common method noncooperative

Table 6.—Handling net margins, 9 grain and soybean cooperatives, 1965

| Item | Amount | Proportion |
|----------------------------|----------------------|----------------|
| | <i>1,000 dollars</i> | <i>Percent</i> |
| Total net margins | | |
| Less: | 6,908 | 100 |
| Patronage refunds | 5,718 | 82.8 |
| Dividends on capital stock | 713 | 10.3 |
| Retained earnings | 244 | 3.5 |
| Income taxes | 204 | 3.0 |
| Net loss carryover | 29 | 0.4 |
| Total disposition | 6,908 | 100 |

corporations use to distribute earnings—accounted for only 10 percent of the nine marketing regionals’ net margins. The other 7 percent of nonpatronage distribution was composed mainly of two items—income taxes paid to Federal and State governments and net margins the cooperatives retained but did not allocate to patrons. The net loss carryover represented an application of current year’s savings to a prior year’s less-than-cost (or deficit) operation.

Methods Used

The nine grain and soybean cooperatives used five methods to distribute 1965 net margins. Table 7 shows these and the percent distributed by each method.

Table 7.—Methods used to distribute net margins, 9 grain and soybean cooperatives, 1965

| Method | Cooperatives | Net margins | |
|---|--------------|-------------|--------------------|
| | | Number | 1,000 dol. Percent |
| I Patronage refunds only | 2 | 1,987 | 28.8 |
| III Patronage refunds and dividends on stock | 2 | 339 | 4.9 |
| IV Patronage refunds, dividends on stock, retained earnings, and income taxes | 3 | 4,121 | 59.7 |
| VI Patronage refunds, retained earnings, and income taxes | 1 | 432 | 6.2 |
| VII Absorption of prior years' net operating losses | 1 | 29 | 0.4 |
| Total | 9 | 6,908 | 100.0 |

Evaluation of Methods

Patronage refund was the basic element in four of the five methods this group of cooperatives used to dispose of 1965 net margins.

Method I.—Two cooperatives—one, the largest in the sample of 14—used patronage refunds only to distribute 100 percent of their net margins to patrons in direct proportion to the amount of business each transacted. These two cases exemplify the basic cooperative concept of providing services to patrons at cost.

Method III.—Two cooperatives used Method III. Patronage refunds, its main component, accounted for 80 percent of net margins so distributed; dividends on stock, for the other 20 percent.

Margins distributed on a stock basis represented payment for use of capital as a factor of production at the going rate of interest or less. Such dividend payments, therefore, represented a cost of providing services and not a distribution of net savings. The two cooperatives paid no income tax on such dividends because of their Section 521 status. This section of the Internal Revenue Code permits cooperatives qualifying under it to deduct dividends on capital stock in computing taxable income. Net savings, amounting to 80 percent of net margins, were returned to all patrons on a current patronage basis giving the method an operations-at-cost rating of 100 percent.

Method IV.—Three cooperatives used Method IV. Their net margins accounted for nearly 60 percent of total margins the nine regionals distributed. Components of the method and the percent of total margins (\$4,121,000) each accounted for were as follows:

| | |
|------------------------------|------------|
| Patronage refunds | 75 percent |
| Dividends on stock | 16 percent |
| Retained earnings | 5 percent |
| Income taxes | 4 percent |

Margins distributed on a stock basis represented payment for use of capital needed in providing services to patrons. Such dividends were not a part of savings that should have been returned on a patronage basis but a part of the cost of operating a cooperative business.

Likewise, income taxes, in our framework of analysis, were regarded as a cost item and not a factor affecting an association’s operations-at-cost status. Since the three cooperatives operated under Section 521 of the Code, they did not pay income tax on margins distributed on a stock basis. The 4 percent of tax resulted from the 5 percent of retained earnings.

To arrive at net savings, dividends on stock and income taxes were subtracted from net margins (table 8).

Table 8.—Net margins and savings distributed by Method IV,
3 cooperatives, 1965

| Item | Net margins and savings | | | |
|--------------------|-------------------------|--------------|---------|-----------|
| | 1,000 dol. | | Percent | |
| Net margins | | 4,121 | | 100 |
| Less: | | | | |
| Dividends on stock | 659 | | 16 | |
| Income taxes | 165 | 824 | 4 | 20 |
| Net savings | | <u>3,297</u> | | <u>80</u> |
| Disposition: | | | | |
| Patronage refunds | 3,091 | | 94 | |
| Retained earnings | 206 | | 6 | |
| Net savings | | 3,297 | | 100 |

Net margins and net savings may not be equal; often net savings are smaller. In these three cooperatives, net savings amounted to 80 percent of net margins. Patronage refunds accounted for 94 percent of net savings, and retained earnings 6 percent—indicating the operation-at-cost score rating of this method.

The three cooperatives using this method (1) followed the policy of paying refunds to all patrons, and (2) returned 94 percent of net savings to them on a current patronage basis. Therefore, the method's operation-at-cost rating was 94 percent.

Savings retained but not allocated or apportioned on a patronage (or business volume) basis are not identified with each patron as the share of savings belonging to him as a result of his doing business with the cooperative. Savings handled in this manner are referred to as retained earnings because they have more of the characteristics of corporate income than patrons' savings. Such treatment of savings signifies a departure from the basic cooperative purpose of providing to patrons goods and services at cost. However, in the case of the three grain regionals, the 6 percent represented was relatively small.

Method VI.—One cooperative used Method VI. Patronage refunds, the basic element in the method, accounted for 82 percent of net margins. The other 18 percent represented that portion of end-of-year margins attributable to nonmember business. These nonmember margins—treated as retained earnings—were taxable as income to the cooperative. Only members received patronage refunds.

In this case, the method scored 100 percent in its cost rating. The regional, which operated as a nonexempt cooperative, followed the policy described in its bylaws of providing nonprofit services to members only. All savings above cost of performing services for members were returned to them on a current patronage basis.

Method VII.—Only one of the nine regionals reporting net margins for 1965 used a method that included no patronage refunds (Method VII). It carried forward to 1965 net operating losses of prior years that completely absorbed that year's net margins. If a loss had been absorbed in the year it occurred—based on that year's patronage—there would have been no carryover. Furthermore, if the cooperative operated on a strictly patronage refund basis, no tax advantage would have been gained by postponing absorption of the loss to a future year when operations resulted in year-end margins.

The method used may have put patrons responsible for the cooperative's 1965 patronage to a disadvantage. Although the cooperative wound up the year with a margin on patrons' business, they received no part of this on a current patronage basis. Savings generated on each patron's volume of business with the cooperative in 1965 were used to make up for less-than-cost services provided in a prior year. Thus, patrons did not receive 1965 services at cost.

Patrons in one year should not be expected to subsidize patrons of another year who received services for less than it cost the cooperative to provide them. This treatment is inequitable because the patron does not receive actual savings on his actual patronage. This method scored zero on the operation-at-cost scale because 1965 net savings were not returned to patrons based on that year's patronage.

Each year's operation should stand on its own feet. This can be accomplished, if there are losses during a year, by charging each patron's capital account with his share of the loss based on his volume of business with the cooperative for that year.

Some patrons' investments may be inadequate to absorb their share of the loss; others may have no equity in the cooperative. These patrons' capital accounts will show a deficit (or debit) balance when charged with the loss. One way to recover such

deficits (or shortages) would be to treat them as accounts receivable to which future patronage refunds could be applied. Should patrons with deficit accounts discontinue patronizing the cooperative, the accounts may be recovered by writing them off as bad debts.

Preventing Inequity

The following tabulation outlines a procedure that eliminates the inequity that may arise in Method IV in treating a portion of net savings as retained earnings instead of patronage refunds.

| | | | |
|---|----------------|-------------------|------------|
| Total net margins | | \$1,000,000 | |
| Less: Dividends of 4% paid on capital stock outstanding | | 150,000 | |
| Total net savings (distributed as patronage refunds) | | <u>\$ 850,000</u> | |
| Cash refunds, 60% ¹ | \$510,000 | | |
| Noncash refunds, 40% ² | | | |
| Appropriated for: | | | |
| Statutory reserve, 10% ³ | \$100,000 | | |
| Capital reserve, 10% | 100,000 | | |
| Unappropriated | <u>140,000</u> | <u>340,000</u> | \$ 850,000 |

¹ 60% of total net savings.

² Evidenced by qualified written notices of allocation.

³ 10% of total net margins.

It is assumed that the association in the example operated as a Section 521 cooperative and, therefore, did not pay income tax on margins it distributed on a stock basis. The 4 percent dividends on stock represented payment for use of capital as an operating cost and not a distribution of savings. All net savings were distributed as patronage refunds—60 percent in cash and 40 percent in qualified written notices of allocation.

The key point in the illustration is the handling of the \$340,000 of net savings not returned to patrons in cash. All retained savings—regardless of how the cooperative proposed to use them—were treated as noncash patronage refunds. Each patron was notified that his investment in the cooperative’s capital structure had increased by a stated amount based on his patronage for that year. All savings retained from his current patronage were credited to his capital account, showing his accumulated portion of ownership in the cooperative’s assets.

Some State laws require that a cooperative retain a portion of net savings in a reserve account—often referred to as a statutory or legal reserve—until such account equals the amount of its capital stock. Management may also decide to place part of its net savings in a capital reserve for such purposes as acquiring buildings or equipment necessary for expanding services, and so on. Such appropriations of retained savings should be allocated on a current patronage basis and treated as noncash patronage refunds and not as retained earnings.

This procedure assures services at cost and reduces the cooperative’s income tax liability. For example, if the \$200,000 of reserves had been unallocated—and, therefore, treated as corporate income (or retained earnings)—the cooperative would have been liable for about \$93,000 income tax, leaving a balance of only \$107,000 for reserves.

The procedure also provides management with a guide for revolving or redeeming in cash prior years’ noncash patronage refunds. Unappropriated savings remaining after additions to reserves indicate the amount available to pay back in cash the oldest noncash patronage refunds.

COMPUTING REFUNDS

Providing services that patrons need on a nonprofit basis is the keystone of cooperative operations. Net margins a cooperative generates through business transactions with patrons do not become corporate profits but are patronage savings when it returns to each patron the margin over cost of performing the service for him. Likewise, if a cooperative winds up a year with margins less than costs, the net operating loss (or deficit) is not a corporate loss but a patronage loss when each patron is charged with the proportionate amount necessary to bring his transactions up to the break-even level.

Although only eight of the 14 gain and soybean associations made patronage refunds in 1965, 12 reported on methods used when last computing them. One cooperative, a joint venture incorporated in 1962 and composed of two other associations as owners, had not yet paid any refunds. Another cooperative, operating on a pooling basis, did not recognize patronage refunds in its type of operations. This information is summarized in the following tabulation.

| Year patronage refunds last paid | Number of cooperatives |
|-------------------------------------|---------------------------|
| 1965 ¹ | 8 |
| 1964 | 2 |
| 1963 | 1 |
| 1959 | 1 |
| Never paid or not recognized | 2 |
| Total | 14 |

¹ Most recent year data were obtained.

In computing patronage refunds, the 12 cooperatives indicated various methods that FCS classified as (1) total business, (2) divisional, (3) departmental, and (4) combination of methods.

Total Business

Seven of the 12 cooperatives used total patronage in determining net savings on individual transactions. Three of the seven cooperatives using this method were "nonexempt" organizations which did not operate under Section 521 of the Code. They refunded savings to members only and used total patronage of members (nonmember patronage excluded) in computing per unit savings on their business.

Two of the four cooperatives operating under Section 521 (often referred to as "exempt" associations) refunded nonpatronage income—as well as patronage savings—to all patrons on a total volume of

business basis. Table 9 illustrates how one of these cooperatives used the total business method to compute its per bushel refund of savings for 1965.

Note that each patron received the same rate of refund (\$0.009) per bushel of grain the cooperative purchased from him. For tax purposes, the cooperative notified its patrons of that portion of the refund rate from patronage savings (\$0.00716) and from nonpatronage income (\$0.00184). This was necessary because some patrons were nonexempt local cooperatives.

In computing taxable income, the nonexempt local could not deduct the nonpatronage portion of the refund it received from the regional cooperative by allocating it to patrons. Local Section 521 cooperatives could deduct total refunds (both patronage and nonpatronage) received from the exempt regional association by including them as part of their own qualified refunds to individual patrons.

Four of the seven cooperatives using total patronage (or business volume) to compute refunds were federated organizations whose membership was made up of other cooperatives. Membership of the other three was mixed with both individual producers and cooperatives belonging to them. Business volumes of the seven associations ranged from \$10 million to \$215 million with a median volume of \$50 million. The function, rate of refund, and patronage base used to compute the rate are shown in table 10.

Table 9.—Computing per bushel patronage refund by total business method

| Item | Total refund | Total patronage | Rate of refund per bushel |
|---------------------------------------|--------------------|------------------------------------|---------------------------|
| Patronage savings | Dollars 130,287 | Bushels ² 18,186,343 | Dollars 0.00716 |
| Nonpatronage type income ¹ | 33,390 | | 0.00184 |
| Total | 163,677 | | 0.00900 |

¹ Received primarily from Commodity Credit Corporation (C.C.C.) for storing and handling grain.

² Grain purchased from patrons.

Table 10.—Function, rate of refund, and patronage base used to compute refund rate,
7 cooperatives using total business method

| Function | Number of cooperatives | Patronage base for computing refunds | Rate of refund ¹ |
|--|------------------------|---|-----------------------------|
| Grain marketing | 4 | Bushels of grain purchased from patrons ² | Cents per bushel |
| Grain marketing | 1 | Units of grain purchased from all patrons ³ | Cents per unit |
| Soybean processing and marketing | 1 | Bushels of soybeans purchased from all patrons | Cents per bushel |
| Soybean oil and cottonseed oil marketing | 1 | Gross dollar volume of commissions paid by member-patrons | Percent of commissions |

¹ Computed by dividing net savings to be refunded by patronage base indicated.

² Two of the 4 grain marketing cooperatives not operating under Section 521 of the Code did not pay refunds to nonmember patrons and used bushels of grain purchased from members only as the patronage base.

³ Wheat was measured in bushels; coarse grain in hundredweights. All units received the same 4.5 cent refund rate, representing savings the cooperative generated from marketing patrons' grain.

Divisional Method

Two of the 12 cooperatives computed refunds by divisions (or major functions), rather than on the basis of total patronage of either members or all patrons. Member-patrons of both associations were other cooperatives. *If such a division of patronage resulted in refund rates that more closely approximated the cooperatives' actual cost of serving each patron, this was a more equitable procedure for them to use.*

Annual business volume of the grain federation using this method amounted to about \$84 million; of the soybean federated cooperative, \$12 million. Late in 1965 the latter association ceased to exist as a separate legal entity and became the soybean processing division of another cooperative.

Management of the federated regional soybean cooperative, operating as a nonexempt organization, reported that 1963 net savings on member-business—the last patronage refund it made—was divided between soybean purchases (70 percent) and soybean meal sales (30 percent). Net savings attributable to transactions with nonmembers, the cooperative retained, after Federal income taxes, as corporate capital.

Member-patrons selling soybeans to the cooperative received 70 percent of total member savings (that

portion determined as net margins on members' soybeans bought) based on the number of bushels purchased from each member. To member-patrons purchasing soybean meal, the cooperative refunded the other 30 percent (determined as savings on these sales transactions) based on the number of tons sold to each member. The method the soybean cooperative used in computing per unit savings to be returned to members is diagramed in figure 7.

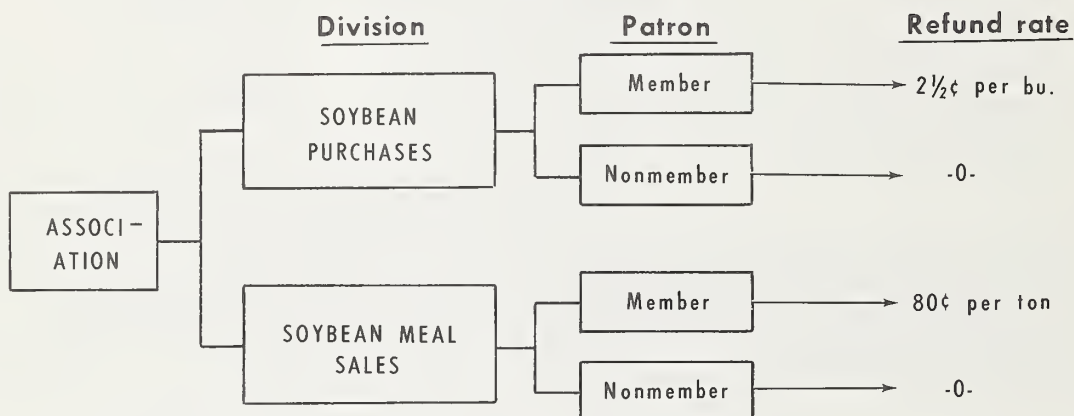
Transactions with member-patrons involving the purchase of soybeans amounted to about 3 million bushels. Marketing this volume generated savings of \$92,000 over cost (purchase price plus operating expenses), an average of 2 1/2 cents per bushel. This rate of refund represented an equitable determination of per unit savings based on the following factors:

1. Only one type product was involved—soybeans
2. Only one type function was involved—marketing
3. Only one type transaction with members was involved—purchasing

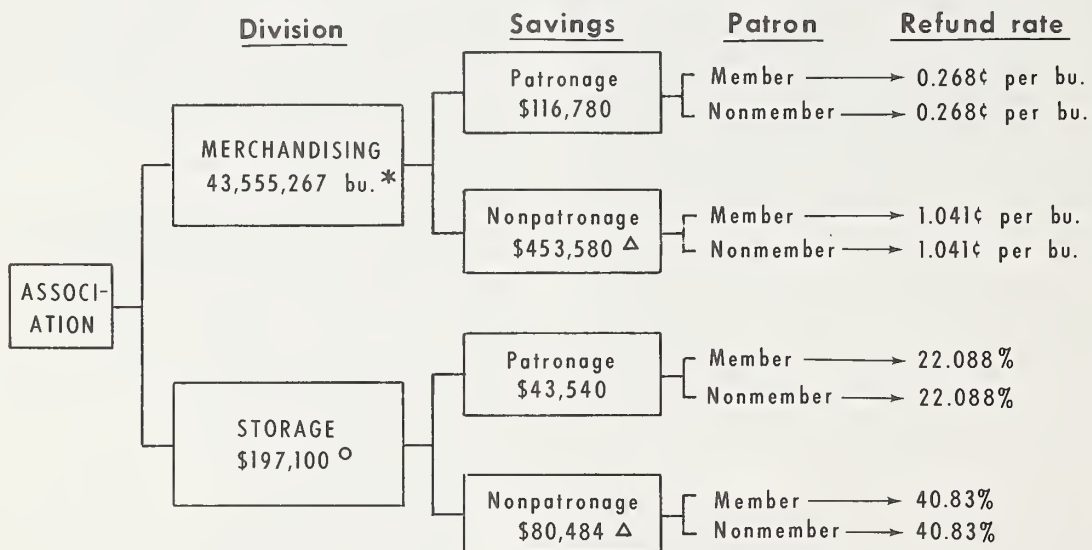
The method used in computing the refund rate of 80 cents per ton for soybean meal sales also represented an equitable procedure. Criteria used in its evaluation were similar to the three relating to the marketing rate of refund: (1) Only one kind of

**FIGURE 7.--DIVISIONAL METHOD OF REFUND,
SOYBEAN COOPERATIVE AND GRAIN COOPERATIVE**

SOYBEAN COOPERATIVE



GRAIN COOPERATIVE



* GRAIN PURCHASED FROM PATRONS. ○ FEES CHARGED PATRONS (STORAGE RATE/BU./DAY SET BY GOVERNMENT).
 Δ INCOME RECEIVED FROM COMMODITY CREDIT CORPORATION (CCC) FOR STORAGE AND HANDLING OF GRAIN, AND
 FROM OTHER INCIDENTAL SOURCES NOT DIRECTLY RELATED TO SERVICES PROVIDED TO PATRONS.

product was involved in its calculation—44 million pounds of soybean meal; (2) only one kind of function was involved—manufacturing; and (3) only one kind of transaction with members was involved—sales.

The other federated regional cooperative computing refunds on a divisional basis was a large grain marketing organization operating under Section 521 of the Code. It treated both members and nonmembers in the same manner in paying refunds. The divisional method it employed in computing per unit savings on transactions with patrons during 1965 also is diagrammed in figure 7.

Here again, the cooperative separated the major classes of business or functions it performed for patrons. Transactions in the merchandising division were of a different nature altogether from those in the storage division. Whereas it purchased grain from patrons in one division, it charged patrons a set fee for using its grain storage facilities in the other. Neither was the type of cost involved in grain buying and selling the same as that connected with storing grain. Such dissimilarity in the nature of the regional's two major functions naturally resulted in unequal margins on merchandising and storage transactions. Therefore, in computing average per unit savings, margins on the two types of transactions were not combined.

For example, in computing average patronage savings on each bushel of grain purchased, the sum of the purchasing transactions (measured in total bushels bought from patrons) was divided into total net margins derived from selling the grain (wheat, oats, milo) purchased from patrons. *This procedure was equitable because in computing its refund rates, the cooperative confined the patronage base to a volume of transactions that yielded similar margins. When such a practice is followed, average unit savings will be representative of actual savings realized on each patron's transactions with the cooperative.*

Since this federated regional qualified as a Section 521 cooperative, it paid refunds that included both patronage savings and nonpatronage income. Management allocated this income to merchandising and storage according to each division's percentage of total gross receipts from patronage. Merchandising accounted for 85 percent of gross income (sales less cost of grain purchased from patrons); storage, 15 percent. Therefore, 85 percent of the nonpatronage

income went to the merchandising (\$453,580) and 15 percent (\$80,484) to the storage division. Total patronage of a division was used as the base for computing both its nonpatronage and patronage average per unit refund rates.

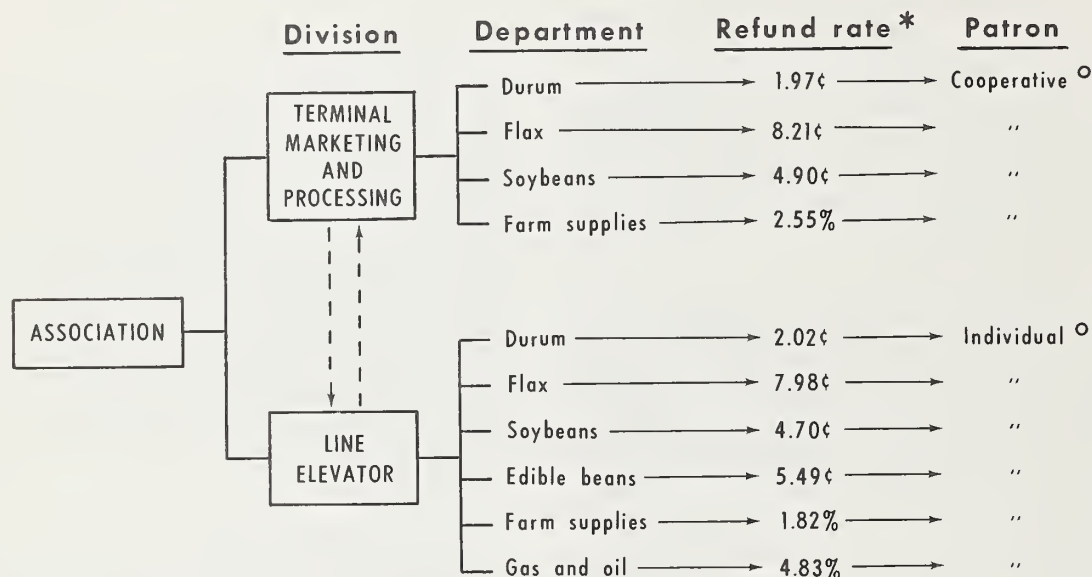
Departmental Method

Two of the 12 cooperatives performed highly diversified services for their patrons. Such operational diversity called for further separation of patronage into departments within major classes or divisions of business. *Variety of a cooperative's functions or services was a key factor in determining the extent of its operational division. On the other hand, size of operations did not appear to be a pertinent factor.* One diversified cooperative's annual business volume was \$20 million—well below the median volume of \$46 million for the group as a whole; the other was the largest organization in the sample with a volume of \$357 million.

This largest of the sample cooperatives was both centralized and federated in its membership. It operated under Section 521 and paid refunds to all patrons (both members and nonmembers) on the same basis. Its major division of operations provided line elevator services for individual farmer patrons on the one hand, and terminal marketing and processing facilities for affiliated or nonaffiliated cooperatives on the other. The departmental method the large regional used in computing average per unit savings it refunded to patrons is diagrammed in figure 8.

Some 250 elevator facilities, owned and operated by the regional are represented by the Line Elevator Division. These facilities were departmentalized, as shown in the diagram, and paid refunds to individual patrons (members or nonmembers) on a departmental basis. The dotted lines between the two divisions indicate transactions inside the cooperative. The Line Elevator Division received marketing and processing refunds on its transactions involving grain shipments to the Terminal Division just the same as on outside transactions the regional made with independent cooperatives selling grain to the Terminal Division. In computing its own patronage refunds, the Line Elevator Division included refunds from the Terminal Division just as independent cooperatives included such regional refunds in computing their own per unit savings to be returned to patrons on a patronage basis.

FIGURE 8.--DETERMINING PER UNIT SAVINGS FOR COOPERATIVE AND INDIVIDUAL PATRONS, DEPARTMENTAL METHOD



* CENTS PER BUSHEL OR PERCENT OF SALES AS INDICATED. ° MEMBER OR NONMEMBER

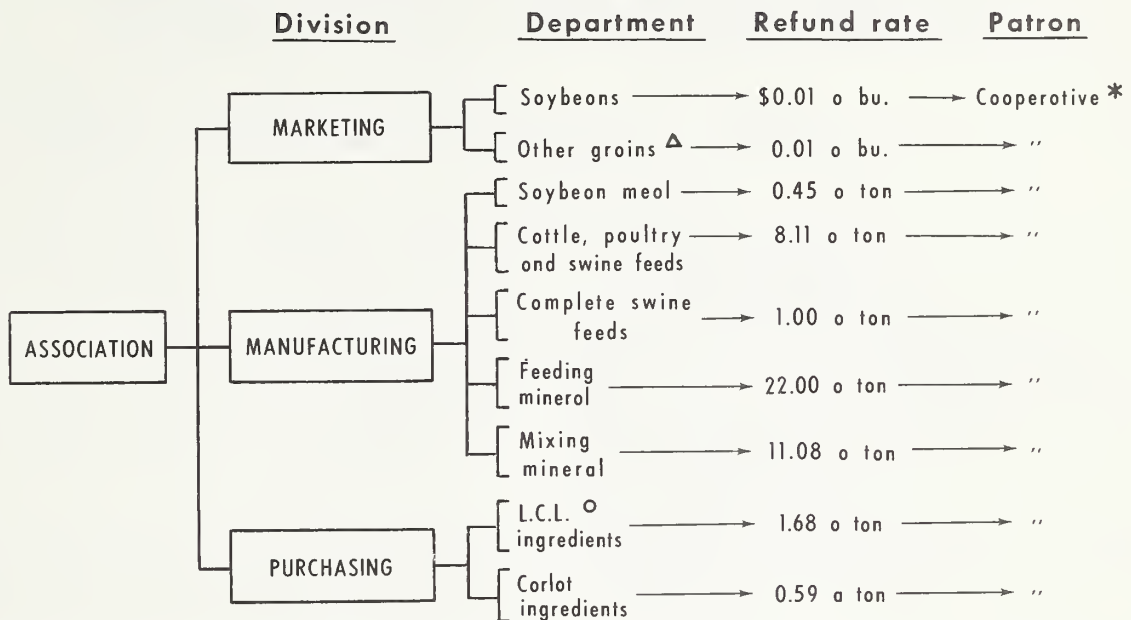
To sum up, the diagram in figure 8 shows how a cooperative performed a wide variety of services for both individual patrons and other cooperatives on an equitable nonprofit basis. Transactions producing similar margins were grouped together as a separate department and average per unit savings were then computed on the total patronage within that department. Such a procedure resulted in average per unit refunds that were equitable and representative of actual savings on individual transactions.

Grouping together of subfunctions within a major function to obtain closer similarity of margins on transactions is the objective of the departmental method as it relates to computing refunds. The other diversified cooperative using this method found that margins within its major functions (or divisions) were too unlike to permit using divisional bases for computing average unit savings. Figure 9 diagrams the departmentalization this cooperative used in figuring average unit refunds on individual transactions with patrons.

Average unit refunds, as figure 9 shows, varied widely among departments. Within the major function of manufacturing, average savings per ton (sales to patrons less manufacturing costs and operating expenses) ranged from 45 cents on soybean meal to \$22 on feeding mineral. Such disparate commodities produced within a division—each with different price and cost structures—should be separated for accounting purposes. Combining these unlike manufactured products, and computing refund rates at the divisional level, would have resulted in average unit margins not representative of actual savings on sales transactions with patrons.

Some of the regional's patrons had their own facilities for feed manufacturing and needed only the ingredients. In these transactions, the regional performed a purchasing function (with no manufacturing involved) by buying and then selling the ingredients to its patrons. Within the purchasing function, less-than-carload sales produced substantially different margins than carlot sales. Therefore, the two types of

FIGURE 9.--DETERMINING REFUND RATE ON INDIVIDUAL TRANSACTIONS, DEPARTMENTAL METHOD



* MEMBER COOPERATIVES (COMMON STOCKHOLDERS) ONLY. NONMEMBER COOPERATIVES RECEIVED NO REFUNDS.
^Δ STRICTLY A SIDE-LINE SERVICE. REPRESENTS ONLY ABOUT 6,000 BUSHELLS. [○] LESS THAN CARLOAD LOT.

transactions were accounted for separately (or by departments) in computing average unit savings to be refunded to patrons.

The regional's marketing function, as it concerned patrons, was primarily that of purchasing their soybeans. Other grains, which the cooperative sold on a brokerage basis, accounted for only a small amount of the total marketing operation. Although the two types of transactions did produce exactly the same average unit savings in 1965, this may have been mere coincidence. In any case, management decided that enough difference existed between the two types of marketing transactions to account for them separately in computing average unit refunds.

Combination of Methods

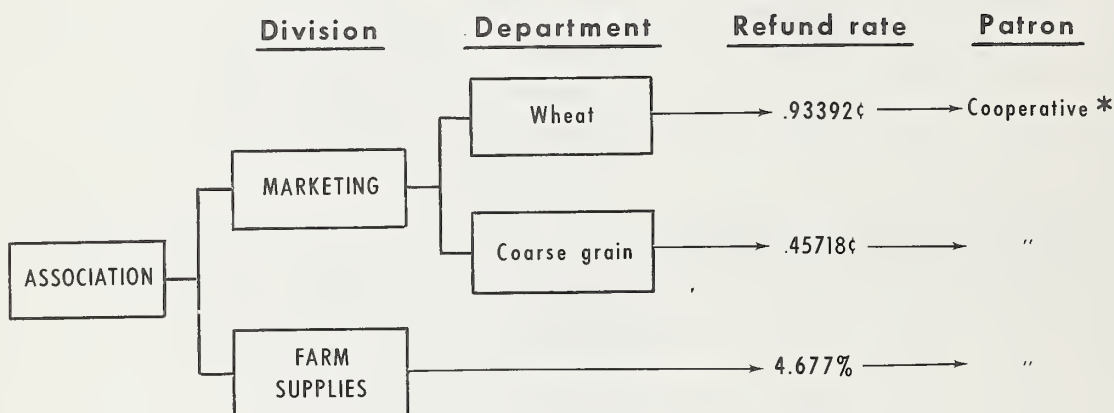
One of the 12 cooperatives used both divisional and departmental methods in computing patronage refunds. It qualified as a Section 521 cooperative and

did an annual business of \$44 million. The regional's two methods of figuring average unit savings on patronage are diagramed in figure 10.

The regional's major function was marketing grain purchased from other cooperatives. In 1965, it bought nearly 19 million bushels—with wheat making up 70 percent and coarse grain 30 percent of the purchase. Separate accounting was maintained for each of these two types of grain.

Handling farm supplies, a minor function with the regional, was classified as a division because it was a separate unrelated activity and could not be considered as a subfunction (or department) of marketing. Management probably decided not to departmentalize the supply function because of its small volume of sales and/or similarity of items handled. Therefore, sales at the divisional level were used as the patronage base for computing average dollar savings on this activity.

FIGURE 10.--DETERMINING PATRONAGE REFUND RATE BY COMBINATION OF METHODS, GRAIN COOPERATIVE



* PATRONAGE REFUNDS PAID TO MEMBER AND NONMEMBER COOPERATIVES ON SAME BASIS.

DISTRIBUTING REFUNDS

After determining amount of savings and computing average per unit refund rates, management must then decide upon the best means for distributing patronage refunds. All but one of the nine grain and soybean cooperatives that completed 1965 operations with net savings distributed refunds for the year. The media they used are shown in table 11.

Cash made up 56 percent of the patronage refunds the eight grain and soybean cooperatives paid in 1965. Retained savings evidenced by qualified written notices disclosing to patrons the dollar amount allocated to them accounted for the other 44 percent.

Dollarwise, certificates were the most important type of written notices used—accounting for about two-thirds of the noncash refunds. Capital stock (and stock credits where patrons' refunds amounted to only fractional shares) and letters of advice represented the other third of the notices.

Table 11.—Media used to distribute patronage refunds, 8 grain and soybean cooperatives, 1965

| Media | Total refunds | Percentage of total |
|--|---------------------|---------------------|
| Cash | 1,000 dol. 3,208 | Percent 56 |
| Qualified written notices of allocation: | | |
| Capital equity certificates | 1,348 | 24 |
| Revolving fund certificates | 283 | 5 |
| Capital stock (and stock credits) | 527 | 9 |
| Letters of advice | 352 | 6 |
| Total patronage refunds | 5,718 | 100 |

A letter of advice indicated to the patron the amount of his noncash refund and how the cooperative allocated his ownership in the organization. For example, one regional's letter disclosed the amount allocated to capital reserve, patrons' equity reserve

and contained a check for the cash portion of the refund. Total refunds (both cash and noncash) the eight cooperatives paid in 1965 qualified for tax exemption at the regional level. They were taxable to patrons in the year received.

As indicated earlier in this section, two cooperatives, last paid refunds in 1964. They distributed nearly 60 percent in cash. Qualified written notices of allocation—in the form of preferred stock—made up the other 40 percent.

One cooperative last paid refunds in 1963—all in the form of patronage certificates. The Revenue Act of 1962 (with its 20 percent minimum cash rule for qualified refunds) did not apply to these refunds because the cooperative's 1963 fiscal year began before December 31, 1962. The cooperative last paying refunds in 1959 did not indicate method of distribution.

To show trend in composition, size, and frequency of patronage refund payments, the 14 cooperatives making up the sample were asked to indicate the

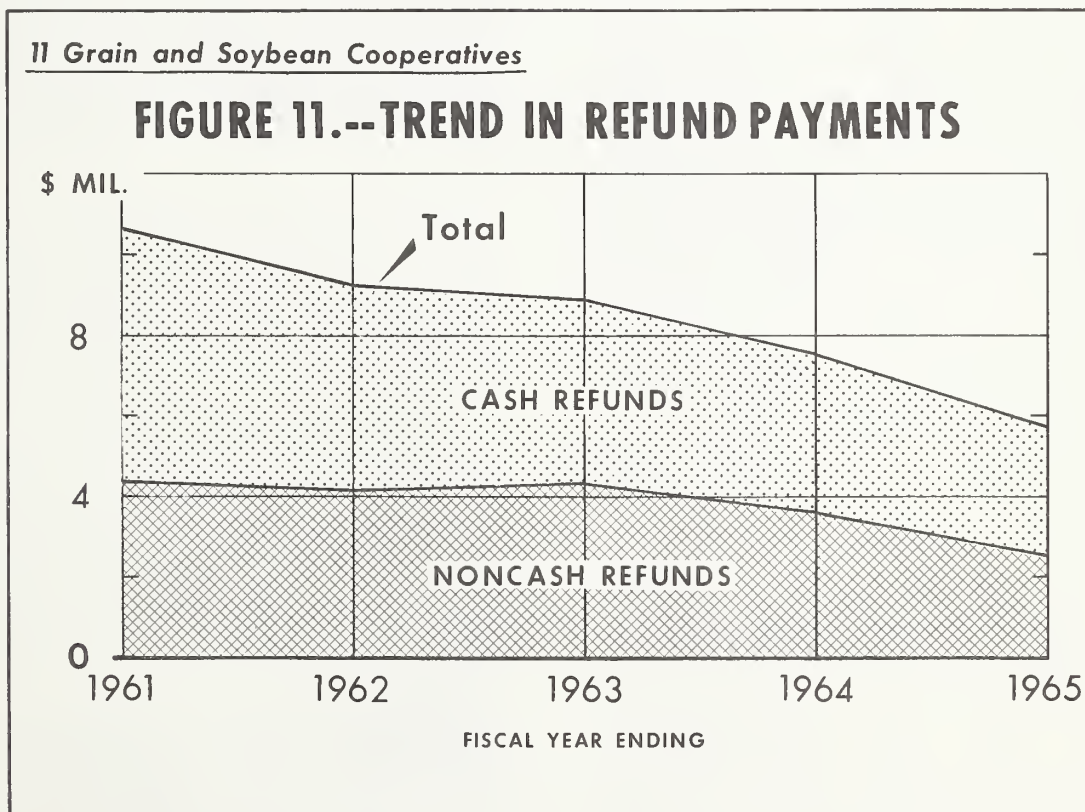
amount of cash and noncash refunded annually from 1961 to 1965. During this 5-year period, 11 of the 14 paid refunds. The following tabulation shows the regularity of these payments.

| Number of refund payments | Number of cooperatives |
|------------------------------|---------------------------|
| 5 | 7 |
| 3 | 1 |
| 2 | 1 3 |
| Total | 11 |

¹ One cooperative began operating in 1963 and completed its first fiscal year in 1964.

Seven cooperatives paid refunds for each of the 5 years. One association missed 2 years; and three missed 3 years. However, eight of the 11 paid patronage refunds every year they operated during the 5-year period.

There was a downward trend in total refund payments the 11 cooperatives made over the 5-year span 1961-65, as figure 11 shows.



Yearly refund payments decreased nearly 50 percent from \$10.7 million in 1961 to \$5.7 million in 1965. During the same period, the number of cooperatives distributing refunds fluctuated between eight and 10—eight in 1962 and 1965, nine in 1961 and 1963, and 10 in 1964. *Altogether, total patron-*

age refunds distributed over the 5-year period amounted to \$42.1 million with 55 percent paid in cash and 45 percent in noncash forms. Cash composition of total annual savings refunded to patrons never dipped below 51 percent (1963) and reached 59 percent in 1961.

SPECIAL CROPS COOPERATIVES

FCS records indicate 70 regional cooperatives, classified as marketing special crops, operated in the United States during 1965. Questionnaires mailed in 1966 to a total sample of 27 produced 24 responses. The different types of special crop associations, sample size, and number that responded from each group are tabulated here.

| Type | Total | Sample | Respondents |
|--------------------|-------|--------|-------------|
| -----Number----- | | | |
| Tobacco | 32 | 9 | 9 |
| Sugar | 20 | 7 | 6 |
| Dry beans and peas | 8 | 4 | 3 |
| Rice | 6 | 4 | 3 |
| Other | 4 | 3 | 3 |
| Total | 70 | 27 | 24 |

Tobacco and sugar and sugar products cooperatives accounted for nearly three-fourths of all the special crops regionals. Organizations in the "other" category were engaged primarily in timber, hybrid grains, and seed marketing activities. Altogether, the 24 respondents represented a 34 percent sample of marketing regionals in the special crops classification.

The following tabulation summarizes size and membership characteristics of the 24 sample cooperatives.

| Annual business volume | Centralized | Federated | Mixed | Total |
|------------------------|---------------|-----------|-------|-------|
| <i>Million dollars</i> | <i>Number</i> | | | |
| Under 1 | 3 | 0 | 2 | 5 |
| 1 - 9.9 | 12 | 1 | 0 | 13 |
| 10 and over | 4 | 0 | 2 | 6 |
| Total | 19 | 1 | 4 | 24 |

Business volumes of the 24 cooperatives ranged from \$63,000 to \$218 million with a median of \$4 million. Nine of the tobacco regionals registered a median business volume of \$4 million; six sugar, \$4 million; three dry beans and peas, \$5 million; three rice, \$21 million; and three others, \$251,000.

DISPOSITION OF NET MARGINS

Thirteen of the 24 sample cooperatives reported net margins or savings for fiscal years ending in 1965; six incurred net losses. Four indicated they marketed patrons' products on a pooling basis and provided no services on a net margins or savings basis. One cooperative pointed out that it operated its grain department on a break-even basis for the last several years, including 1965, showing neither savings nor loss.

How the 13 cooperatives handled their 1965 net margins and the significance (dollarwise) of the different procedures is shown in table 12. Patronage refunds accounted for about 91 percent of total net margins they distributed.

Table 12.—Handling net margins, 13 special crops cooperatives, 1965

| Item | Amount | Proportion |
|----------------------------|----------------------|----------------|
| | <i>1,000 dollars</i> | <i>Percent</i> |
| Total net margins | 1,688 | 100.0 |
| Less: | | |
| Patronage refunds | 1,533 | 90.8 |
| Dividends on capital stock | 69 | 4.1 |
| Retained earnings | 51 | 3.0 |
| Income taxes | 28 | 1.7 |
| Net loss carryover | 7 | 0.4 |
| Total disposition | 1,688 | 100.0 |

Table 13.—Methods used to distribute net margins,
13 special crops cooperatives, 1965

| Method | Cooperatives | Net margins | |
|---|--------------|---------------|-------|
| | Number | 1,000 dol. | Pct. |
| I Patronage refunds only | 1 | 457 | 27.1 |
| III Patronage refunds and dividends on stock | 2 | 535 | 31.7 |
| IV Patronage refunds, dividends on stock, retained earnings, and income taxes | 1 | 227 | 13.4 |
| V Patronage refunds, and income taxes | 2 | 165 | 9.8 |
| VI Patronage refunds, retained earnings, and income taxes | 3 | 279 | 16.5 |
| VII Absorption of prior years' net operating losses | 1 | 7 | 0.4 |
| VIII Retained earnings, and income taxes | 3 | 18 | 1.1 |
| Totals | 13 | 1,688 | 100.0 |

Methods Used

The 13 special crops regionals used seven different methods in disposing of 1965 net margins (table 13). Patronage refunds were the major part in five of the seven; refunds were not included in the other two methods.

Evaluation of Methods

Operating at cost is a primary cooperative concept. Refunding savings on a business volume basis is the common procedure used in providing services to patrons on a nonprofit basis.

Method I.—One cooperative used Method I to distribute 100 percent of its net margins—which equaled net savings. All the 1965 raw sugar volume it marketed came from either individual member growers or member cooperatives. It did no nonmember business. It operated as a nonexempt cooperative and paid refunds to members only.

This cooperative paid no income taxes on 1965 net margins because it operated on a nonincome (or cost) basis by refunding all end-of-year margins to members in proportion to their patronage. Therefore the method's cost rating equaled 100 percent.

Method III.—Two cooperatives used Method III to distribute 97 percent of net margins on a patronage basis and 3 percent on a stock basis. One marketed rice and the other tobacco.

Both operated as Section 521 organizations and were allowed to deduct dividends paid on capital stock in computing taxable income. Such dividends did not damage their patronage refund distributions from the standpoint of all savings above cost being returned to patrons. The dividends represented payment for use of capital, at the going interest rate or less, as part of the cost providing services to patrons and were not a distribution of savings. All net savings—net margins less dividends on stock—were returned to patrons on a business volume basis. This method, therefore, rated 100 percent on the operations-at-cost scale.

Method IV.—One cooperative, a tobacco marketing association, used Method IV to distribute 1965 net margins. The cooperative qualified under Section 521 of the Code and paid patronage refunds to all patrons. It did not operate under a Commodity Credit Corporation (CCC) tobacco loan agreement.

Dividends on stock and payment of income tax were distributions of net margins that represented a part of the total cost of providing services to patrons. They were not a part of net savings. The association's bylaws state that "A dividend of a minimum of 4 percent and a maximum of 8 percent shall be paid on stock ... before any patronage refund shall be paid." These limited dividends on stock represented a

Table 14.—Disposition of net margins or savings,
Method IV, special crops cooperative, 1965

| Item | Net margins | |
|--------------------|--------------------|--------------------|
| | 1,000 dol. | Percent |
| Net margins | 227 | 100 |
| Less: | | |
| Dividends on stock | 51 | 22 |
| Income tax | <u>7</u> <u>58</u> | <u>3</u> <u>25</u> |
| Net savings | <u>169</u> | <u>75</u> |
| Disposition: | | |
| Patronage refunds | 152 | 90 |
| Retained earnings | <u>17</u> | <u>10</u> |
| Net savings | 169 | 100 |

“reasonable return on capital” that management considered a part of the “final cost of services rendered.”

Net savings amounted to 75 percent of net margins. Patronage refunds accounted for 90 percent of net savings and retained earnings for 10 percent.

Retained earnings were a part of savings exceeding cost of providing services to patrons. Such savings retained but not credited to growers’ capital accounts on the cooperative’s books did affect its cost status. The 10 percent of retained earnings measures the deviation from operations at cost—or the amount of actual savings not refunded to patrons according to each one’s volume of business with the association. Therefore, this method received an operations-at-cost rating of 90 percent.

Method V.—Two cooperatives used Method V to distribute 94 percent of their 1965 net margins as patronage refunds and 6 percent in payment of income taxes. Margins distributed as patronage refunds did not represent savings resulting from doing business directly with patrons. Rather the margins resulted from investments and rental income.

Treating such margins as patronage refunds by allocating them to patrons based on their volume of business with the cooperative was an equitable way of handling them. *Such treatment is in line with the basic principle of sharing all economic benefits from a cooperative business on a patronage basis.*

One cooperative using this method to distribute its nonpatronage income was engaged in sugar refining and marketing. The largest regional in the sample of 24 special crops cooperatives, it operated on a pooling basis with its raw sugar and molasses pools computed and settled for separately.

Management reported that “As we handle our pools, all amounts paid to growers for their products are treated as patronage dividends. Although we make ‘initial payments,’ these are in the nature of advances, and subject to refund if the advance exceeds the final amount due.”

In this type of pooling procedure, as management indicated, growers received payment for their raw sugar and molasses shipments on a patronage basis. To growers, these payments represented the market

price (or value) for their products that the cooperative refined and sold.

Patronage refunds, as we have defined them for purposes of this study, do not include cost of product (or market price)—but savings in addition to market price that are returned to patrons on a patronage basis. In this kind of pooling setup, the cooperative did not recognize a market price (or gross margin) or determine a net savings at the end of the year. Therefore, patronage refunds, as such, were indeterminate.

Net margins, after taxes, of \$153,200 that the sugar cooperative did refund to patrons were not a part of its pooling operations, but nonpatronage income. This income resulted primarily from cash dividends the cooperative received from its stock holdings in another company. Although the cooperative operated under Section 521, which allows the deduction of nonpatronage type income allocated to patrons, management elected to pay tax on these savings.

The other cooperative using this method marketed tobacco. It allocated margins of \$2,040 to members after taxes. This was nonpatronage income the cooperative received from renting a warehouse to the buyer of its members’ tobacco. Rental fees were the only income the cooperative received in 1965. It paid taxes on this nonpatronage type of income because it operated as a nonexempt organization and could not deduct it in computing taxable income.

Method VI.—Three cooperatives used Method VI to distribute 90 percent of their margins as patronage refunds; 10 percent represented taxes and retained earnings. In one case, retained earnings represented a taxable capital gain of \$22,000 on sale of assets (nonpatronage type income) because the tobacco marketing cooperative—a Section 521 organization—did not handle the capital gain on a patronage refund basis. *The unallocated capital gain responsible for the retained earnings did not affect the cooperative’s operations-at-cost status because the gain on sale of assets was not a part of its margin-over-cost of performing services to patrons.*

Another cooperative using this method marketed dry beans. It operated as a nonexempt cooperative and retained as unallocated surplus, after taxes, margins attributable to business with nonmembers. Since it was the association’s policy to provide services at cost for members only, the retention of

unallocated nonmember margins as retained earnings did not reflect adversely upon the cooperative's patronage refunding system. The cooperative returned all margins above cost of performing marketing services to members as savings on a patronage basis. Nonmember margins were not a part of the margins exceeding cost of doing business with members.

The third cooperative using this method was engaged primarily in bean marketing and operated under Section 521 of the Code. Its retained earnings of \$1,175, after taxes, represented refunds of \$5 or less not paid to patrons. Management reported a recent change in the cooperative's bylaws to permit nonpayment of small refunds falling into this size category. Such action was justified on the high cost of making these refunds in relation to their value.

Members of a cooperative may decide, as a matter of policy, not to pay refunds under a certain size because cost of making such payments would be approximately equal to or greater than their value. Such a policy does not impair the effectiveness of a cooperative's patronage refunding procedure in providing services on a cost basis.

How retained earnings originated was a key factor in evaluating Method VI. In each of the three cases, it was found that retained earnings—from nonpatronage income, margins on nonmember business, and small refunds—did not jeopardize their cost status. Therefore, the method was given an operations-at-cost rating of 100 percent.

Method VII.—One cooperative reported using Method VII in disposing of 1965 net savings. It carried forward prior years' losses that completely offset its 1965 savings. This recently organized timber marketing association incurred operating losses during its first few years in getting underway. After deficits are absorbed, the cooperative reported it plans to return yearend net savings to members on a patronage refund basis.

To assure services on a cost basis, a year's net savings or losses should be distributed on the basis of that year's patronage. Using Method VII does not meet this criterion. Therefore, the method rated zero on our operations-at-cost scale.

Method VIII.—Three cooperatives used Method VIII in disposing of 1965 net margins. One, the

smallest cooperative in the sample with a business volume of \$63,000—but with widespread sales of foundation seed stocks to patrons all over the country—recently changed from the patronage refund method of handling savings. Management reported that the Revenue Act of 1962, requiring 20 percent or more of refunds to be paid in cash, was the main factor causing the cooperative to discontinue distributing savings on a patronage basis.

Operations of the other two cooperatives not paying refunds consisted primarily in making price support available to producers under a tobacco loan agreement with Commodity Credit Corporation (CCC). As the manager of one cooperative stated, "Since tobacco under the loan program has not shown a net profit to members in recent years, no refunds have been available for distribution." The net margin (\$1,485) reported for 1965 was income from interest on membership dues the cooperative had invested. Management decided it would be too costly to justify treating such a small amount as patronage refunds. Therefore, taxes were paid on the nonpatronage income with the balance divided between two unallocated capital accounts, "reserve" and "tobacco sales promotion fund."

All of the other tobacco cooperative's 1963 crop of loan tobacco was not sold until 1965. Its board of directors resolved "...to pay Federal income tax on the 1963 crop overplus and make no allocation to patrons." Gross sales proceeds were more than sufficient to pay CCC for the amount of the loan, plus charges and interest, resulting in a net gain (or overplus) of \$4,039 on the 1963 crop. After paying taxes on the 1965 net savings resulting from this "overplus" and other incidental income such as rent, interest, and acreage dues, the cooperative placed the balance in what it described as "unallocated reserve."

Management indicated that in 1958 the cooperative amended its bylaws to provide that net proceeds for any year may be allocated as patronage refunds—or not allocated—depending upon how the board of directors chooses to handle them. Such action, according to management, changed the organization's status from one that qualified under Section 521 of the Code to that of a nonexempt cooperative.

To summarize evaluation of this method: Using it as a means of distributing savings is not recommended unless savings are so small as to be impractical to treat

as patronage refunds. This was the case with one of the tobacco cooperatives. The other two associations did not meet this criterion.

COMPUTING REFUNDS

In the sample of 24 special crops cooperatives, 13 reported net savings and six net losses from 1965 operations. Four marketed products using a pooling method that did not determine net margins nor recognize patronage refunds. One association indicated it operated one department on a net margins basis but that the department broke even for 1965—showing neither savings nor loss.

We learned in the preceding section that nine of the 13 with 1965 net margins returned most of these in the form of patronage refunds. Also, that methods the nine cooperatives used to distribute refunds, in all but one case, met the equity standard of returning all savings above costs on a patronage basis.

Although only nine of the 24 associations made patronage refunds in 1965, a total of 18 reported the year they last paid them. This information is summarized in the following tabulation.

| Year patronage refunds last paid | Number of cooperatives |
|--|---------------------------|
| 1965 ¹ | 9 |
| 1964 | 4 |
| 1963 | 1 |
| 1961 | 1 |
| 1959 | 2 |
| 1956 | 1 |
| 1944 ² | 1 |
| Not recognized or never paid ³ | 5 |
| Total | 24 |

¹ Most recent year data were obtained.

² Data not available on method.

³ One recently organized cooperative had not yet paid refunds but planned to in the future. Four did not operate on a net margin basis nor recognize patronage refunds.

In computing patronage refunds, the 18 cooperatives indicated various methods that FCS classified as: (1) total business, (2) divisional, and (3) departmental.

Total Business

Thirteen of the 18 cooperatives used total patronage as the basis for determining margin over cost of individual transactions. Use of this method appeared equitable from the standpoint of functional specialization. Each of the associations was engaged in marketing a specific product for patrons. *Such nondiversified operations did not call for functional segregation to achieve equitability.* The 13 cooperatives are classified in table 15 by function and patronage base used in computing the average per unit refund of savings to patrons.

In computing average per unit savings, the seven tobacco cooperatives used various bases to measure total business with patrons. Four marketed patrons' tobacco on a commission basis. When commissions collected amounted to more than operating costs, the excess (or savings) was refunded. Two returned these savings as a certain percentage of the commissions each farmer paid. For example, one cooperative reported returning 21.5 percent of the commissions it had charged each patron. The other two cooperatives refunded net commissions (or savings) as a certain percent of the sales value each patron received for tobacco marketed. Use of either base—commissions patrons paid or dollars patrons received for tobacco marketed—provided an equitable means for refunding savings and operating at cost.

Two cooperatives administering the price support program under tobacco loan agreements with CCC based per unit refunds on total dollars advanced on crops pledged as security for loans. In one case, the overplus of the 1953 crop-year pool—not completely sold until 1959—was divided by the price support advances made to growers participating in that year's pool. The resulting percent (or cents per dollar) was returned to each patron as additional savings on each dollar previously advanced to him on the 1953 crop. Using the same procedure, the other cooperative last paid patronage refunds in 1956 on overplus resulting from liquidation of its 1950 crop-year pool.

One tobacco cooperative, also operating under a CCC loan agreement, computed its last paid refunds (in 1959) based on annual membership dues collected from members. Refunding of unused membership dues represented nonpatronage income allocated to patrons. The association did not realize any net margins in 1959 from its tobacco operations. Either

Table 15.—Function and patronage base used to compute rate of refund,
13 special crops cooperatives

| Function | No. of ass'ns | Patronage base | Rate of refund ¹ |
|--------------------|---------------|---|-----------------------------|
| Tobacco marketing | 2 | Gross dollar volume of commissions charged to patrons | Percent of commissions |
| Tobacco marketing | 2 | Gross dollar volume patrons received for tobacco marketed on a commission basis | Percent of sales |
| Tobacco marketing | 2 | Total dollars advanced to producers on crop pledged to CCC | Percent of advances |
| Tobacco marketing | 1 | Total annual membership dues consisting of \$1 per acre of tobacco produced | Percent of dues |
| Sugar marketing | 3 | Standard tons of sugar cane members shipped for processing into raw sugar | Dollars a ton |
| Dry bean marketing | 1 | Hundredweights of beans purchased from local co-op members | Cents a cwt. |
| Rice marketing | 1 | Total dollar value of rice purchased from patrons | Percent of purchases |
| Seed marketing | 1 | Gross dollar value of seeds sold to members | Percent of sales |

¹ Computed by dividing savings to be refunded by patronage base indicated.

no crop pools were liquidated during the year (that is, unsold inventories pledged to CCC were still in storage) or, if liquidated, no savings resulted.

Three sugar cooperatives, computing refunds using the total business method, based their calculations on standard tons of sugar cane purchased from members. One last paid refunds in 1965; the other two in 1964. Average cents a ton the three associations refunded amounted to \$0.72. After processing the cane into raw sugar, the cooperatives sold the raw product to a refinery.

The bean marketing cooperative (the only federated organization in the sample) functioned as a sales agency for its local cooperative members. Management reported it attempted to operate on a set margin of 10 cents a 100-pound bag. In 1965, operating expenses amounted to only 7 cents a bag and savings of 3 cents a hundredweight were refunded to members.

Rice and seed marketing cooperatives refunded savings to patrons based on total dollar value of patronage as indicated in table 15.

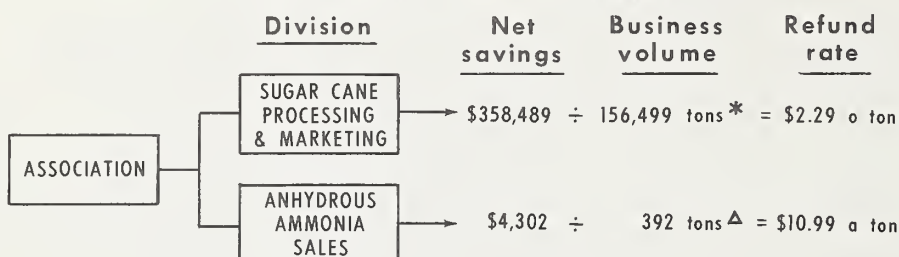
Divisional Method

Two of the 18 cooperatives, handling farm supplies as well as marketing farm products, computed refunds separately for each major function. The divisional set up one of the concerns, a sugar marketing cooperative, used in computing average per unit savings refunded to patrons, is diagramed in figure 12.

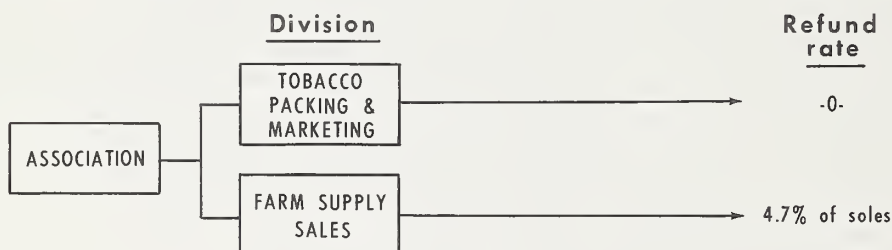
Such a division of operations was necessary to achieve equitability in returning margin over cost of performing these services for patrons. Transactions with patrons involving purchase of sugar cane resulted in average unit savings of \$2.29 a ton after the cooperative processed and sold it in the form of raw sugar. The savings represented amounts in addition to the purchase (or market) price already advanced to the sugar cane growers. They reflected tangible benefits from a marketing-at-cost operation.

Transactions with patrons involving the sale of ammonia resulted in average unit margins of \$10.99 a ton that the cooperative refunded to patrons according to the number of tons each purchased. To have

FIGURE 12.--DETERMINING PATRONAGE REFUND RATE, DIVISIONAL METHOD, TOBACCO MARKETING AND SUGAR MARKETING COOPERATIVES



* STANDARD TONS OF SUGAR CANE PURCHASED FROM PATRONS. Δ TONS OF ANHYDROUS AMMONIA SOLD TO PATRONS.



combined both operations and computed a single refund rate on a total business basis would have resulted in an inequitable distribution of savings.

Marketing patrons would have received more than the actual savings resulting from the marketing operation, anhydrous ammonia patrons would have received less than actual savings generated on the fertilizer operation.

Marketing tobacco for and selling farm supplies to its patrons were the major activities of the other cooperative computing average unit savings on a divisional basis. Figure 12 shows the system it used in determining 1965 patronage refunds.

Patrons got about a nickel back on every dollar they spent for farm supplies. These included a large variety of items—feed, fertilizer, hardware, and so on. As figure 12 indicates, management did not departmentalize its supply division or attempt to compute average unit savings on different products handled. Although such a procedure would have resulted in a more exact allocation of costs and margins, it would

also have added substantially to accounting costs. Sales volume of the various items may not have been large enough to justify the additional expenditure necessary to do this.

Patrons of the marketing division received no refund of commissions paid to the cooperative for selling their tobacco. Costs of maintaining this operation in 1965 more than offset commissions received, resulting in a divisional loss. The loss was charged against the supply division's net margin before arriving at that division's net savings available for distribution.

This method of handling a divisional loss (by transferring it to a division with savings) is a simple way of absorbing it. And, if the cooperative's bylaws provide for such treatment, it is acting within its legal rights. However, this may not be the fairest means of disposing of such a loss. Ideally, the division incurring the loss should absorb it currently from that year's patronage. A division should provide services at cost for its patrons—not less than cost. When such a situation develops, patrons of that division should be

charged, on a current patronage basis, with the amounts necessary to bring that year's operation up to the break-even level.

Departmental Method

Three of the 18 cooperatives maintained separate accounting for operations within a major function or division. *Unlikeness of functions appeared to be the major reason for segregating activities beyond the divisional level.*

For example, one cooperative, designated "A" in figure 13, marketed patrons' dry peas, beans, and lentils on a pooling basis. It financed these operations by making per unit capital retains (instead of relying on retention of net margins) in accordance with a signed marketing agreement. Management reported that patronage refunds, as such, were not determined. That is, all proceeds patrons received—cash plus retain certificates³—were regarded as market price (or value) for products sold on a pooling basis.

In operating its grain department, however, this cooperative did not pool sales proceeds but paid each patron the going market price for his grain on the day he delivered it to the elevator.

Management reported "Our grain operation which might result in patronage refunds from profits (savings) has barely paid its way during the past several years. Handling and storage costs have been reduced to the point, coupled with short storage periods, where we have had no profits (savings) from which to pay patronage refunds."

As management indicated, deducting handling and storage fees (ranging in recent years from 4 cents to 6 cents a bushel) from price paid to patrons has absorbed departmental costs with no excess remaining at year's end for refunding to patrons. There is no inequity in such a situation as long as patrons selling grain to the department meet all departmental costs.

If competition permitted, however, it might be safer to set somewhat higher marketing charges that would result in a nominal margin at the end of the year. Under these circumstances, chances of winding up with a less-than-cost operation would be greatly

reduced. *From a membership relations standpoint, it is better to operate at cost by refunding margins than by making additional charges to break even.*

As figure 13 also points up, these pea, bean, and lentil pools made no patronage refunds after the close of a fiscal year. The cooperative regarded final pool settlements paid to patrons after this date as the last installment of the market price. The total market price a patron received from a pool was composed of cash and capital retain certificates. Such certificates evidence the amount retained for each ton of product a patron included in the pool.

Another of the three cooperatives computing refunds on a departmental basis was the largest in the sample. It refined and marketed raw sugar and molasses on a pooling basis for its patrons. Departments it used in accounting to patrons for products handled are diagramed in figure 13. (This cooperative is designated "B".)

Neither the sugar nor the molasses pool paid patronage refunds as the term is ordinarily defined—although management treated all amounts paid to growers as "patronage dividends." Products accounted for in the pools were not purchased from growers. *Payments to growers, made in installments, were not separated into what may be considered as market price and additional payments.* It is these "additional payments," made on a business volume basis, that for purposes of this study we regard as patronage refunds.

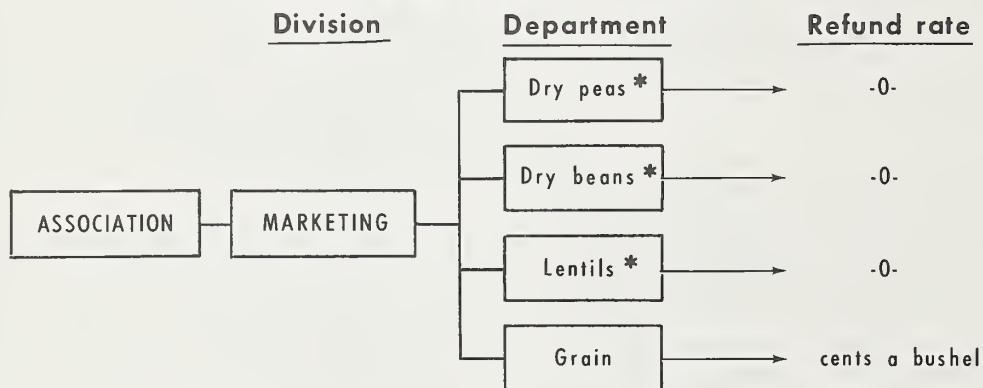
The 13 cents a ton shown in the diagram represented additional payments to patrons but was not a part of the proceeds arising from sale of refined sugar. These payments represented nonpatronage earnings (derived from investments) that the cooperative allocated to patrons included in the raw sugar pool. This was the principal pool—accounting for nearly 80 percent of the product tons the cooperative handled. Management justified allocating the nonpatronage income on the basis of sugar pool patronage because (1) growers in both pools were virtually the same individuals, and (2) the sugar operation was mainly responsible for the cooperative's investment in the company that produced the earnings.

Two of the three cooperatives computing refunds on a departmental basis did so, as we have seen, by separating operations within a single division or major

³ Evidencing per unit capital retains withheld.

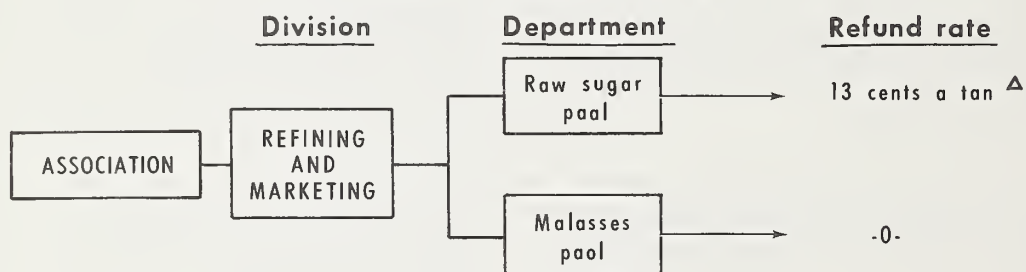
FIGURE 13.--DETERMINING PATRONAGE REFUND RATES, DEPARTMENTAL METHOD, SPECIAL CROPS COOPERATIVES

DRY PEAS AND BEANS COOPERATIVE ("A")



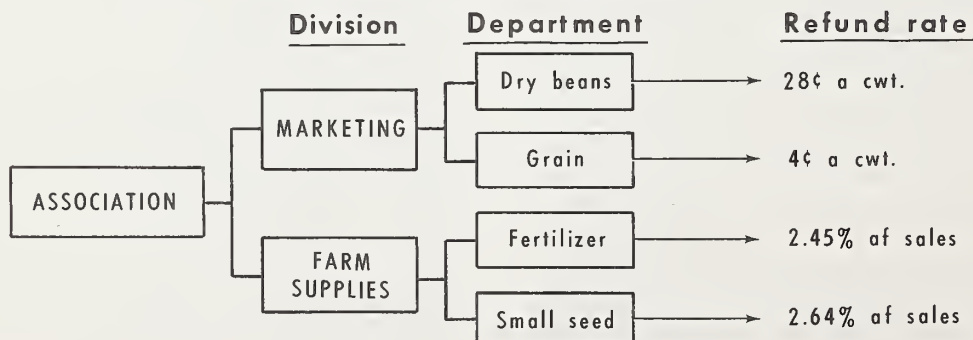
* OPERATED ON A POOLING BASIS WITH NO PATRONAGE REFUNDS DETERMINED.

SUGAR COOPERATIVE ("B")



^Δ NONPATRONAGE INCOME ALLOCATED TO PATRONS ON BASIS OF TONS OF PRODUCT INCLUDED IN RAW SUGAR POOL.

DRY BEANS COOPERATIVE ("C")



function—marketing. One pooled sales proceeds in each of its departments and the other in three of its four marketing departments. Neither one maintained a farm supply operation.

The third cooperative using the departmental method separated operations within each of two divisions. Figure 13 shows departments it used in 1965 to compute average unit savings refunded to patrons. (This cooperative is designated "C".)

Total business volume of this cooperative was a little larger than the average for the sample. It did not pool sales proceeds in any department. At the close of the year, each department's net margin was divided by its patronage in determining average unit refunds to be returned to patrons. *Such a separation of income and costs by departments assured patrons an equitable determination of unit savings from the cooperative's marketing and farm supply services.*

For example, the dry bean department returned savings of 28 cents a hundredweight to its patrons, in addition to the market price paid on delivery of product to the cooperative. By making such yearend payments of net margin on the basis of its patronage, the department provided marketing services to patrons on a cost basis. The same can be said for the grain department. Farm supply departments—fertilizer and seed—also operated at cost by refunding 2.45 cents and 2.64 cents, respectively, on each dollar of sales made to patrons on a competitive price basis.

DISTRIBUTING REFUNDS

Not only did the special crops cooperatives use different methods in computing patronage refunds, but they also followed different procedures in distributing these refunds. We indicated earlier in this section that 13 of the 24 sample cooperatives reported net savings for 1965. Nine of the 13 distributed a portion (or all) of their savings in the form of patronage refunds. Table 16 shows the methods they used.

Cash accounted for 61 percent of patronage refunds the nine special crops cooperatives paid in 1965. Patrons invested close to 40 percent of their 1965 refunds—increasing cooperatives' assets and capitals by \$605,000. *These invested (or noncash) refunds, in most cases, were evidenced by letters of*

Table 16.—Methods of distributing patronage refunds, 9 special crops cooperatives, 1965

| Media | Total refunds | Percentage of total |
|--|-------------------|------------------------|
| Cash | 1,000 dol. 928 | Percent 61 |
| Qualified written notices of allocation: | | |
| Letters of advice | 319 | 21 |
| Certificates of indebtedness | 80 | 5 |
| Preferred stock | 62 | 4 |
| Book credits without written notification to patrons | 144 | 9 |
| Total patronage refunds | 1,533 | 100 |

advice, although one association issued certificates of indebtedness and another, preferred stock. One cooperative credited patrons' equity accounts without providing written notification to patrons. With the exception of the \$144,000 of book credits, all other refunds (both cash and noncash) qualified as deductions the cooperatives could make in computing taxable income.

Four cooperatives, as shown on page 34, last paid refunds in 1964. Cash accounted for 23 percent; qualified written notices of allocation, 62 percent; and nonqualified notices, 15 percent. Three used letters of advice to evidence the noncash payments; one used certificates of equity. All four cooperatives (three sugar and one seed marketing) operated as nonexempt organizations. They distributed refunds to member-patrons only. Therefore, only members received services on a cost basis. The cooperatives retained net margins attributable to nonmember business as unallocated capital.

One cooperative (tobacco marketing) last paid refunds in 1963—all cash. Another, in 1961, paid refunds (all noncash) to patrons of its grain department. Its other departments—peas, beans and lentils—used pooling methods that did not recognize patronage refunds. The four cooperatives last paying refunds previous to 1961 did not indicate how they distributed them.

To point out changes in composition, size, and frequency of patronage refund payments, the 24 sample cooperatives were asked to indicate the amount of cash and noncash refunded annually from

1961 through 1965. During this 5-year period, 15 of the 24 paid refunds. The following tabulation indicates the 15 cooperatives' regularity in making these annual payments.

| Number of refund payments | Number of cooperatives |
|---------------------------|------------------------|
| 5 | 7 |
| 4 | 3 |
| 3 | ¹ 4 |
| 1 | <u>1</u> |
| Total | 15 |

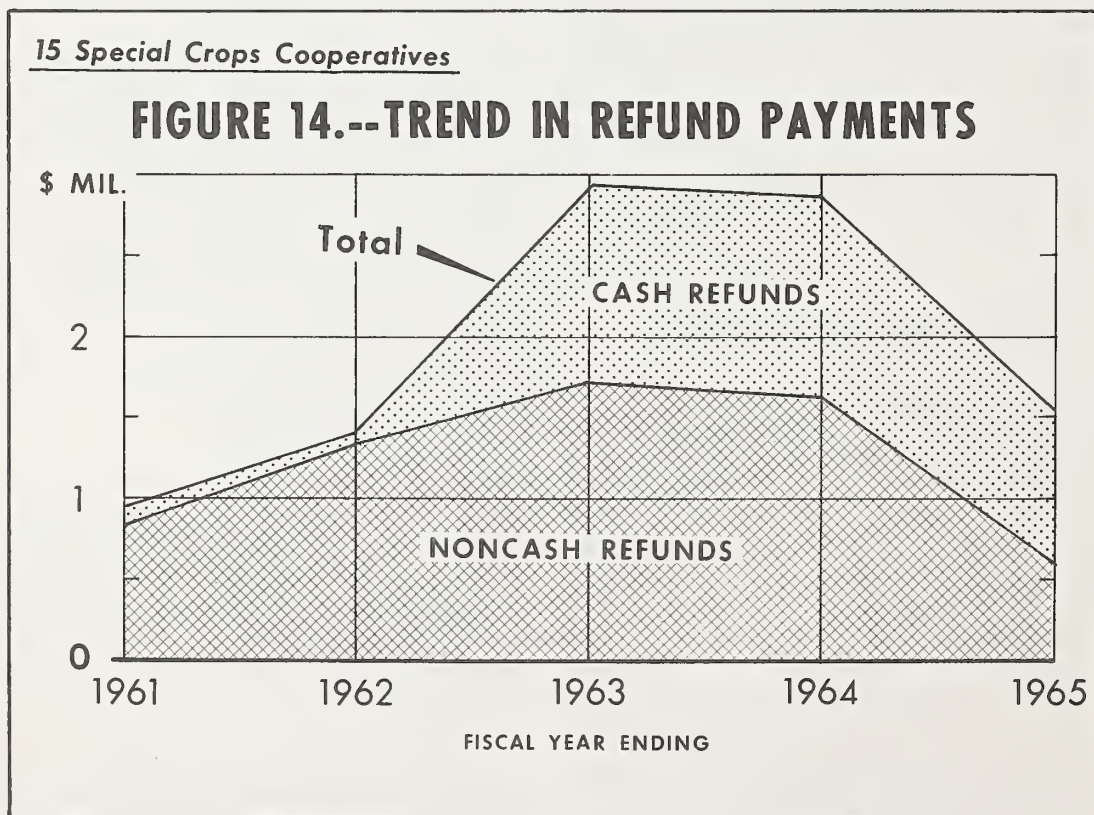
¹ One cooperative completed its first year's operation in 1963.

Since one sugar cooperative in the group did not finish its first year's operation until 1963, eight of the 15 actually paid patronage refunds every year they operated during the 5-year period.

Total patronage refunds the 15 special crops cooperatives paid for the years 1961-65, as figure 14 shows, fluctuated between a low of \$949,000 in 1961 and a high of \$2,946,000 in 1963.

Fourteen of the 15 cooperatives paid refunds from 1961 net margins, 11 from 1962, 13 from 1963 and 1964, and nine from 1965. Altogether, total patronage refunds distributed from margins realized during the 5 years amounted to \$9,694,000 with 40 percent paid in cash and 60 percent in noncash forms.

The cash portion of patronage refunds paid in 1961 and 1962—15 percent and 5 percent, respectively—was small compared to following years. *New tax law requirements, effective for years beginning after December 31, 1962, were an important factor in enlarging the cash composition of refunds paid in 1963 and after.* The new law caused management to become more cash-conscious in its treatment of refunds. Forty-two percent of patronage refunds from 1963 operations was paid in cash; 43 percent from 1964, and 60 percent from 1965.



FRUIT, VEGETABLE, AND NUT COOPERATIVES

FCS records indicate 42 regional fruit, vegetable, and nut cooperatives operated in the United States in 1965. Questionnaires mailed in 1966 to a sample of 23 produced 18 responses. The 18 respondents represent a 43 percent sample of the 42 associations. In the following tabulation, size and membership characteristics of the 18 are summarized.

| Annual business volume | Centralized | Federated | Mixed | Total |
|------------------------|--------------|---------------|--------------|----------|
| <i>Million dollars</i> | <i>-----</i> | <i>Number</i> | <i>-----</i> | |
| Under 5 | 4 | 1 | 1 | 6 |
| 5 to 29.9 | 3 | 3 | 2 | 8 |
| 30 and over | <u>2</u> | <u>1</u> | <u>1</u> | <u>4</u> |
| Total | 9 | 5 | 4 | 18 |

Business volumes of the 18 associations ranged from \$630,000 to \$233 million with a median of \$12 million. Half the organizations had individual growers as members; the other half was about equally divided between those with cooperatives as members and those with both types.

Based on size and membership characteristics, the sample of 18 was representative of regional farm cooperatives marketing fruit, vegetables, and nuts.

DISPOSITION OF NET MARGINS

Ten of the 18 sample cooperatives reported net margins for fiscal years ending in 1965; one incurred a net loss. Seven indicated they marketed patrons' products on a pooling basis and did not use accounting procedures that showed net margins at the close of a fiscal period.

The seven pooling cooperatives made payments to growers in installments but did not separate such payments into market price and additional payments. *It is precisely these "additional payments" made on a business volume basis that for purposes of this study we consider as patronage refunds. They are not a part of market price (or cost of product) but savings in addition to market price that are returned to patrons on a patronage basis.*

Table 17.—Handling net margins, 10 fruit, vegetable, and nut cooperatives, 1965

| Item | Amount | Proportion |
|----------------------------|----------------------|----------------|
| | <i>1,000 dollars</i> | <i>Percent</i> |
| Total net margins | 6,993 | 100.0 |
| Less: | | |
| Patronage refunds | 6,466 | 92.5 |
| Dividends on capital stock | 23 | 0.3 |
| Retained earnings | 66 | 0.9 |
| Income taxes | <u>438</u> | <u>6.3</u> |
| Total disposition | 6,993 | 100.0 |

Five of the seven cooperatives marketing on a pooling basis conducted large operations with business volumes ranging from \$23 million to 37 million. All seven acquired operating capital by making per unit assessments on products marketed.

How the 10 cooperatives, as a group, disposed of their 1965 margins is shown in table 17.

The cooperatives distributed all but about 8 percent of net margins as patronage refunds. Income taxes accounted for most of the margins not refunded on a business volume basis.

Methods Used

The 10 cooperatives used five methods to distribute 1965 net margins. Table 18 shows dollar amounts and percentage of total margins each method accounted for.

Table 18.—Methods used to distribute net margins, 10 fruit, vegetable, and nut cooperatives, 1965

| Method | Cooperatives | Net margins |
|---|---------------|------------------------------|
| | <i>Number</i> | <i>1,000 dollars Percent</i> |
| I Patronage refunds only | 4 | 1,709 24.4 |
| III Patronage refunds and dividends on stock | 1 | 759 10.9 |
| V Patronage refunds and income taxes | 1 | 4,168 59.6 |
| VI Patronage refunds, retained earnings, and income taxes | 2 | 334 4.8 |
| VIII Retained earnings and income taxes | <u>2</u> | <u>23</u> <u>0.3</u> |
| Totals | 10 | 6,993 100.0 |

Evaluation of Methods

Patronage refunds was the major element in four of the five methods the 10 cooperatives used in disposing of 1965 net margins. Refunds were not included in the method two used. The methods are evaluated here to determine if they resulted in operations at cost for the cooperatives.

Method I.—Four cooperatives used patronage refunds only (Method I) in distributing yearend net margins. Because they returned all margins over cost of performing services to patrons—as savings—according to each patron's volume of business transacted with the association, the method rated 100 percent in bringing about operations on a cost basis.

Method III.—One cooperative used Method III in distributing 97 percent of its yearend margins as patronage refunds and 3 percent as dividends on capital stock. It paid no income tax on the stock dividends because of its Section 521 (or exempt) status.

The dividends represented payment for use of capital at going interest rates or less and were part of the cooperative's cost of providing services to patrons and not a distribution of savings. Therefore, the regional's employment of the method gave it an operations at cost rating of 100 percent.

Method V.—One large fruit and vegetable canning association used Method V to distribute 90 percent of its yearend net margins as patronage refunds; and 10 percent was for income taxes. *The taxes resulted from nonpatronage-type income the cooperative refunded to patrons on the same basis as net margins from business with patrons.* All savings exceeding cost of services were refunded to patrons on a patronage basis plus additional earnings the cooperative realized from nonpatronage sources.

The income tax may be regarded as part of the cooperative's cost of earning the nonpatronage income it allocated to patrons. The regional operated as a nonexempt organization and had to pay tax on such incidental (or nonpatronage) income derived from sources not directly related to marketing and processing activities performed for its producer patrons. This method, as the cooperative used it, was 100 percent effective in completing the year's operation on a cost basis. (Reference is also made to this method on page 44.)

Method VI.—Two cooperatives used Method VI to distribute 79 percent of net margins as patronage refunds, 14 percent as retained earnings, and 7 percent for income taxes. The taxes resulted from retained earnings, not from the refunds.

In one cooperative, the retained earnings represented savings generated on nonmember producer business. This association did not operate under Section 521 of the Code and followed the policy of providing nonprofit services to members only. Such a policy did not adversely affect its patronage refunds because all savings exceeding cost of doing business with members were returned to them on a patronage basis.

The other cooperative retaining a portion of net margins as retained earnings did not pay refunds to all patrons either. Management followed a set policy of not refunding any yearend margins as savings to producers "requiring a guaranteed purchase price for their raw products." Such an agreement among patrons did not preclude patronage refunds the cooperative paid from including all savings above cost of providing services to those not requiring a guaranteed price. (This procedure is explained in greater detail on page 44.) The way the two cooperatives used this method gave them an operations-at-cost rating of 100 percent.

Method VIII.—Two cooperatives used Method VIII to retain net margins (84 percent), after taxes (16 percent), and did not pay any patronage refunds.

Management of one association, an organization of peanut growers, reported its 1965 net margins (\$9,600) were too small to handle as patronage refunds. Payment to each producer would have been insignificant and too costly to determine and distribute. The organization last paid refunds in 1961.

The other cooperative, an association of potato growers, last paid patronage refunds in 1959. Management reported it decided to stop refunding yearend margins because (1) unwillingness of nonmembers to consent to include noncash portion of refunds in their gross income had caused dissatisfaction among the cooperative's members, and (2) the detailed record-keeping connected with patronage refunds was too voluminous and costly.

Using this method of handling net margins is not recommended unless yearend margins are nonmaterial and thus impractical for management to treat as

patronage refunds. This was the case with the peanut cooperative. The other cooperative did not meet this criterion.

COMPUTING REFUNDS

In the previous section we learned that 11 of the 18 sample cooperatives operated on a net margin basis. The other seven reported using pool accounting methods that did not show net savings nor recognize patronage refunds. Although only eight of the 11 refunded net margins or savings in 1965, all 18 indicated the year they last paid refunds. This information is summarized in the following tabulation.

| Year patronage refunds last paid | Number of cooperatives |
|-------------------------------------|---------------------------|
| 1965 ¹ | 8 |
| 1964 | 1 |
| 1961 | 1 |
| 1958 | 1 |
| Not recognized ² | 7 |
| Total | 18 |

¹ Most recent year data were obtained.
² Used pool accounting methods that did not show yearend savings nor recognize refunds.

In computing patronage refunds, the 11 cooperatives indicated various methods that FCS classified as:

- (1) total business, (2) divisional, (3) departmental, and (4) combination of methods.

Total Business

Five of the 11 cooperatives used total patronage as the base for determining average unit savings above cost of individual transactions. A key characteristic of this method of computing refunds is the calculation of a single refund rate. Although a cooperative may have maintained several departments for managerial control, savings from such operations were combined and only one refund rate computed for returning savings to patrons.

Functions each association performed and the patronage base used in computing average unit margins to be refunded to patrons are shown in table 19.

Business volumes of these five associations ranged from \$4 million to \$61 million with a median of \$7 million. Three of the five had both individual farmers and other associations as members. One was centralized and one federated. Three were nonexempt and two qualified under Section 521 of the Code.

Except for the two fruit and vegetable canning concerns, the cooperatives marketed a single type product such as potatoes or peanuts.

Table 19.—Determining refund rates by total business method, 5 fruit, vegetable, and nut cooperatives

| Function | No. of ass'ns | Patronage base | Refund rate ¹ |
|---------------------------------|---------------|---|------------------------------|
| Fruit and vegetable canning | 1 | Dollar value of raw products patrons delivered | Percent of raw product value |
| Fruit and vegetable canning | 1 | Gross dollar volume from sale of members' products | Percent of sales |
| Potato processing and marketing | 1 | Dollar value of raw products pool patrons delivered | Percent of raw product value |
| Pecan marketing | 1 | Pounds of pecans received from members | Cents a 1b. |
| Peanut marketing | 1 | Net tons of peanuts pledged to CCC for price support loan | Dollars a ton |

¹ Computed by dividing savings to be refunded by patronage base indicated.

The largest of the fruit and vegetable canning cooperatives operated on a cost basis for its members by using the following summarized procedure in determining annual net savings to be refunded on a patronage basis.

Data for fiscal year ended May 31, 1965

| | |
|---------------------------------------|---------------------|
| Sales | \$96,763,030 |
| Less: | |
| Value of raw products ¹ | 21,600,887 |
| Cost of processing, canning, etc. | <u>60,489,678</u> |
| Gross margin | \$14,672,465 |
| Less: Operating expenses | <u>10,504,415</u> |
| Net margin | \$ 4,168,050 |
| Less: Federal income tax ² | <u>412,000</u> |
| Net savings paid as refunds | <u>\$ 3,756,050</u> |

¹Going rate or market price for products delivered.

²On portion of margins derived from business with nonmember nonproducers. Since cooperative did not operate under Section 521 of the Code, it could not deduct nonpatronage income allocated to patrons.

Rate of refund for returning to each member-producer his share of the savings, thus completing the marketing-at-cost operation, was computed as follows:

$$r = \frac{\$3,756,050 \text{ (net savings)}}{\$21,600,887 \text{ (Value of raw products delivered by all producers)}} = 17.4\% \text{ of raw product value}$$

A member shipping raw products valued at \$3000 to the association would have received a patronage refund of \$522 (0.174×3000). Stated in another way the cooperative's net savings, (or patronage refunds) amounted to 4 percent of its sales.

Information in table 19 pertaining to the potato processing and marketing cooperative's patronage base requires a little more explanation. In its operation, this cooperative provides growers with an option. They may either participate in the pool or sell

their raw products to the cooperative at a guaranteed purchase price. However, patrons cannot be partially in the pool—they are either in or out. For 1965, 80 percent of the cooperative's tonnage was pooled, indicating growers' preference for this method of marketing. The following tabulation gives a summary account of the cooperative's method of computing refunds.

| | Value of raw products mkt'd. | Net savings | Refund rate |
|------------------------------|---------------------------------|----------------|----------------|
| Pool and nonpool combined | \$3,076,000 | \$279,985 | \$0.091 |
| Less: Nonpool (purchased) | <u>688,000</u> | <u>62,602</u> | <u>0.091</u> |
| Pooled products | \$2,388,000 | \$217,383 | \$0.091 |

Both pooled and purchased (nonpooled) potatoes were placed in one of the cooperative's two divisions—marketing or processing—according to quality and size, through mechanical elimination or hand sorting. The net savings of \$279,985 represents the outcome of the entire operation as one unit. Dividing this figure by the value of total raw products marketed ($\$279,985 \div \$3,076,000$) results in an average unit savings distribution (or refund) rate of 9.1 cents on each dollar of potatoes shipped to the cooperative. Savings of \$62,602 ($\$688,000 \times 0.091$) on the purchased volume, the cooperative kept—after taxes—as retained earnings. The balance of the savings—\$217,383 ($\$2,388,000 \times 0.091$)—was returned to pool patrons as patronage refunds by multiplying the dollar value of each patron's raw product shipments by the \$0.091 rate of refund.

Management believed nonpool patrons requiring a guaranteed purchase price (and thus assuming no marketing risk) had already benefited by such price and were not entitled to any end-of-year savings accruing to the cooperative's over-all operation.

Divisional Method

Three of the 11 cooperatives used divisional bases in computing patronage refunds. One of these was centralized, one mixed, and one federated in membership structure. Their business volumes ranged from less than \$1 million to \$22 million with a median of

\$3 million. Only the concern with the smallest business volume did not operate under Section 521 of the Internal Revenue Code. The other two qualified under this section of the Code.

Each of the three cooperatives used marketing and purchasing as the divisional bases for computing patronage refunds. This means that each association computed two refund rates in returning average unit savings to patrons. Such a procedure was followed because marketing and purchasing were completely unrelated functions with widely different unit costs. In such cases, using a separate refund rate for each division assures that it will be more representative of actual savings per unit of product the patron purchases or the cooperative markets. Representativeness of its refund rate (or rates) is one important measure of the equitability of the patronage refund method a cooperative uses.

The divisional method the three cooperatives used in computing their patronage refunds is diagramed in figure 15.

One of the three cooperatives reported using this method for its 1957-58 season when it last paid patronage refunds. The other two were currently using it. All three cooperatives used physical units (cartons, boxes, and packages) shipped by patrons in determining volume of business (or patronage) on which to base their *marketing refund rate*. Likewise, all three used dollar value of sales to patrons in measuring the patronage on which to base their *purchasing refund rate*.

The one cooperative not operating under Section 521 omitted nonmembers' patronage (and savings on this patronage) in computing its divisional refund rates because it distributed savings to members only.

Departmental Method

Two of the 11 associations used departmental bases in computing patronage refunds. One of these was the largest cooperative in the sample with a business volume of \$233 million. The other's business volume (\$14 million) was near the median (\$12 million) for the whole group. Both concerns operated under Section 521 of the Code which requires that all patrons be treated alike in computing refunds. The largest cooperative was federated, the other, centralized in membership structure.

The federated cooperative reported three major divisions in its overall operations—marketing, advertising and export-military. Various rates of refunds were computed in each of these divisions, depending upon product variety in advertising and export-military, and upon sales in the marketing division. This was the extent of the information the cooperative gave on its refund computation. This organization's refunding method was classified as departmental because of the separation of operations within each division by product sales and variety. A separate refund rate was computed for each of these intradivisional operations.

In the centralized association, departments were grouped under two major divisions, marketing and purchasing. Its method of computing refunds also is diagramed in figure 15.

Refunds were made on rates established separately for each department. The association had only one class of members and the size of each individual's refund depended on the amount of his participation (or patronage) in each department. Management indicated it attempted to establish each year prices for stores (supplies), rental fees for containers, and charges for marketing services that would provide a small margin over costs for each department. However, things don't always work out exactly as planned.

As the diagram indicates, *two departments paid no refunds because they incurred net losses*. Members patronizing the two losing departments did not absorb these losses directly by paying additional charges.

Management reported not using this procedure because members resented it. Instead the departmental losses of \$2,500 were absorbed by (or charged to) departments with savings. After deducting departmental losses, the cooperative paid refunds for the year amounting to \$138,190 (\$140,690 minus \$2,500).

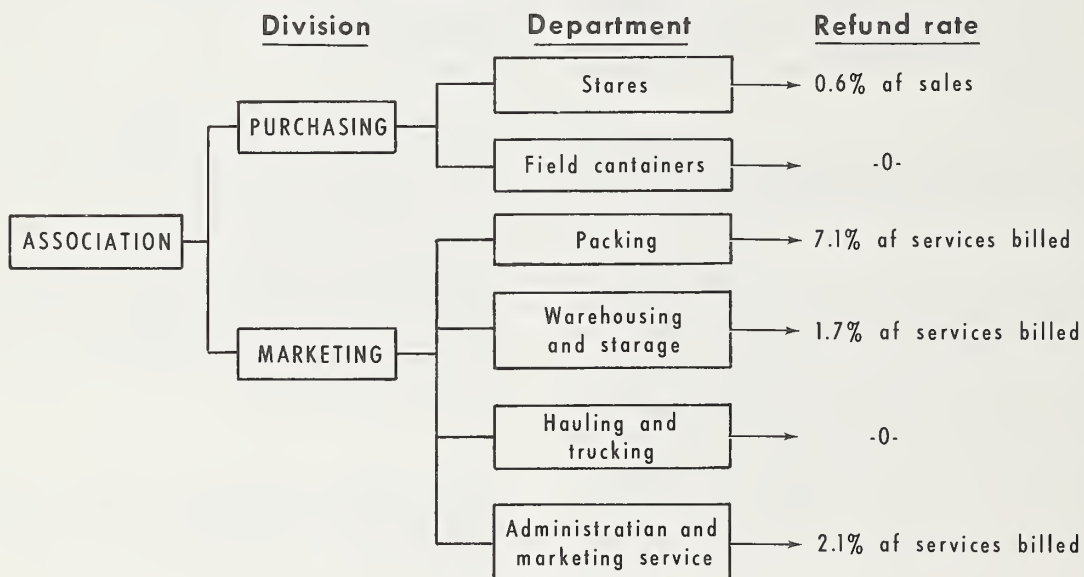
The cooperative did not indicate how it prorated the loss to the margin departments. One method that is sometimes used in determining the amount of the loss to be absorbed by each department with savings is to multiply total loss (in this case, \$2,500) by each department's percentage of total savings (in this case, \$140,690).

**FIGURE 15.--METHODS OF COMPUTING PATRONAGE REFUNDS,
FRUIT, VEGETABLE, AND NUT COOPERATIVES**

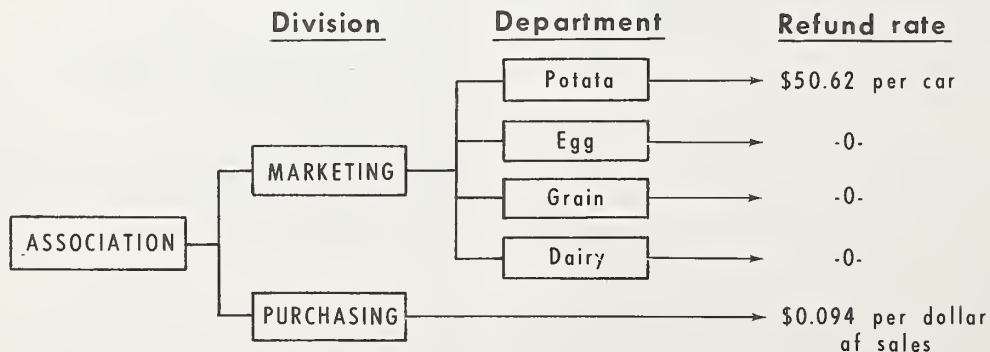
DIVISIONAL METHOD



DEPARTMENTAL METHOD



COMBINATION



Combination of Methods

One of the 11 cooperatives used both divisional and departmental bases in computing its patronage refunds. This association, a potato growers organization, had a centralized membership structure and an annual business volume of \$11 million (close to the median volume of the cooperatives in the sample). It also operated under Section 521 of the Internal Revenue Code. The two methods the cooperative used in computing its patronage refunds are diagrammed in figure 15.

The cooperative separated its major functions—marketing and purchasing—into two divisions. Net savings on sales transactions in the purchasing division were returned to patrons at the rate of 9.4 cents on each dollar of their purchases, as follows:

$$\frac{\$472,700 \text{ (net savings)}}{\$5,014,200 \text{ (Total sales of division)}} = 9.4\% \text{ of sales}$$

This shows how the cooperative used the divisional method in computing patronage refunds for its purchasing operation. As figure 15 shows, the association did not divide the purchasing (or supply) operation into departments, but used total value of sales at the divisional level as the base for calculating the amount of savings per dollar of patrons' purchases.

In its marketing operation, the cooperative did not use a divisional base in computing its refunds but departmentalized this function by type of products processed and sold for members. Savings of each marketing department were then refunded to patrons of that department based on the relationship of each individual's patronage to total patronage. For example, in the potato department, savings of \$263,200 (after absorption of the three sideline departments' losses) were realized on a total patronage of 5,200 carload lots. A patron shipping one percent of the patronage (or 52 cars of potatoes) would have received a refund of \$2,632 ($52/5200 \times \$263,200$).

However, a simpler method for determining amount of savings to be refunded to each patron is to (1) compute average unit savings and (2) multiply it by the number of units each patron shipped. Using the same figures as in the above example, the average unit savings of \$50.62 a car ($\$263,200/5,200$) \times 52 cars the patron shipped results in the same refund of \$2,632.

DISTRIBUTING REFUNDS

As in computing average unit savings to be refunded to patrons, the cooperatives also used different methods in distributing these savings. As indicated earlier in this section, 10 of the 18 sample cooperatives reported net margins for 1965. Eight of the 10 distributed all or part of their margins in the form of patronage refunds. Table 20 shows methods they used.

All written notices (or noncash payments) qualified under the Revenue Act of 1962, thus allowing the associations to deduct total refunds paid (both cash and noncash) in computing their taxable income. This does not signify that the \$6.5 million of net margins the cooperatives paid in the form of patronage refunds escaped taxation. It does indicate that patrons elected to pay the federal income tax on these savings resulting from business with their cooperatives.

Savings paid in noncash forms represented the portion of refunds patrons invested in the associations. As table 20 shows, patrons invested 59 percent of their 1965 refunds—increasing cooperative assets and capitals by \$3.8 million.

Five of the eight cooperatives paid refunds composed of both cash and noncash elements; three paid all cash. Two of the five used letters of advice to notify patrons of the dollar amount credited to their equity accounts. One issued "Class A" stock which management reported was not classified as common or preferred but as an "intermediate type" issued specifically to evidence noncash patronage refunds.

Table 20.—Methods of distributing patronage refunds, 8 fruit, vegetable, and nut cooperatives, 1965

| Media | Total refunds | Percentage of total |
|---|---------------------|------------------------|
| Cash | 1,000 dol. 2,662 | Percent 41 |
| Qualified written notices of allocation: | | |
| Revolving fund certificates | 3,005 | 47 |
| Letter of advice | 479 | 7 |
| Capital stock | 320 | 5 |
| Total patronage refunds | 6,466 | 100 |

One evidenced its noncash refunds in the form of preferred stock.

Capital stock, as table 20 shows, accounted for only 5 percent of total refunds the associations distributed. Although only one (which was next to the largest cooperative in the sample) of the five issued revolving fund certificates, this type of written notice accounted for the largest amount of noncash refund dollars.

Three cooperatives, as shown in the tabulation on page 43, last paid refunds in 1964, 1961, and 1958, respectively. The one last paying refunds in 1961, a peanut marketing association, paid all in noncash.⁴ The cooperative (potato marketing) last making refunds in 1958 did not indicate how it distributed them.

To reveal changes in makeup, size, and frequency of patronage refund payments, we asked the 18 sample cooperatives to indicate the amount of cash

⁴ Management reported the cooperative had refunded \$4.8 million to members since its inception in 1937, and that 1961 revolving fund certificates were the only ones outstanding.

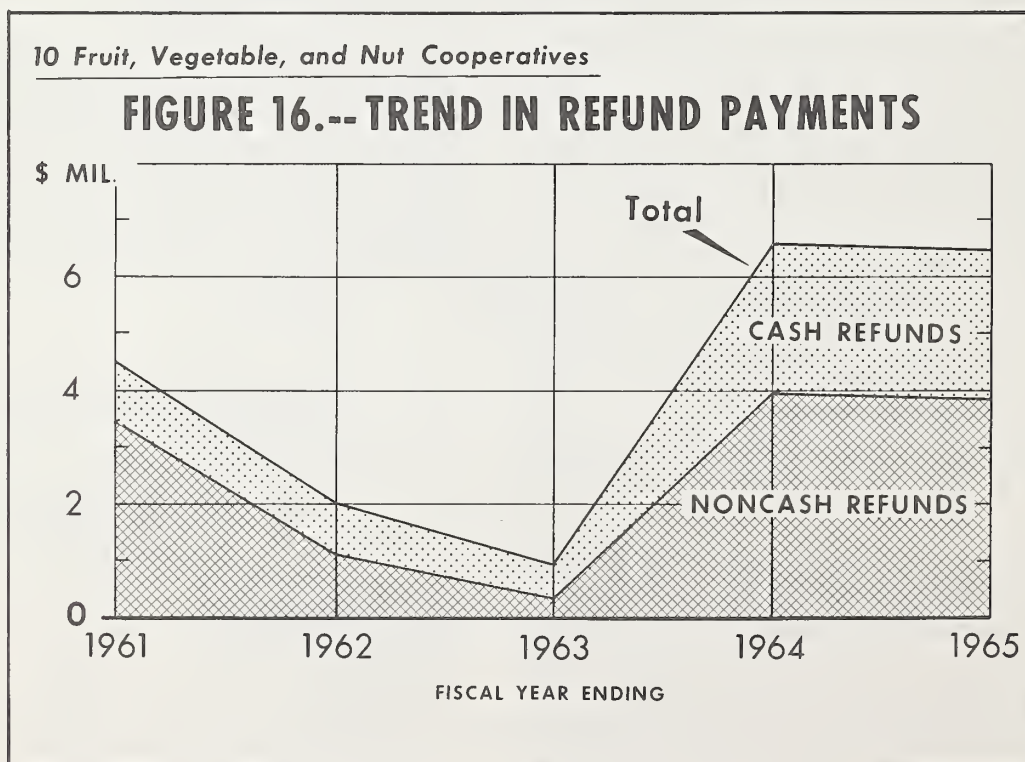
and noncash refunded annually from 1961 to 1965 and how often they paid refunds. During this time, as the tabulation on page 43 shows, 10 of the 18 paid refunds. The following tabulation indicates how often the associations made annual refund payments during the 5-year span.

| Number of refund payments | Number of cooperatives |
|------------------------------|---------------------------|
| 5 | 7 |
| 4 | 1 |
| 1 | 1 |
| Total | 10 |

¹ One cooperative completed its first year's operation in 1964.

The cooperative that completed its first year in 1964 refunded all of that year's savings (\$112,000) in cash but did not pay refunds resulting from its 1965 operations.

Total patronage refunds the 10 fruit, vegetable, and nut cooperatives paid for the years 1961-65, swung from \$4.5 million in 1961 down to about \$1 million in 1963 and then up to about \$6.5 million in both 1964 and 1965 (figure 16).



Notwithstanding the sizable drop in 1962 and 1963, the overall trend in total dollar volume of refunds over the 5 years was upward. Eight of the 10 associations refunded savings out of 1961, 1962, and 1963 net margins; nine out of 1964, and eight out of 1965 margins. Altogether, total patronage refunds distributed out of annual net margins during the 5 years amounted to \$20.5 million. Thirty-eight percent was paid in cash and 62 percent in noncash forms.

As figure 16 portrays, total yearend refunds declined from 1961 to 1962 and 1963. However, the cash portion of refunds during the same period increased. Cash made up 24 percent of 1961 refunds,

46 percent of 1962, and 65 percent in 1963. The cash percentage of 1964 and 1965 refunds was about the same, amounting to nearly 41 percent.

Although management can control the cash-noncash composition of yearend margins refunded on a patronage basis, it cannot predict with certainty the total dollar amount of these margins. This uncertainty indicates that cooperatives, where possible, should not depend entirely on retained refunds as the only source of operating capital. Some of the cooperatives in this sample did use other means, such as per-unit retains and sale of stock—as well as noncash refunds—to finance overall operations.

COTTON AND OILSEED COOPERATIVES

FCS records indicate 30 regional cotton and oilseed cooperatives operated in the United States during 1965. Questionnaires mailed in 1966 to a sample of 12 produced 10 responses for a 33 percent sample. The following tabulation summarizes size and membership characteristics of the 10 sample cooperatives.

| Annual business volume | Centralized | Federated | Mixed | Total |
|------------------------|---------------|-----------|-------|-------|
| <i>Million dollars</i> | <i>Number</i> | | | |
| Under 5 | 0 | 2 | 2 | 4 |
| 5-39.9 | 2 | 1 | 1 | 4 |
| 40 and over | 1 | 0 | 1 | 2 |
| Total | 3 | 3 | 4 | 10 |

Business volumes of the 10 associations ranged from \$1 million to \$190 million with a median of \$12 million. The three centralized associations varied from \$17 million to \$148 million with a median of \$36 million. The four mixed associations with both individual producers and other cooperatives as members had business volumes ranging from \$3.5 million to \$190 million with a median of \$6 million and the three federated ranged from \$1 million to \$28 million with a median of \$3.5 million.

DISPOSITION OF NET MARGINS

Nine of the 10 sample cooperatives reported net margins for fiscal years ending in 1965. One, next to the largest in the sample, indicated operating on a pool accounting basis that did not show a net margin at the end of the year. Management of the pooling association explained that after closing its 1965 pool and subtracting from sales receipts all operating expenses, initial advances, additional progress payments, and per bale capital retains—a final cash payment of \$5.5 million was made to patrons to complete the year's marketing-at-cost operation.

The pooling association did not regard the final cash payment as a refund of savings because it did not separate payments to patrons into market price (or cost of product) and additional payments after meeting operating expenses. It considered all payments to patrons as cost of products marketed and patrons viewed these payments as the market value received for their cotton. Neither savings nor refunds, as defined in this study, were recognized in this type of pool accounting.

Table 21 shows total net margins of the nine cooperatives and procedures they used in disposing of these amounts.

Patronage refunds accounted for nearly 96 percent of total net margins. The other 4 percent the

Table 21.—Handling net margins, 9 cotton and oilseed cooperatives, 1965

| Item | Amount | Proportion |
|----------------------------|----------------------|----------------|
| | <i>1,000 dollars</i> | <i>Percent</i> |
| Total net margins | 9,591 | 100 |
| Less: | | |
| Patronage refunds | 9,186 | 95.8 |
| Dividends on capital stock | 375 | 3.9 |
| Retained earnings | 23 | 0.2 |
| Income taxes | 7 | 0.1 |
| Total disposition | 9,591 | 100 |

cooperatives distributed mainly as dividends on capital stock. Retained earnings and income taxes were very minor deductions. Dividends paid on a stock basis were not taxable to the cooperatives making them because of their Section 521 (or exempt) status. Exempt cooperatives are allowed to deduct such dividends in computing taxable income.

Methods Used

The nine cooperatives used three methods in distributing 1965 net margins (table 22).

Table 22.—Methods used to distribute net margins, 9 cotton and oilseed cooperatives, 1965

| Method | Cooperatives | Net margins | |
|--|---------------|-------------------|----------------|
| | <i>Number</i> | <i>1,000 dol.</i> | <i>Percent</i> |
| I Patronage refunds only | 5 | 6,068 | 63.3 |
| III Patronage refunds and dividends on stock | 3 | 3,497 | 36.4 |
| VIII Retained earnings and income taxes | 1 | 26 | 0.3 |
| Totals | 9 | 9,591 | 100.0 |

Evaluation of Methods

Patronage refunds was the major element in two of the methods nine cooperatives used to distribute net margins. Refunds were not included in the other one.

Method I.—Five cooperatives used patronage refunds only—with very minor exceptions in two instances—in returning yearend margins to patrons as savings. One of the five, the largest cooperative in the sample, followed a policy of not paying refunds to patrons when the amount involved was \$1 or less. It kept these small amounts, after taxes, as retained earnings. In 1965, the cooperative had refunds in this size category amounting to \$2,500 (or 0.1 percent) of its total net margins of \$4.3 million refunded to patrons as savings or additional income. Such a practice did not lower the cooperative's operation-at-cost rating because margins it withheld were not a part of the margins exceeding cost of providing services to patrons receiving patronage refunds.

Another of the five cooperatives kept as retained earnings that portion of net margins attributable to

nonmember business. It operated as a nonexempt cooperative and paid patronage refunds—or operated at cost—for members only. In 1965 retained nonmember margins amounted to only \$311 after taxes, or 0.1 percent of total net margins of \$442,060. Patronage refunds paid to members accounted for the other 99.9 percent. The cooperative's retention of nonmember margins did not impair its operation-at-cost status because margins withheld were not a part of the margins arising from member business.

Method III.—Three cooperatives used Method III in distributing 89 percent of net margins on a patronage basis and 11 percent on a stock basis. No income tax was paid on the dividends on capital stock because the three associations operated under Section 521 of the Code. This section permits cooperatives to deduct such dividends in computing taxable income.

The dividends were limited in amount to the going interest rate or less and represented payment for use of capital in marketing patrons' products. The dividends were more in the nature of a cost of providing services than a distribution of net margins. Under

these circumstances such payments on a stock basis did not impair the three cooperatives' cost status. This method of distributing net margins, as the three associations used it, rated 100 percent in providing services to patrons at cost.

Method VIII.—One cooperative used Method VIII to retain net margins, 77 percent after taxes (23 percent), and did not return yearend margins as a savings on a patronage basis. Management explained, "In view of the fact that we sell most of our cotton out of the loan, we make settlement with the grower based on our price to the mill. This results in a small savings each year (\$25,600 in 1965) on which we pay taxes and add to our undivided margins." The association last paid patronage refunds in 1951.

This method, as the cooperative used it in 1965, was rated zero because that year's net margins—judged to be material in quantity—were not refunded to patrons as savings based on their patronage. Patrons did not receive services at cost.

COMPUTING REFUNDS

In the previous section we learned that nine of the 10 sample cooperatives operated on a net margin or savings basis. The other one operated on a pooling basis that did not show yearend savings nor recognize patronage refunds. Eight of the nine cooperatives operating on a net margin basis indicated they paid

patronage refunds in 1965; the other last paid refunds in 1951. This information is summarized in the following tabulation.

| Year patronage refunds last paid | Number of cooperatives |
|-------------------------------------|---------------------------|
| 1965 ¹ | 8 |
| 1951 | 1 |
| Not recognized ² | 1 |
| Total | 10 |

¹Most recent year data were obtained.

²Used pool accounting that did not show year-end savings nor recognize refunds.

In computing patronage refunds, eight cooperatives reported various methods that FCS classified as (1) total business and (2) departmental. The association last paying refunds in 1951 did not indicate how it computed them.

Total Business

Five of the eight cooperatives used the total business method in 1965 to determine the unit refund rate necessary in completing their nonprofit operations. The functions each association performed, its total savings, and patronage base used in computing average unit savings to be refunded to patrons are shown in table 23.

Table 23.—Determining refund rates by total business method, 5 cotton and oilseed cooperatives, 1965

| Function | Cooperatives | Net savings | Patronage base | Refund rate ¹ |
|-------------------------------------|---------------|-------------------|--|---------------------------|
| | <i>Number</i> | <i>1,000 dol.</i> | | |
| Cottonseed processing and marketing | 4 | 1,134 | 210,861 tons of cottonseed purchased from patrons ³ | \$5.34 a ton ² |
| Compressing and storing | 1 | 373 | 178,832 bales of cotton received from patrons | \$2.08 a bale |

¹ Computed by dividing savings by patronage base indicated.

² Average rate for 4 cooperatives combined. Individual averages for the 4 ranged from \$4.62 to \$7.02 a ton.

³ One cooperative, operating as a nonexempt organization, paid refunds to members only. It excluded nonmember patronage (a very small portion of its total patronage in 1965) in computing refunds.

One of the cottonseed processing and marketing cooperatives, not qualifying under Section 521 of the code, based patronage refunds on total business of members excluding nonmember business. The cooperative referred to its member business as "contractual patronage" and did not refund savings on nonmember (or noncontractual) transactions. The other three providing this specialized service were Section 521 cooperatives and based refunds on business of all patrons. Business volumes of the four associations ranged from \$3.5 million to \$7 million.

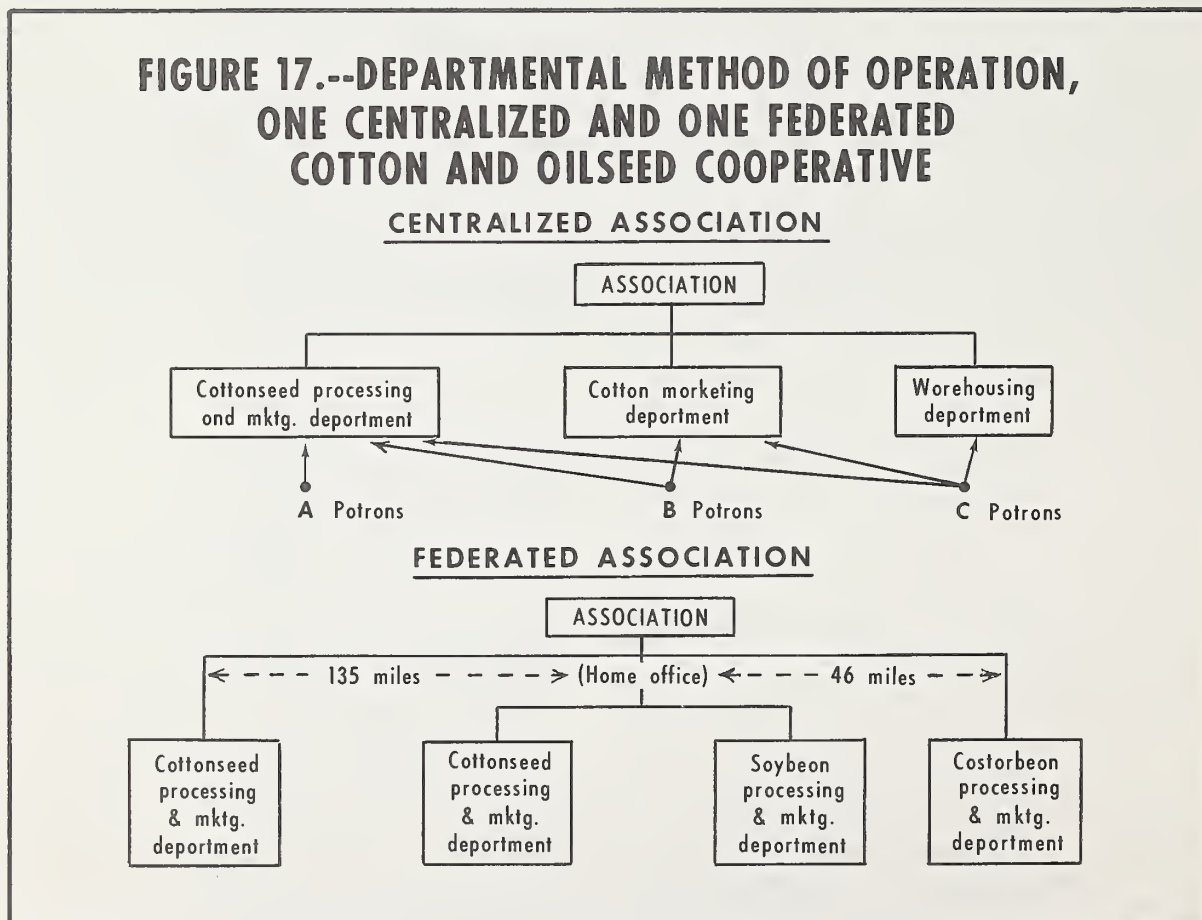
One federated cooperative owned by several gin associations performed the specialized function of compressing and storing cotton. It had a business volume of about \$1 million and net savings after dividends on stock of \$372,690. These savings, amounting to \$2.08 a bale, were computed on the basis of 178,832 bales of cotton received from patrons (table 23). For example, a gin shipping 5,000

bales of cotton during the season would have received a yearend patronage refund of \$10,400 ($5,000 \times \2.08).

Departmental Method

Because of a greater variety in services offered to patrons, three of the eight cooperatives used departments as bases for computing patronage refunds. Two departmentalized their marketing operations. One, engaged in marketing and handling farm supplies, divided both these operations into several departments. Both associations performing strictly marketing activities had large business volumes (\$28 million and \$35 million) with one federated and the other centralized in membership structure.

Centralized Association.—The centralized association's departmental method is diagrammed in figure 17.



In the diagram, A, B, and C represent patrons who used the association in different ways. "A" patrons limited their business to the cottonseed processing and marketing department by delivering cottonseed only. "B" patrons used two departments by delivering both cotton and cottonseed; "C" patrons used all three departments.

In 1965, the cooperative's overall net savings amounted to \$975,638. Table 24 shows how each department's savings and business volume was used to compute average unit savings (rate of refund) for patrons. A B-type patron, for example, delivering 25,000 lbs (approximately 50 bales) of cotton and 20 tons of cottonseed would have received patronage refunds amounting to \$403.50 (20 x \$6.50 and 25,000 x .019). C-type patrons received refunds from all three departments, and "A" patrons were refunded \$6.50 for each ton of cottonseed they shipped.

Federated Association.—The federated association's primary function was processing and selling cottonseed shipped by local gin cooperative members. Other services, of less importance, consisted of

processing and marketing soybeans and castorbeans. Its departmentalized marketing operations are diagramed in figure 17.

Function, location of facilities, and type of product processed and marketed were factors in determining operational division of this cooperative. Management used this system of operations in cost identification and control and in achieving equitability in returning savings above cost to patrons using different services.

At the home office, separate departments were maintained for the processing-marketing of cottonseed and soybeans. The association owned and operated additional cottonseed oil mill facilities, located 135 miles to the southeast, which were treated as a separate department. This was a lesser-volume higher-cost operation which produced smaller savings, on a per ton basis, than the one located at the home office (table 24).

The castorbean department, located 46 miles north of the home office, paid no patronage refunds because the processing plant was not completed for

Table 24.—Computing patronage refunds by departmental method, centralized and federated cotton cooperatives

| Department | Net savings | Business volume base for refund | | Refund rate |
|-------------------------------------|----------------------------|---------------------------------|--------------|----------------|
| <u>Centralized Association</u> | | | | |
| | <i>Dollars</i> | <i>Thou.</i> | <i>Units</i> | <i>Dollars</i> |
| Cotton marketing | 566,457 | 51,745 | lbs. | 0.019 a lb. |
| Cottonseed processing and marketing | 284,870 | 44 | tons | 6.50 a ton |
| Warehousing | 124,311 | 106 | bales | 1.17 a bale |
| Total refunds | <u>975,638</u> | | | |
| <u>Federated Association</u> | | | | |
| Cottonseed (Home office location) | ¹ 2,254,564 | 320 | tons | 7.05 per ton |
| Soybean (Home office location) | ¹ 55,106 | 367 | bu. | .15 per bu. |
| Castorbean | -0- | 9 | tons | -0- |
| Cottonseed | <u>¹ 52,127</u> | 18 | tons | 2.94 per ton |
| Total refunds | 2,361,797 | | | |

¹ After dividends on capital stock.

crushing until after end of the fiscal year—although patrons had delivered some 9,000 tons of beans prior to that time.

Mixed Membership.—One mixed membership cooperative, because of its wide variety of marketing services and extensive purchasing activities, computed patronage refunds on a departmentalized marketing and purchasing basis. This cooperative's business volume amounted to \$190 million in 1965; it was the largest association in the cotton sample. Its operational division is diagramed in figure 18.

Except for the marketing division's grain and pecan departments, all departments realized net savings and paid patronage refunds in 1965. Net losses in grain and pecans were charged, on a pro rata basis, to departments with savings. No subsidy, however, was involved in this procedure. Future years' savings made by the two departments incurring losses in 1965 will be charged first for the amount needed to pay back the capital "loaned" to them by 1965 margin departments.

Total savings the large regional cooperative refunded to its patrons amounted to \$4,342,160 with its major divisions (or functions) of marketing and purchasing accounting for 52 percent and 48 percent, respectively. Nonpatronage income of \$29,000 was included in total refunds paid to patrons, although the cooperative did not report on how this incidental income—from sources not related directly to its marketing and purchasing activities—was allocated or prorated among the departments.

In the purchasing division, departments were based on type of patron served (wholesale or retail); in marketing, type of commodity handled was the deciding factor.

DISTRIBUTING REFUNDS

Besides using different methods to compute patronage refunds, the cooperatives also employed various means to distribute them. Eight of the nine cooperatives that reported yearend savings for 1965

FIGURE 18.--OPERATIONS OF MIXED MEMBERSHIP COTTON COOPERATIVE

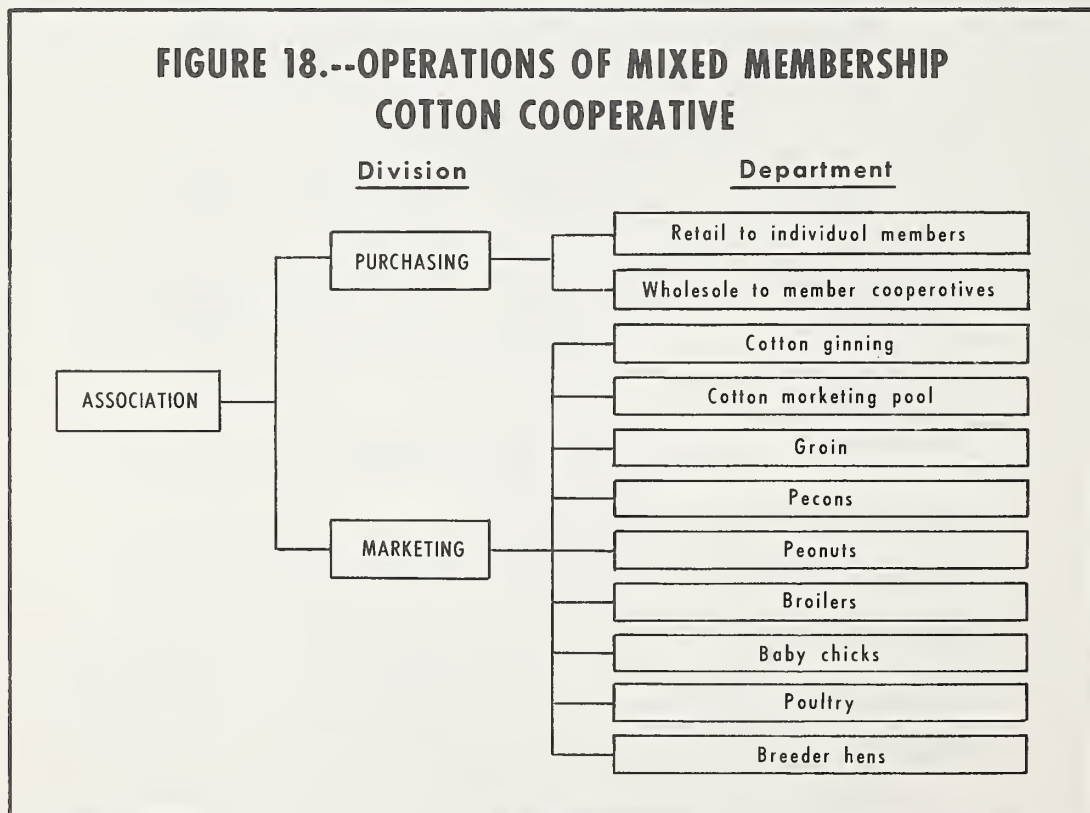


Table 25.-Methods of distributing patronage refunds, 8 cotton and oilseed cooperatives, 1965

| Media | Total refunds | Percent of total |
|---|-------------------|------------------------|
| | <i>1,000 dol.</i> | <i>Percent</i> |
| Cash ¹ | 4,985 | 54 |
| Qualified written notices of allocation: | | |
| Letters of advice | 2,238 | 25 |
| Capital stock | 1,673 | 18 |
| Patronage equity certificates | 290 | 3 |
| Total patronage refunds | 9,186 | 100 |

¹ Includes "cashable certificates" of \$1,737,000 issued by the largest association in the sample.

distributed all or part of their savings in the form of patronage refunds. Table 25 shows methods they used.

Fifty-four percent of patronage refunds the eight cooperatives paid out of 1965 net savings was in the form of cash; 46 percent was in noncash forms. All noncash payments met Federal tax law requirements as qualified written notices of allocation, thus allowing the associations to deduct total refunds in computing taxable income. Patrons agreed to include the \$9.2 million of refunds in their individual tax returns for the year they received them.

Dollarwise, letters of advice and capital stock accounted for 93 percent of the noncash refunds. Patronage equity certificates made up the balance. Noncash refunds also indicate that portion of refunds patrons invested in their cooperatives. As table 25 shows, patrons invested about half their 1965 refunds, increasing cooperative assets and capital by \$4.2 million.

To indicate trend in size, composition, and frequency of patronage refund payments, we asked the 10 sample cooperatives to report the amount of cash and noncash refunded annually from 1961 through 1965. During this time eight of the 10 paid refunds. The following tabulation shows how often these associations made refund payments out of net savings during the 5 years.

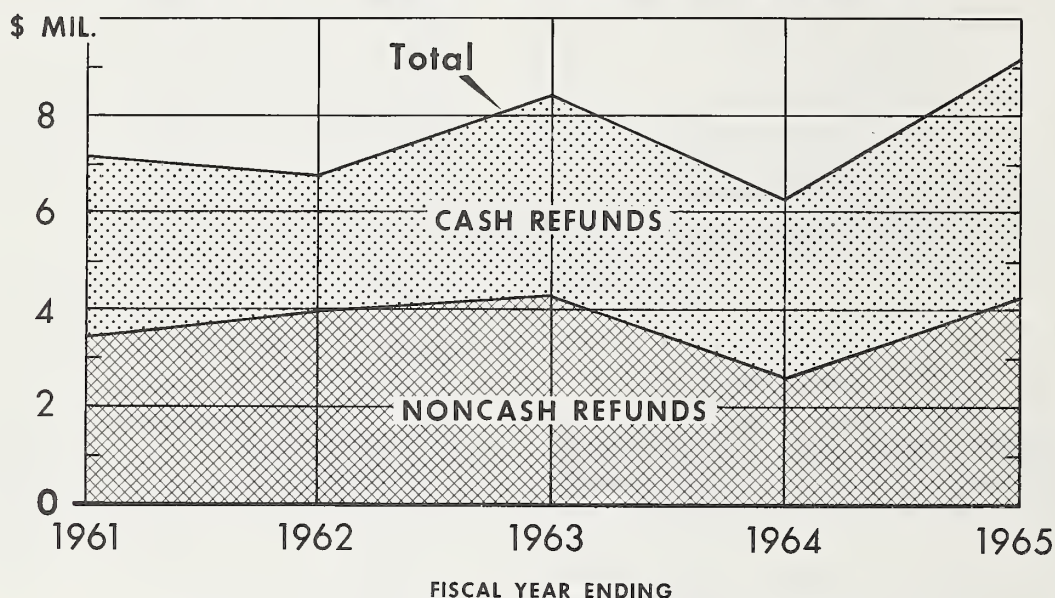
| Number of refund payments | Number of cooperatives |
|------------------------------|---------------------------|
| 5 | 6 |
| 4 | 2 |
| Total | 8 |

Altogether, from 1961 through 1965, the eight cotton and oilseed associations made 38 yearly payments out of a possible 40—indicating a high degree of regularity in refunding annual savings.

Total patronage refunds the eight cotton and oilseed cooperatives paid for these years increased from \$7.2 million in 1961 to \$9.2 million in 1965 (figure 19).

Although total refunds declined in 1962 and 1964 from preceding years, the overall trend in dollar volume of yearly refunds from 1961 to 1965 was upward. Eight associations refunded savings in 1961, 1962, 1963, and 1965 and six in 1964. Altogether, total patronage refunds distributed out of yearly net margins from 1961 through 1965 amounted to \$38 million, 51 percent in cash and 49 percent in noncash forms.

Cash composition of yearly refunds ranged from a low of 41 percent in 1962 to a high of 58 percent in 1964. Cash accounted for 52 percent of 1961 refunds, 49 percent in 1963, and 54 percent in 1965. Notwithstanding the cash percentage decline in annual refunds from 1961 to 1962 and from 1964 to 1965, the 5-year period indicated a rising trend in the cash portion of refund payments.

FIGURE 19.--TREND IN REFUND PAYMENTS

DAIRY COOPERATIVES

FCS records indicate 57 regional dairy cooperatives operated in the United States in 1965. Questionnaires mailed to a sample of 20 produced 18 responses in 1966, a 32 percent sample of the 57 associations. (See appendix table 1 for details on sampling procedure.) The following tabulation summarizes size and membership characteristics of the 18 sample cooperatives.

| Annual business volume | Centralized | Federated | Mixed | Total |
|------------------------|-------------------------|-----------|-------|-------|
| <i>Million dollars</i> | <i>-----Number-----</i> | | | |
| Under 5 | 2 | 1 | 0 | 3 |
| 5-39.9 | 6 | 3 | 2 | 11 |
| 40 and over | 1 | 1 | 2 | 4 |
| Total | 9 | 5 | 4 | 18 |

Size of the 18 sample cooperatives varied greatly as indicated by amount of business conducted. Business volumes of the nine centralized associations ranged from about half a million dollars to \$106 million. The five federated organizations had business volumes ranging from \$1.4 million to nearly \$94 million; the four mixed-membership concerns transacted business ranging from \$8 million to \$229 million. Altogether, the 18 cooperatives had a median business volume of \$14 million.

Based on size and membership characteristics, the sample of 18 was representative of all regional dairy cooperatives.

DISPOSITION OF NET MARGINS

Sixteen of the 18 sample cooperatives indicated net margins or savings for fiscal years ending in 1965.

Table 26.-Handling net margins, 16 dairy cooperatives, 1965

| Item | Amount | Proportion |
|--|----------------------|-----------------------|
| | <i>1,000 dollars</i> | <i>Percent</i> |
| Total net margins | 11,077 | 100 |
| Less: | | |
| Patronage refunds | 10,842 | 97.9 |
| Dividends on capital stock | 137 | 1.2 |
| Retained earnings | 64 | 0.6 |
| Income taxes | 29 | 0.3 |
| Margins allocated to employee margin-sharing plan | <u>5</u> | <u>(¹)</u> |
| Total disposition | 11,077 | 100 |

¹ Less than 0.05 percent.

Management of two cooperatives which reported no net margins for the period explained that they operated on a pool basis that returned gross proceeds minus all expenses to patrons each month. In this type of pool accounting, there were no end-of-year margins, savings, or patronage refunds to be distributed.

Table 26 shows total net margins the 16 dairy cooperatives realized from 1965 operations and procedures they used in disposing of these amounts.

As table 26 reveals, the 16 cooperatives returned all but about 2 percent of net margins to patrons in

the form of patronage refunds. Dollarwise, margins distributed on a stock basis were relatively unimportant, accounting for only a little more than 1 percent of the \$11.1 million total. Retained earnings, taxes, and contributions to an employee margin-sharing plan also represented very minor deductions, together amounting to less than 1 percent.

Methods Used

FCS found the 16 cooperatives used six different methods in distributing 1965 net margins (table 27).

Table 27.-Methods used to distribute net margins, 16 dairy cooperatives, 1965

| Method | Cooperatives | Net margins | |
|---|---------------|----------------------|----------------|
| | <i>Number</i> | <i>1,000 dollars</i> | <i>Percent</i> |
| I Patronage refunds only | 9 | 2,324 | 21.0 |
| II Patronage refunds, dividends on stock, and income taxes | 1 | 7,401 | 66.8 |
| III Patronage refunds and dividends on stock | 2 | 512 | 4.6 |
| IV Patronage refunds, dividends on stock, retained earnings, and income taxes | 1 | 571 | 5.2 |
| VI Patronage refunds, retained earnings, and income taxes | 2 | 215 | 1.9 |
| IX Patronage refunds, dividends on stock, and contributions to employee margin-sharing plan | <u>1</u> | <u>54</u> | <u>0.5</u> |
| Totals | 16 | 11,077 | 100.0 |

The basic element comprising each of the six methods the 16 dairy marketing regionals used was patronage refunds. Some regionals distributed less than 100 percent of net margins on a patronage basis but this did not mean they returned some end-of-year savings on a nonpatronage basis. *Net margins and net savings were not always the same thing. Net margins sometimes included costs of providing services whereas net savings, as the term was used in this study, referred to amounts that exceeded all costs.*

Evaluation of Methods

To evaluate the six methods of distributing net margins, the following criterion was used: Did the method result in return of all yearend margins that exceeded cost of performing services to either members or all patrons on a business volume basis?

Method I.—Nine cooperatives used patronage refunds only in returning 100 percent of their net margins to patrons in proportion to the amount of business each one conducted with the association. Eight of these operated as Section 521 cooperatives and one as a nonexempt organization. All nine refunded total savings to every patron on the same basis. Where departmentalized accounting was used, all patrons of a department received the same refund rate.

The method rated 100 percent in completing operations at cost because all net margins—which equaled net savings—were returned to patrons based on their patronage.

Method II.—The largest cooperative in the sample used Method II to distribute 99 percent of its 1965 net margins on a patronage basis, 0.8 percent on a stock basis, and 0.2 percent as income taxes. Because of its Section 521 status, it did not pay tax on dividends paid on capital stock. The Federal income tax it did pay (\$11,000) resulted from a small portion of patronage refunds not qualifying as a deduction from gross income and charitable contributions exceeding 5 percent of taxable income.

Margins the cooperative distributed on a nonpatronage basis—dividends and taxes—did not represent a departure from services at cost. Such distributions were part of the total annual cost of providing services to patrons and not a distribution of savings. Dividend payments were for the use of capital at

going interest rates or less. *For purposes of this study, net margins distributed in the form of taxes—to both Federal and State taxing authorities—were regarded as part of operational cost.* This method, as the cooperative used it, rated 100 percent in carrying through operations on a cost basis.

Method III.—Two cooperatives used Method III to pay out of net margins cash dividends to stockholders—in proportion to the number of shares they held—before distributing the balance of their margins (averaging 87 percent) as savings on a patronage refund basis. Because of their Section 521 status, the two associations deducted dividends paid on capital stock in figuring taxable income.

Such dividends did not impair the cooperatives' cost status because they represented limited returns to capital for its use in providing services to patrons. The dividends were an operating cost charged to net margins before arriving at net savings. All net savings were refunded on a patronage basis; therefore, the method as the two cooperatives used it scored 100 percent in achieving operations at cost.

Method IV.—One cooperative used Method IV to distribute 90 percent of net margins as patronage refunds, 2 percent as dividends on stock, 6 percent as retained earnings, and 2 percent as income taxes. (table 28).

Net savings amounted to 96 percent of net margins after deducting limited dividends paid on capital stock, at going interest rates or less, and Federal and State income taxes—both, for purposes of this study, regarded as part of the total cost of providing services

Table 28.—Dairy cooperative's distribution of net margins by Method IV

| Item | Net margins or savings | |
|--------------------|------------------------|---------|
| | 1,000 dollars | Percent |
| Net margins | 571 | 100 |
| Less: | | |
| Dividends on stock | 10 | 2 |
| Income tax | 11 | 2 |
| | 21 | 4 |
| Net savings | 550 | 96 |
| Disposition: | | |
| Patronage refunds | 512 | 93 |
| Retained earnings | 38 | 7 |
| Net savings | 550 | 100 |

to patrons. Income taxes resulted from margins distributed on a stock basis (the cooperative was a nonexempt organization), retained earnings, and a small quantity of nonqualified patronage refunds.

Patronage refunds amounted to 93 percent of net savings, as table 28 shows; retained earnings made up the balance. Although the cooperative paid refunds to members only, its nonmember business was non-material and the retained earnings represented savings attributable to members. The method's operations-at-cost score, therefore, was 93 percent because 7 percent of net savings were not refunded on a business volume basis.

Method VI.—Two cooperatives used Method VI to distribute 85 percent of their total net margins as patronage refunds, 12 percent as retained earnings, and 3 percent as income taxes. One of the associations, a nonexempt organization, kept margins attributable to nonmember business as retained earnings. It paid income tax at the corporate rate on these unallocated savings originating from transactions with nonmembers.

Since it was association policy to serve only members on a cost basis, withholding of nonmember margins as retained earnings did not damage its operations-at-cost status. Nonmember margins were not a part of the margin-over-cost of doing business with members. All savings above cost of performing marketing services to members were refunded to them on a patronage basis. This method, as the cooperative used it, scored 100 percent on the operations-at-cost scale.

The other cooperative, a Section 521 organization, followed the practice of paying refunds to all patrons

on the same basis regardless of whether they were members or nonmembers. Margins, if withheld as retained earnings, did lower its operations-at-cost rating because the margins were a part of savings (table 29).

The cooperative retained 9 percent of net savings not allocated or credited to patrons' capital accounts. Net savings handled in this manner (1) resulted in \$2,000 income taxes and (2) gave the method, as this cooperative used it, an operations-at-cost rating of 91 percent.

Method IX.—One cooperative used Method IX to distribute 75 percent of net margins as patronage refunds, 15 percent as dividends on stock, and 10 percent to an employee margin-sharing plan. The cooperative operated under Section 521 of the Code and paid no tax on margins used for dividends and contributions to the margin-sharing plan.

Neither the dividends nor the contributions lowered the association's cost rating. Dividends represented payment for use of capital (at going interest rates or less) as a cost of providing services to patrons. When the cooperative's members decide as a matter of policy to let employees share in net margins, such fringe benefits also become a part of the cost of providing services. The method rated 100 percent on the operations-at-cost scale.

COMPUTING REFUNDS

The 16 dairy marketing regionals used several different methods in disposing of 1965 net margins or savings, FCS found. However, they were similar in one major respect—patronage refunds were the major element in each. How were the refunds determined? FCS classified the various procedures into four methods: (1) total business, (2) departmental, (3) divisional, and (4) combination of methods.

Total Business

Five cooperatives used total patronage (or one department) as the base for computing patronage refunds. A "blanket" or single rate was used in returning unit savings to patrons. Generally, this method was satisfactory in terms of fairness and practicality when all patrons delivered either raw or finished products of a similar type and quality.

Table 29.—Distribution of net margins by Method VI, dairy cooperative

| Item | Net margins or savings | |
|-------------------|------------------------|----------------|
| | <i>1,000 dollars</i> | <i>Percent</i> |
| Net margins | 83 | 100 |
| Less: | | |
| Income tax | <u>2</u> | <u>2</u> |
| Net savings | <u>81</u> | <u>98</u> |
| Disposition: | | |
| Patronage refunds | 74 | 91 |
| Retained earnings | <u>7</u> | <u>9</u> |
| Net savings | 81 | 100 |

Table 30.—Function, patronage base, and rate of refund, 5 dairy cooperatives

| Functions | No. of ass'ns. | Patronage base | Refund rate ¹ |
|---------------------------------|----------------|---------------------------------------|--------------------------|
| Milk bottling and manufacturing | 2 | Pounds of milk purchased ² | Cents a cwt. |
| Milk bottling and manufacturing | 1 | Dollar value of milk purchased | Percent of purchases |
| Bargaining and manufacturing | 1 | Pounds of milk purchased | Cents a cwt. |
| Milk drying | 1 | Dollar value of milk purchased | Percent of purchases |

¹ Computed by dividing savings to be refunded by patronage base indicated.

² One cooperative restricted patronage to milk purchased from members only.

Table 30 shows functions each association performed and the patronage base used in computing average unit savings to be refunded.

Business volume of the five associations ranged from \$1.5 million to \$19 million with a median of \$12 million. Three were centralized, one federated, and one of mixed membership. All but one qualified under Section 521 of the Code.

Departmental Method

Half of the 16 dairy cooperatives determined savings by departments within their overall marketing operations. Departmental savings were then divided by departmental business volume in computing a refund rate for each department. Business volumes of the eight associations ranged from \$3.2 million to \$93.5 million with a median of \$11 million. Three were centralized, four federated, and one had both individual producers and cooperatives as members. All but one qualified under Section 521 of the Internal Revenue Code.

Departments per cooperative ranged from two to 11; only two of the eight concerns maintained more than three departments, as the following tabulation indicates.

| Coopera- tives | Depart- ments | Business volume |
|-------------------|------------------|--------------------|
| <i>Number</i> | <i>Number</i> | <i>Mil. dol.</i> |
| 4 | 3 | \$7 (av.) |
| 2 | 2 | 14 (av.) |
| 1 | 5 | 28 |
| 1 | 11 | 94 |

Size and number of departments were not always directly related because larger cooperatives were often more specialized than those with smaller business volumes. As the tabulation shows, the four cooperatives with three departments did less business than the two associations with two departments. The two largest organizations in this group, however, had the most departments.

Major factors the eight cooperatives indicated for dividing operations into departments may be summarized as follows:

1. Quality of raw whole milk patrons shipped (Grade A or manufacturing grade)
2. Type of raw dairy products patrons shipped (farm-separated cream, skim milk, buttermilk, and so on)
3. Kind of finished products patrons shipped (cheddar cheese, butter, skim milk powder, and so on)
4. Market for finished products (domestic or export)
5. Origin of milk (regular or outside sources)

Management had to balance equitability with business feasibility in determining the extent and type of operational division necessary to conduct the cooperative properly.

The department setup of the federation with 11 departments is presented in table 31. For each department, net savings divided by volume of business equals refund rate.

Table 31.—Net savings, volume of business, and refund rate for each department of federated dairy cooperative

| Marketing departments | Net savings | Business volume | Refund rate |
|---------------------------|----------------|------------------------------|--------------------------|
| | <i>Dollars</i> | | <i>Dollars</i> |
| Grade A milk | 188,644 | 18,574,330 lbs. of butterfat | .01016 per lb. butterfat |
| Manufacturing grade milk | 2,640 | 677,630 lbs. of butterfat | .00390 per lb. butterfat |
| Manufacturing grade cream | 6,430 | 2,155,700 lbs. of butterfat | .00298 per lb. butterfat |
| Evaporated milk | 1,645 | 188,845 cases | .00871 per case |
| Condensed skim milk | 1,536 | 800,340 gals. | .00192 per gal. |
| Nonfat dry milk powder | 28,325 | 40,844,240 lbs. | .00069 per lb. |
| Whey powder | 584 | 2,865,200 lbs. | .00020 per lb. |
| Whole milk powder | 1,114 | 890,090 lbs. | .00125 per lb. |
| Butter | 82,566 | 23,884,420 lbs. | .00346 per lb. |
| Cottage cheese | 2,368 | 4,889,200 lbs. | .00048 per lb. |
| Cheddar cheese | 13,148 | 7,890,225 lbs. | .00167 per lb. |

Total net savings of this large federated association amounted to \$329,000. Because of variation in marketing costs and margins of handling various types of dairy products shipped by different patrons, net savings were determined by product departments. Business volume (or patronage) was measured in pounds of butterfat contained in raw milk or cream shipments—or cases, gallons, or pounds of finished dairy products delivered. Most items shipped by the federation's cooperative members were finished dairy products to be graded, packaged, labeled, and marketed to the wholesale and retail trade. Exceptions were Grade A and manufacturing-grade raw milk and cream. The federation either processed and bottled these in its own plants or acted as bargaining agent in selling the raw products to other processors.

Only one of the eight cooperatives with departmental marketing operations reported on the procedure used in handling a net loss. The organization was centralized with two departments based on quality of milk shipped by patrons. It indicated, however, that losses were allocated to all patrons (both producers of Grade A and manufacturing grade) on the basis of

their patronage. Apparently companywide business, measured in total pounds of milk shipped, was used as the basis for computing a per pound rate of loss. This rate was then used in determining the amount of loss to be charged to each patron's capital account based on his individual milk deliveries.

Divisional Method

Only one cooperative used the divisional method. The smallest association in the sample, with a business volume of \$557,000, it qualified under Section 521 of the Internal Revenue Code and had a centralized membership structure.

Net savings for its fiscal year ending in 1965 amounted to \$22,500. Ninety-one percent of these savings came from the milk and creamery marketing division's operations and 9 percent from the "side-lines" (feed and fertilizer sales) division. The association paid a 4.9 cent divisional rate of refund (or savings) on each dollar of milk and cream purchased from producer-patrons and a 2.6 cent refund rate per dollar of feed and fertilizer sales.

Combination of Methods

Two of the largest associations in the sample used both departmental and divisional bases in computing patronage refunds. Each association had two classes of voting members—individual farmers and cooperatives. Their business volumes in 1965 amounted to \$229 million and \$52 million, respectively. The largest cooperative was qualified under Section 521 of the Internal Revenue Code; the other was not.

As might be expected, the largest association was more highly diversified with three major divisions plus intra-divisional breakdown of operations. Figure 20 diagrams the operational division the cooperative employed in computing refunds.

The association reported that products marketed were interrelated and with the “full line” concept used in selling, results were pooled for the marketing division. One rate of refund—2.33 percent of dollar sales—was computed for distributing the \$4.3 million of marketing division savings. Included in the market-

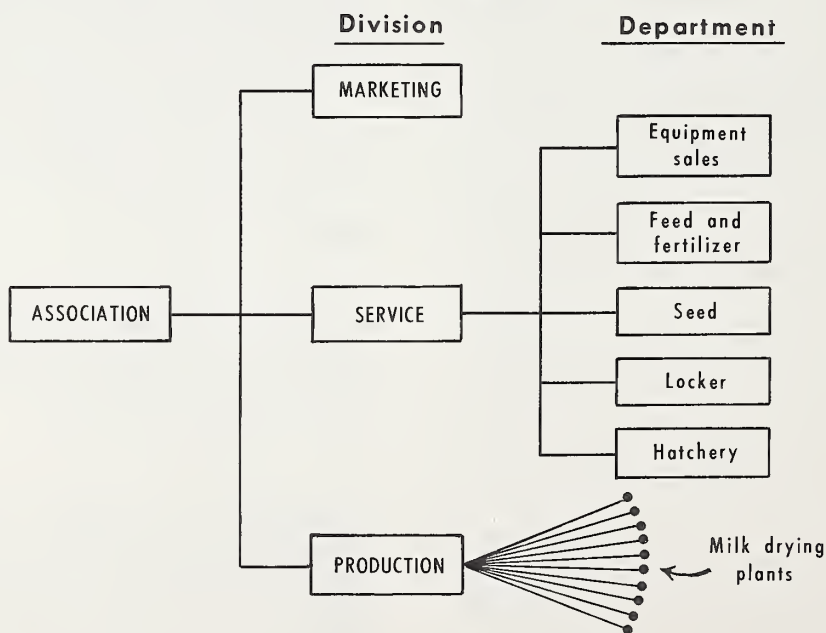
ing savings were \$200,580 of nonpatronage income. Since this incidental income was derived from financial transactions within the marketing area, it was included in this division's savings.

Refunds were computed at the department level in the service division because of the broad variety of items and services offered in this division. The association reported, however, that the locker and hatchery departments made no patronage refunds because (1) lockers were a minor service and being phased out, and (2) the hatchery department was a break-even service furnished to turkey growers.

The other three service departments—equipment sales, feed and fertilizer, and seed—made refunds. In the seed department, sales volume was the base used in computing the refund (or savings) rate:

$$r = \frac{\text{Dept. net savings}}{\text{Dept. sales}} = \frac{\$ 55,203}{\$1,183,491} = 4.72\% \text{ (or 4.72 cents per dollar of sales)}$$

FIGURE 20.-- OPERATIONAL CHART, LARGE DAIRY COOPERATIVE WITH 3 MAJOR DIVISIONS



Equipment sales, and feed and fertilizer used gross margins instead of sales as the base for computing departmental refund rates. For example, in the equipment sales department patronage records were kept which showed type of equipment and dollar amount of sales to each patron. In this department the patronage refund rate was computed as follows:

| | <i>Amount</i> | <i>Percent</i> |
|--------------------------|------------------|----------------|
| Sales | \$6,207,754 | 100.0 |
| Cost of equipment sold | <u>5,313,203</u> | <u>85.6</u> |
| Gross margins on sales | \$894,551 | 14.4 |
| Operating expenses | <u>703,117</u> | <u>11.3</u> |
| Net margins (or savings) | <u>\$191,434</u> | <u>3.1</u> |
| Gross margin | \$894,551 | 100.0 |
| Operating expenses | <u>703,117</u> | <u>78.6</u> |
| Net margins (or savings) | <u>\$191,434</u> | <u>21.4</u> |

$$r = \frac{\text{Dept. net savings}}{\text{Dept. gross margins}} = \frac{\$191,434}{894,551}$$

$$= 21.4\% \text{ (or 21.4 cents per dollar of gross margins)}$$

To determine the amount of each patron's refund at the end of the year, his purchases were multiplied by the gross margin percentage of the items of equipment sold to him. This indicated the amount of gross margin on his purchases. This figure was then multiplied by the 21.4 percent refund rate to obtain the amount of departmental net savings to be refunded to him.

Using gross margins instead of sales as the base for computing refund rates was a more equitable procedure because cost of products sold (as a percent of selling price) varied considerably among products within each of the two departments.

In the production division, patronage refunds were allocated on an area or geographical basis based on the operating performance of the milk drying plants in each area.

Altogether, the association distributed \$7.4 million of patronage refunds in 1965. All patrons—including nonmembers and two classes of voting members—were treated alike in the same division or department.

The other association using a combination of divisional and departmental bases in computing its

patronage refunds was engaged primarily in manufacturing and marketing butter and nonfat dry milk. Creamery supplies were also handled as an additional service to its member creameries and individual farmer patrons.

Figure 21 shows how the cooperative segregated its operations to achieve equitability in returning net savings to its patrons. Marketing was divided into four departments on the basis of type of product (butter or nonfat dry milk powder) and function (manufacturing or selling finished products). A single rate of refund was computed for each department. For example, the butter sales department received 62,274,311 pounds of butter from member creameries and the butter manufacturing department. This formed the base for computing the refund rate:

$$r = \frac{\text{Butter sales dept. } \$182,464 \text{ (net savings)}}{62,274,311 \text{ lbs. of butter}} = \$0.293 \text{ per cwt.}$$

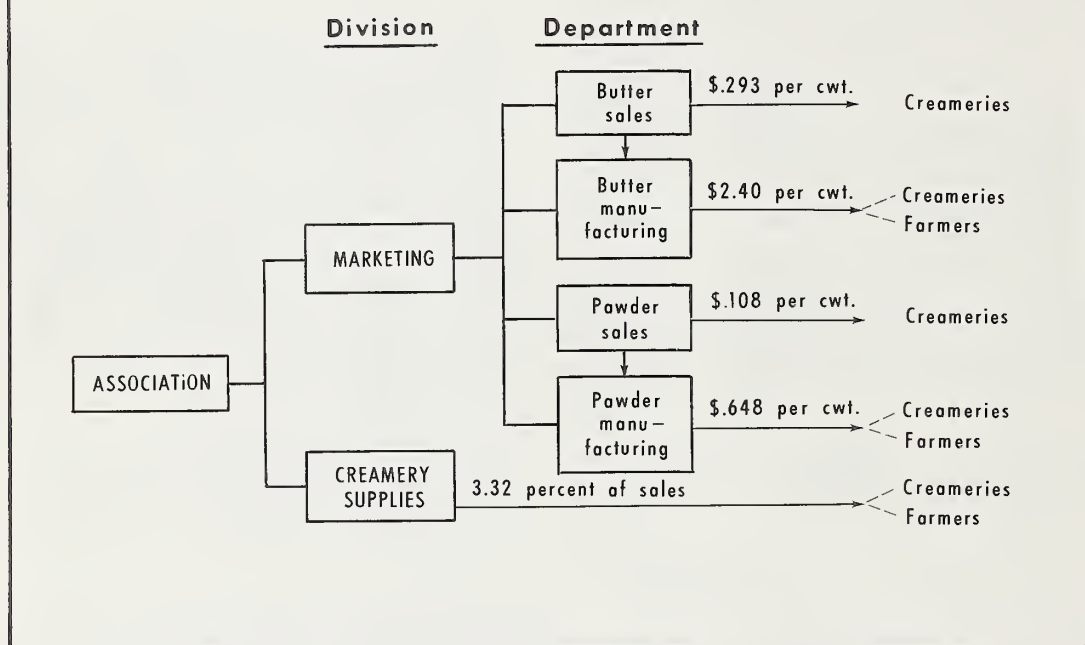
Likewise, both the butter manufacturing department and member creameries received savings of 29.3 cents on each hundred pounds of finished product shipped to the butter sales department for printing, packaging, and distributing to the wholesale and retail trade. These in- and outside distributions of marketing department savings are indicated in figure 21 by arrows from departments to other departments, creameries or individual farmers.

The creamery supply business was segregated from marketing operations. Computation of the refund rate for this division was based on dollar volume of sales as follows:

$$r = \frac{\$46,188 \text{ (Division net savings)}}{\$1,391,194 \text{ (Division sales)}} = 3.32 \text{ percent of sales}$$

This means patrons buying creamery supplies realized savings of 3.32 cents on each dollar of their purchases. Also indicated is that management did not go beyond the divisional level in its departmentalization of supply sales. This decision was probably justified, and rightly so, on similarity in creamery supply items and costs of handling them. Through the use of five patronage refund rates (four departmental and one divisional), this association returned a total of \$512,507 of its 1965 net savings to patrons.

**FIGURE 21.--COMPUTING PATRONAGE REFUNDS,
LARGE DAIRY COOPERATIVE**



DISTRIBUTING REFUNDS

After determining net margins, the proportion to be refunded on a patronage basis, and computing refund rates, management then had to decide how to distribute the refunds. Federal tax laws played an important part in making this decision. Table 32 shows how the 16 dairy cooperatives distributed refunds for fiscal years ending in 1965.

Altogether, they paid about 24 percent of their patronage refunds in cash and the balance primarily in letters of advice. *These letters to patrons—in some cases, referred to as letters of credit or notices of patronage allocation—notified them of amounts credited to their capital (or ownership) accounts.*

The noncash refunds denoted that patrons of the 16 regionals invested 76 percent of their 1965 refunds. This increased cooperative assets and capitals a little over \$8 million.

A few cooperatives had small amounts of nonqualifying refunds because patrons did not cash the

Table 32.--Methods of distributing patronage refunds, 16 dairy cooperatives, 1965

| Media | Total refunds | Percentage of total |
|--|---------------------|---------------------|
| Cash | 1,000 dol. 2,566 | Percent 23.7 |
| Written notices of allocation: | | |
| Qualified: | | |
| Letters of advice | 7,603 | 70.1 |
| Revolving fund certificates | 579 | 5.4 |
| Common stock | 3 | (1) |
| Nonqualified: | | |
| Refund checks (representing 20% of total refunds) not cashed | 91 | 0.8 |
| Total patronage refunds | 10,842 | 100.0 |

¹ Less than 0.05 percent.

checks sent to them representing 20 percent of their total refund. The cooperative paid the Federal income tax on such refunds. However, less than 1 percent of all patronage refunds the 16 dairy cooperatives paid fell into this category (table 32).

To denote changes over time in composition, size, and frequency of patronage refund payments, the 18 sample cooperatives were asked to indicate the amount of cash and noncash refunded annually from 1961 through 1965. The following tabulation indicates how often 16 cooperatives made these annual payments during the 5-year period. Two cooperatives did not recognize patronage refunds in their type of operations.

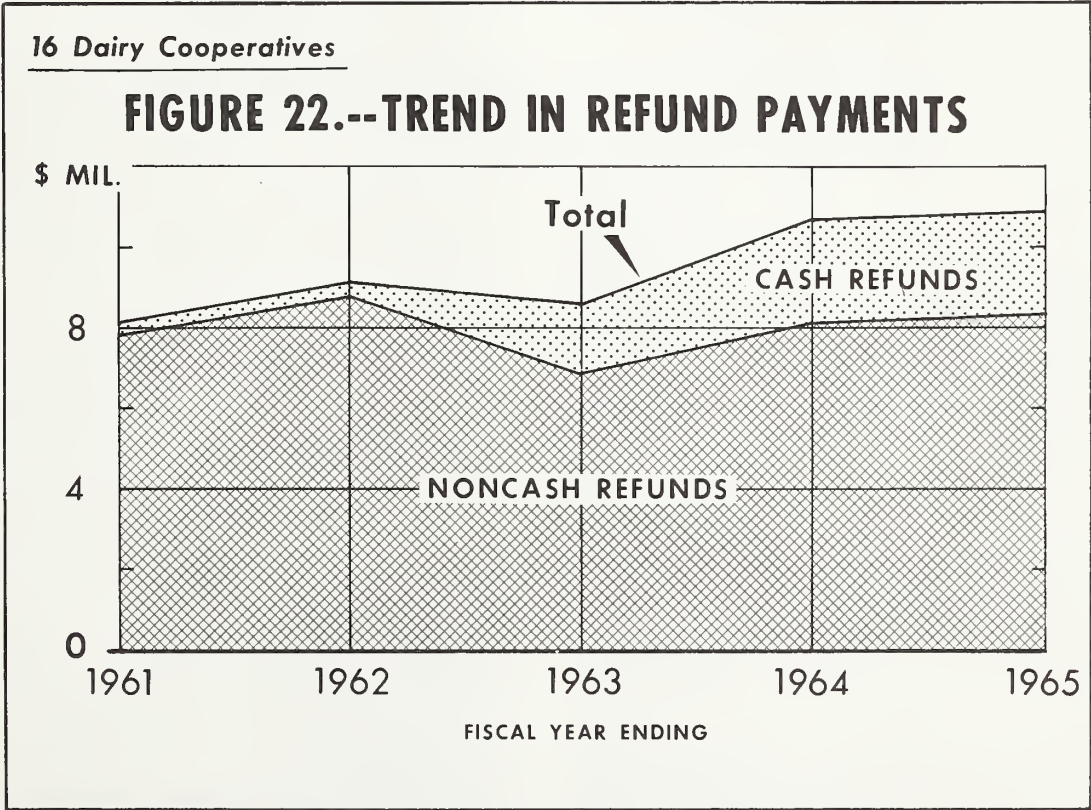
| Number of refund payments | Number of cooperatives |
|------------------------------|---------------------------|
| 5 | 14 |
| 4 | 1 |
| 2 | 1 |
| Total | 16 |

Total patronage refunds the 16 dairy cooperatives paid during the years 1961-65 increased from \$8.1 million in 1961 to about \$11 million in 1964 (figure 22).

Overall, the trend in total dollar volume of refunds distributed over the 5-year span was upward. Fifteen of the 16 cooperatives paid refunds in 1961 and 1962, 14 in 1963, and 16 in 1964 and 1965. Total refunds paid over the 5-year period amounted to \$46.8 million with 16 percent returned to patrons in cash and 84 percent in noncash forms.

The cash percentage of refunds paid increased from 3 percent in 1961 to 4 percent in 1962, to 21 percent in 1963, and 24 percent in 1964 and 1965. This sizable increase in the cash composition of patronage refunds after 1962 reflects, in large measure, the Revenue Act of 1962. Effective for taxable years beginning after December 31, 1962, a farmer cooperative had to pay at least 20 percent of its refunds in cash to qualify them as a deduction from gross income in computing its Federal income tax liability.

Paying noncash refunds, as figure 22 shows, was an important means of financing dairy operations. Only



two of the 16 cooperatives paid refunds strictly in cash. One of these paid refunds on a straight cash basis for each of the 5 years. For the other one, this was a newly adopted policy. The latter cooperative reported that in 1963 it changed from retaining net savings as the basis for accumulating revolving capital

to retaining a fixed amount for each unit of product it marketed. Reasons given for this change were to provide a more orderly revolving fund redemption program and to put the organization in a stronger position to forecast and meet long-range financial needs.

LIVESTOCK AND WOOL COOPERATIVES

According to FCS records, 47 regional livestock and wool cooperatives operated in the United States in 1965. Questionnaires mailed in 1966 to a sample of 21 produced 19 responses, a 40 percent sample of the 47 associations.

The following tabulation summarizes size and membership characteristics of the 19 sample cooperatives.

| Annual business volume | Centralized | Federated | Mixed | Total |
|------------------------|---------------|-----------|-------|-------|
| <i>Million dollars</i> | <i>Number</i> | | | |
| Under 5 | 5 | 0 | 0 | 5 |
| 5-39.9 | 3 | 5 | 2 | 10 |
| 40 and over | 3 | 0 | 1 | 4 |
| Total | 11 | 5 | 3 | 19 |

Business volumes of the 19 livestock and wool cooperatives, taken as a group, ranged from \$661,000 to \$172 million with a median of \$18 million. Taken separately, the seven wool marketing cooperatives were smaller in size—with a median business volume of \$2 million—than the 12 livestock marketing associations with median volume of \$26 million.

Over half of the 19 associations were centralized with individual farmers holding direct membership. Five had memberships composed of other cooperatives, and three had both farmers and cooperatives as members.

Data on volume of business failed to indicate any close relationship between size and type of membership. Although the federated and mixed-membership cooperatives fell into the medium and large size

classifications, centralized associations occupied all three categories—with both the largest and smallest organization of this type.

DISPOSITION OF NET MARGINS

To pay patronage refunds, a cooperative must first realize net savings from operations. Fourteen of the 19 livestock and wool cooperatives indicated net margins or savings for fiscal years ending in 1965. Five reported net operating losses for the same period.

Total net margins the 14 cooperatives realized on 1965 operations and the procedures they used in disposing of these amounts are shown in table 33.

Net savings returned in the form of patronage refunds accounted for 41 percent of the \$1,023,543

Table 33.—Handling net margins, 14 livestock and wool cooperatives, 1965

| Item | Amount | Proportion |
|----------------------------|----------------------|----------------|
| | <i>1,000 dollars</i> | <i>Percent</i> |
| Total net margins | 1,024 | 100 |
| Less: | | |
| Patronage refunds | 416 | 41 |
| Net loss carryovers | 284 | 27 |
| Retained earnings | 171 | 17 |
| Income taxes | 89 | 9 |
| Dividends on capital stock | ¹ 64 | 6 |
| Total disposition | 1,024 | 100 |

¹ One cooperative's dividend payments exceeded yearend margins by \$6,500. The \$6,500 was omitted so that distributions would equal total net margins.

of yearend margins the 14 marketing regionals realized from 1965 activities. The associations did not refund the other 59 percent of net margins to patrons. These margins were used to pay dividends on a stock basis, absorb prior years' operating losses, pay income taxes, or were retained as unallocated corporate earnings.

End-of-year margins transferred to retained earnings or used to restore losses of earlier years constituted a higher proportion (44 percent) of 1965 net margins than did patronage refunds. This is the only

group of marketing regionals among the seven major types questioned where this situation was found. In the six other types of regionals, patronage refunds accounted for 83 percent to 98 percent of net margins distributed.

Methods Used

FCS found that in distributing 1965 net margins 14 of the 19 cooperatives used six different methods (table 34). Five reported net losses.

Table 34.—Methods used to distribute net margins, 14 livestock and wool cooperatives, 1965

| Method | Cooperatives | | Net margins | |
|--|--------------|---------------|-------------|--|
| | Number | 1,000 dollars | Percent | |
| I Patronage refunds only | 2 | 153 | 15 | |
| II Patronage refunds, dividends on stock, and income taxes | 1 | 255 | 25 | |
| VI Patronage refunds, retained earnings, and income taxes | 2 | 167 | 16 | |
| VII Absorption of prior years' net operating losses | 2 | 284 | 28 | |
| VIII Retained earnings and income taxes | 6 | 153 | 15 | |
| X Dividends on stock only | 1 | 12 | 1 | |
| Totals | 14 | 1,024 | 100 | |

Nine of the 14 cooperatives used methods (VII, VIII, and X) that did not include patronage refunds. The other five associations used methods (I, II, and VI) that did include refunding savings on a patronage basis. If the regionals (two wool and three livestock) incurring net operating losses for the same period are considered, a total of 14 (or 74 percent) of the 19 sample cooperatives made no patronage refunds resulting from 1965 operations.

Evaluation of Methods

Why did nine of the 14 cooperatives showing 1965 net margins use methods that did not encompass patronage refunds? Management indicated various reasons. Were such methods justifiable from an operations-at-cost standpoint? In evaluating methods the 14 cooperatives reported, the basic test consisted in determining if savings of a material nature were refunded on a 1965 patronage basis.

Method I.—Two cooperatives used patronage refunds only in distributing 100 percent of their 1965 net margins as savings—giving the method a 100 percent operations-at-cost rating. Because the two organizations did not pay dividends on a stock basis nor have any taxable income, their net margins were equal to net savings.

One association operated under Section 521 of the Code, the other as a non-exempt cooperative. This points up the fact that both types of organizations may exclude qualified patronage refunds from gross income and complete yearly operations with no taxable margins.

Method II.—One cooperative reported using Method II to distribute 79 percent of its yearend margins as savings on a patronage basis, 20 percent as dividends on a stock basis, and 1 percent as taxes to Federal and State governments. Did this method

prevent operations at cost since all margins were not returned as refunds on a business volume basis? No, because all net savings—equal to 79 percent of net margins—were refunded according to 1965 patronage, as the following tabulation signifies.

| Item | Net margins or savings | |
|--------------------|---------------------------|-----------|
| | <i>Percent</i> | |
| Net margins | 100 | |
| Less: | | |
| Dividends on stock | 20 | |
| Income tax | <u>1</u> | <u>21</u> |
| Net savings | | 79 |

Because the association using Method II to dispose of 1965 margins returned all savings in proportion to that year's patronage, the method's cost rating score was 100 percent. The organization operated as a Section 521 cooperative and was not taxed on margins it used to pay dividends, at going interest rates or less, to stockholders for use of their capital in providing services to patrons.

The small amount of income tax (1.2 percent of net margins) was composed of \$2,800 State taxes and \$230 Federal taxes. Nondeductible items such as premiums the cooperative paid on officers' life insurance and charitable contributions exceeding 5 percent of taxable income accounted for the Federal tax. The State tax resulted from dividends the cooperative paid on capital stock which were not deductible in computing its taxable income for State purposes.

Method VI.—Two cooperatives reported using Method VI but for different reasons. In one, savings were refunded to members only. The nonexempt cooperative kept margins attributable to business with nonmembers as retained earnings, after taxes. This was in accordance with the association's bylaws. Therefore, no inequity resulted because all savings belonging to members were returned to them on a current patronage basis.

The other association conducted marketing activities on a parent-subsidiary basis. Each subsidiary organization refunded its net savings to its own customers on a patronage basis. The parent coopera-

tive, a nonoperating holding company, realized a small net margin in 1965 from rent, interest, and dividends which it treated as retained earnings, after taxes.

There was no departure from services at cost in the way the cooperative used this method because all savings a subsidiary generated were returned to its patrons on a business volume basis. Since yearend margins the parent cooperative kept as retained earnings were not part of subsidiary net savings, the organization's cost status was not affected. Method VI, as the cooperative used it, graded 100 percent in carrying through operations on a cost basis.

Method VII.—Two cooperatives reported using Method VII in handling 1965 net margins to raise prior years' operations to the breakeven level. Current year patrons did not receive services on a strictly cost basis because margins resulting from their patronage were used to restore net operating losses occurring in earlier years.

Since current year margins were not returned as savings to 1965 patrons based on their volume of business for that year, the method rated zero on the operations-at-cost scale. (For a further discussion of handling losses, see pages 74-76 of this report.)

Method VIII.—Six cooperatives used Method VIII in disposing of their 1965 net margins of \$153,000. Retained earnings constituted 73 percent and income taxes 27 percent of the total margins. Two wool marketing associations reported that end-of-year margins were so small (\$550 in one case, \$296 in the other) as to be impractical to refund as savings on a patronage basis. Therefore, they paid income tax on these amounts and kept the balance as retained earnings. Management of one cooperative reported that this was the "...smallest savings in our 40-year history." Although the method's operations-at-cost rating, as the two wool cooperatives used it, equaled zero, nonmateriality of margins appeared to justify its use.

Another wool marketing cooperative indicated transferring 1965 net savings of \$6,800, after taxes, to retained earnings as a reserve for absorbing future losses. Establishing reasonable reserves for such purposes is often desirable. However, *the reserves usually should be treated as an appropriation of noncash patronage refunds and not as an appropriation of*

retained earnings. Using this criterion as the basis for evaluation, the method scored zero in its cost rating as the association employed it.

Management of the fourth wool marketing cooperative—with 1965 net margins of \$16,000—did not indicate reasons for using this method.

One livestock marketing association using this method reported never having paid patronage refunds. After paying Federal income taxes of \$18,000 on its 1965 yearend margins of \$67,700, the association transferred the balance of \$49,700 to retained earnings. These retained earnings were then appropriated for general reserve (\$47,000) and educational reserve (\$2,700). Since the cooperative returned none of its net margins generated from business transactions with patrons as savings on a patronage basis, the method graded zero.

Another livestock association reported changing to this method because the Revenue Act of 1962, effective for years beginning on or after January 1, 1963, required that 20 percent or more of patronage refunds be paid in cash to be tax deductible at the cooperative level.

Management of the cooperative used a revolving fund plan in making annual cash redemptions of prior years' patronage refunds paid in noncash forms. It felt the additional 20 percent cash payment required to qualify current year refunds would result in an excessive drain of working capital. Therefore, it decided to stop using the patronage refund method of handling current year's net savings until all noncash refunds paid in earlier years had been redeemed in cash.

Method VIII, as this livestock cooperative used it, graded zero in its operations-at-cost rating. Although it was sound cooperative practice to revolve capital acquired via patronage refunds, current year savings should have been allocated according to each patron's volume of business with the association in 1965.

Method X.—One cooperative used Method X in distributing 1965 net margins. In fact, the dividend payments it made—to preferred stockholders—exceeded yearend margins by 56 percent. This situation resulted from three factors:

1. For the cooperative (a Section 521 organization) to be able to deduct dividends paid on a stock basis in computing taxable income, shareholders had

to receive such payments before the close of the cooperative's fiscal year.

2. To assure that this would happen, management declared and paid dividends several weeks prior to the end of the fiscal year when the amount of net margins could only be estimated.

3. The association's December business volume was much smaller than anticipated, substantially lowering its net margins and resulting in the dividend overpayment.

The cooperative's use of this method in paying for its capital costs was not an inequitable distribution of margins. Such costs were part of the total cost and expenses of providing services to patrons. *Using net margins to meet the capital costs did not represent an improper disposition of margins because no net savings were involved.* Management should have used greater precaution in the amount of dividends it declared, however, and precluded payments from exceeding yearend margins.

COMPUTING REFUNDS

The preceding discussion has revealed that of the 19 livestock and wool cooperatives constituting the sample, 14 realized net margins or savings and five incurred net operating losses for fiscal years ending in 1965. Of the 14 reporting yearend margins or savings, only five indicated using methods that included patronage refunds.

However, 16 of the 19 sample cooperatives indicated methods they used in computing refunds, when last paying them. Three reported never having paid patronage refunds. This information is summarized in the following tabulation.

| Year patronage refunds last paid | Number of cooperatives |
|-------------------------------------|---------------------------|
| 1965 ¹ | 5 |
| 1964 | 3 |
| 1963 | 3 |
| 1962 | 1 |
| 1961 | 2 |
| 1957 | 1 |
| 1944 | 1 |
| Never paid | 3 |
| Total | 19 |

¹ Most recent year data were obtained.

In calculating patronage refunds, the 16 cooperatives indicated using various procedures that FCS classified as: (1) total business, (2) parent-subsidiary, and (3) combination of methods.

Total Business

Fourteen of the 16 associations used the total business method to compute a single rate of refund for returning savings to patrons. Eight of the 14 were centralized (individual farmers as members); three were federated (cooperatives as members); and three had both types of members. Business volumes ranged from a little less than \$1 million to \$172 million with a median of \$12 million.

Twelve of the 14 cooperatives qualified under Section 521 of the Code and refunded savings to all patrons—both member and nonmember—on the same basis. The other two were nonexempt associations and operated on a nonprofit basis for members only. They did not return savings to nonmembers. We have classified the 14 cooperatives by function and patronage base used in computing a refund rate (table 35).

Each of the 14 cooperatives computed a single rate of refund for returning savings to members or all patrons. As management of one livestock marketing cooperative reported "...savings are prorated to individuals on the basis of total commissions they

paid—irrespective of whether the commissions originated from cattle, hogs, sheep sales or purchases."

Another livestock marketing cooperative, operating in one central and 14 branch markets, indicated that for 1957—the year it last paid refunds—total commissions from each market were added together. Then, after subtracting operating costs and expenses from the \$837,000 total commissions received from the 15 markets, a net savings of \$30,000 remained. To complete its marketing-at-cost operation, the cooperative returned this \$30,000 to patrons by computing a single rate of refund, as follows:

$$r = \frac{\$30,000}{\$837,000} = 3.584\% \text{ of total commissions paid by patrons.}$$

Total commissions a patron paid to the cooperative for selling his livestock were multiplied by the 3.584 percent refund rate to determine his pro rata share of the net savings.

The meat packing and hog slaughtering cooperatives computed the refund rate as a percent of purchases. Net savings divided by cost of livestock purchased provided this rate. Total purchases made from each patron times the determined refund rate indicated his share of savings or amount of patronage refund.

The six wool cooperatives all used pounds of wool delivered by producers as the patronage basis for

Table 35.—Function, patronage base, and refund rate, 14 livestock and wool cooperatives

| Function | Number of cooperatives | Patronage base used in computing refunds | Refund rate ¹ |
|---------------------|------------------------|--|--------------------------|
| Livestock marketing | 6 | Dollar volume of commissions (or service charges) all patrons paid | Percent of commissions |
| Wool marketing | 6 | Pounds of wool all patrons consigned to association ² | Cents per pound of wool |
| Meat packing | 1 | Dollar volume of purchases from all patrons | Percent of purchases |
| Hog slaughtering | 1 | Dollar volume of purchases from members only | Percent of purchases |

¹ Computed by dividing net savings by dollar volume of total commissions, livestock purchases, or pounds of wool consigned.

² One of the 6 wool marketing cooperatives (a nonexempt organization) did not refund savings to nonmembers and used pounds of wool members only shipped as the patronage base.

computing the per pound rate of savings to be refunded to each patron according to the amount of his wool shipments.

Parent-Subsidiary and Combination of Methods

Two of the 16 cooperatives—both livestock marketing—divided their operations on an intracompany (departmental) and intercompany (subsidiary) basis. One organization, with a business volume of about \$36 million, did not operate under Section 521 of the Code and was federated in its membership structure. The other concern, centralized in its membership, qualified under Section 521 and performed a business of about \$28 million.

The centralized association divided its major operations (or functions) into four separate subsidiary companies. It owned all or a majority of the voting stock in each of these concerns. The association itself—the holding or parent company—did not perform any operating function but controlled and coordinated the overall activities of its subsidiaries. In refunding net savings to individual farmers—its patrons—the association computed rates of refund by major function, returning a function's savings to patrons using that function or service.

How the association's major functions—selling livestock, buying feeder cattle, custom feeding and livestock financing—were handled by subsidiary companies, and how computing refunds were related to this organizational set-up are shown in figure 23.

As figure 23 indicates, the livestock credit corporation paid no patronage refunds. The balance of its 1965 net savings, after taxes and dividends on capital stock, was retained as unallocated surplus. A probable reason for not refunding any of the surplus was to increase capital (net worth) and thus broaden its credit base for providing the short-term capital needs of its livestock patrons. To rediscount patrons' notes at the Federal Intermediate Credit Bank (FICB), the parent association's livestock credit subsidiary, had to maintain what the FICB considered a favorable debt-to-capital ratio. As a rule of thumb, this ratio cannot exceed 7 to 1.

The federated cooperative maintained three separate departments for its cattle, hog, and sheep selling activities and handled its cattle order business

through a wholly-owned subsidiary organization. Each department and the subsidiary returned its savings to patrons by computing a refund rate based on the gross dollar volume of its sales. Figure 23 shows how the cooperative used the departmental and parent-subsidiary methods in refunding net savings to patrons.

DISTRIBUTING REFUNDS

As we have already seen, 14 of the 19 cooperatives in the sample reported net margins or savings for 1965. Only five of the 14 distributed any savings as patronage refunds for that year. However, when years previous to 1965 were considered, 16 of the 19 associations reported paying refunds at one time or another. How were these refunds distributed?

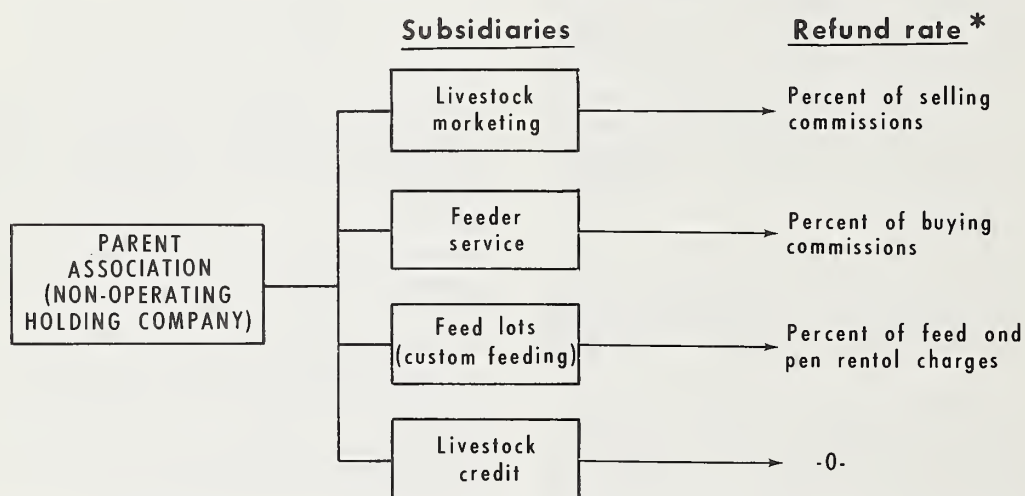
First, consider the five cooperatives that paid refunds in 1965. Table 33 showed that the refunds amounted to \$416,000 of the 14 cooperatives' total net margins or savings for that period. The media the five marketing regionals used to distribute their patronage refunds are shown in table 36.

Of the total refunds, the five concerns paid about a third in cash and the balance in written notices of allocation. The letters of advice one cooperative used to pay refunds did not qualify as a deduction from its gross income because less than 20 percent of each refund was paid in cash. Therefore, these refunds were taxable to the cooperative. All refunds, both cash and noncash (written notices of allocation), the other four cooperatives paid were qualified and thus taxable at the patron level. Three of the five concerns operated under Section 521 of the Code and therefore distributed patronage refunds to all patrons on the same basis. The other two cooperatives did not qualify under Section 521. One of these distributed refunds to member-patrons only—the other, to all patrons.

Three cooperatives reported last paying refunds in 1964. Two of these distributed refunds all in cash; the other one, all in letters of advice notifying patrons of their patronage refund allocation on the books of the cooperative. Two of the three concerns distributed refunds to all patrons (Section 521 cooperatives); the other cooperative (non-Section 521), restricted its patronage refund payments to member-producers.

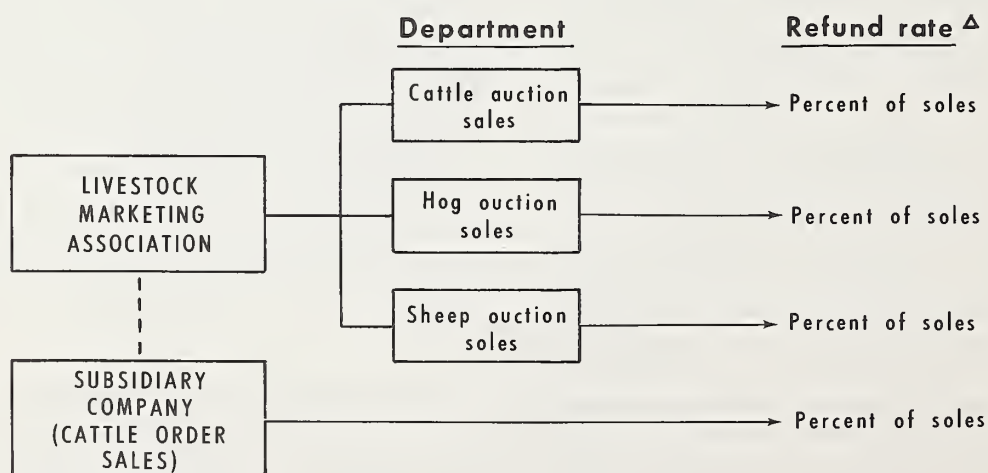
FIGURE 23.--METHODS OF COMPUTING REFUNDS, 2 LIVESTOCK MARKETING ASSOCIATIONS

CENTRALIZED ASSOCIATION USING SUBSIDIARY METHOD



* SUBSIDIARY COMPANY'S NET SAVINGS (AFTER FEDERAL AND STATE INCOME TAXES) DIVIDED BY DOLLAR VOLUME OF TOTAL COMMISSIONS (SELLING OR BUYING) OR INCOME FROM FEED SALES AND PEN RENTALS.

FEDERATED COOPERATIVE USING DEPARTMENTAL AND PARENT-SUBSIDIARY METHOD



^Δ NET SAVINGS OF DEPARTMENT (OR SUBSIDIARY) DIVIDED BY ITS GROSS DOLLAR VOLUME OF SALES.

Table 36.—Methods of distributing patronage refunds, 5 livestock and wool cooperatives

| Media | Total refunds | Percentage of total |
|--------------------------------|-------------------|------------------------|
| | <i>1,000 Dol.</i> | <i>Percent</i> |
| Cash | 134 | 32 |
| Written notices of allocation: | | |
| Qualified: | | |
| Patronage certificates | 133 | 32 |
| Letters of advice | 113 | 27 |
| Nonqualified: | | |
| Letters of advice | 36 | 9 |
| Total patronage refunds | 416 | 100 |

Seven of the eight other cooperatives reporting their last payment of patronage refunds—three in 1963, one in 1962, two in 1961, one in 1957, and one in 1944—indicated methods used in distributing them. The association last paying refunds in 1944 did not have such information available. Four of the seven concerns paid 100 percent of their refunds in noncash forms. One cooperative paid all cash; and two, combination of cash and noncash payments.

| <u>Number of refund payments</u> | <u>Number of cooperatives</u> |
|--------------------------------------|-----------------------------------|
| 5 | 2 |
| 4 | 3 |
| 3 | 3 |
| 2 | 2 |
| 1 | 4 |
| Total | 14 |

Altogether, the seven associations paid 16 percent of their refunds in cash, 81 percent in written notices of allocation, and only 3 percent in book credits without written notification to patrons. All eight associations qualified under Section 521 of the Code and distributed refunds to all patrons, both members and nonmembers, on the same basis.

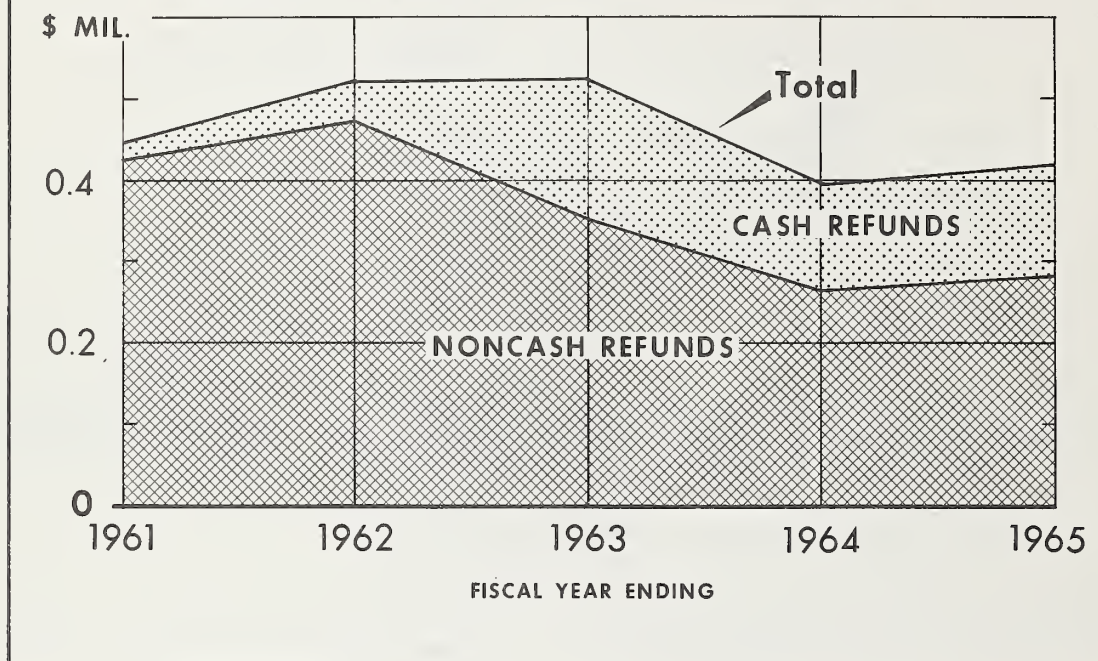
To give some idea of the trend in composition, size, and consistency of refund payments, cooperatives in the sample were requested to indicate the amount of cash and noncash refunded annually from 1961 through 1965 to patrons on a patronage basis. As explained in the questionnaire, cash paid out at any time during this period to revolve or redeem noncash patronage refunds was not to be included in these amounts.

The following tabulation reveals that only two cooperatives paid patronage refunds for each of the 5 years. One association in the one-refund-in-5-year group did not begin operations until 1962.

Total patronage refunds the 14 cooperatives paid during the 5-year period 1961-65, as figure 24 illustrates, fluctuated from \$445,000 in 1961 to a high of \$524,000 in 1963. They dropped sharply to a 1964 low of \$395,000, and then rose slightly to \$416,000 in 1965.

The overall trend in total dollar volume of refunds distributed over the 5-year period was downward. Likewise, during the same period, the number of cooperatives distributing refunds declined. Ten of the 14 livestock and wool cooperatives reported paying refunds in 1961 and 1962, eight in 1963, six in 1964, and five in 1965.

Altogether, total refunds distributed over the 5-year period amounted to \$2.3 million with 22 percent paid to patrons in cash and 78 percent in noncash form. Prior to 1963, the cash composition of refund payments was very low—4 percent in 1961 and 9 percent in 1962. Refunds for 1963 showed a considerable increase in the proportion of cash—33 percent—reflecting, in large part, new 1962 tax law requirements. The cash-to-noncash makeup of 1964

FIGURE 24.--TREND IN REFUND PAYMENTS

and 1965 refund payments was about the same as for 1963—33 percent and 32 percent, respectively. For years beginning after December 31, 1962, a cooperative's refund payments had to contain a minimum of 20 percent cash to qualify as a deduction for Federal income tax purposes.

HANDLING LOSSES

Five of the 19 cooperatives in the sample, as reported earlier in this section, did not realize savings for 1965 but incurred net operating losses. Two others reported on their treatment of losses prior to this year.

Did these seven associations use current patronage as the basis for absorbing such negative balances? Only one of the seven (a livestock cooperative) pointed out that it absorbed losses on the same patronage basis as it distributed savings. As its management explained, after payment of Federal and State income taxes the balance of net savings is apportioned and credited to patrons' equity cards,

based on total commissions each patron paid to the cooperative times the refund (or savings) rate, as follows:

$$\text{Rate of savings} = \frac{\text{Net Savings}}{\text{Total commissions patrons paid}} \\ = \% \text{ of total commissions paid by patrons}$$

Likewise, the cooperative apportioned and debited (or charged) patrons' equity cards—in red figures—with its 1965 net loss, on a 1965 patronage basis (total commissions each patron paid times the loss rate) as follows:

$$\text{Rate of loss} = \frac{\text{Net Loss}}{\text{Total commissions patrons paid}} \\ = \% \text{ of total commissions paid by patrons}$$

Two of the seven associations indicated uncertainty as to how to handle their 1965 losses. As one reported, "At this date, the board of directors has taken no action regarding the 1965 loss and it still remains on the books." The other cooperative offered no comments other than that its attorneys were pondering the best means of handling the loss.

The four other associations reported treatment of losses that were similar in nature. A year's net operating loss was not allocated and charged to patrons based on their volume of business with the cooperative for that period. *Instead, absorption of the loss was deferred until it could be applied against savings of future years. This meant that future patronage was charged with a loss resulting from a prior year's operation.*

If the cooperative's patrons were virtually the same individuals or concerns from one year to the next and the volume of business that each transacted also was in about the same proportion, then it would be immaterial as to whether current or future patronage absorbed the loss. However, questions of equitability may arise when these conditions do not prevail and a current year's loss is offset by future savings.

For example, assume (1) that five patrons—A, B, C, D, and E—provided the cooperative's total business volume in the proportion shown in table 37, (2) the cooperative incurred a net loss of \$10,000 in 1965, and (3) the net loss was charged to current patrons on a volume of business basis.

As table 37 indicates, the cooperative's five patrons would have absorbed the 1965 net loss of \$10,000 in proportion to each one's 1965 patronage. Since patron B's business amounted to 10 percent of the total volume, he was charged with 10 percent (or \$1,000) of the loss. If the \$10,000 represented net savings instead of a loss, he would have received a \$1,000 distribution of savings. *Using proportionality of patronage in the year a loss (or savings) occurs as*

Table 37.—Absorption of net loss based on same year's patronage

| Patron | 1965 | | Patrons' equity ¹ |
|--------|-----------------|---------------------|------------------------------|
| | Business volume | Net loss | |
| | Percent | ----- Dollars ----- | |
| A | 5 | -- | (500) |
| B | 10 | -- | (1,000) |
| C | 15 | -- | (1,500) |
| D | 30 | -- | (3,000) |
| E | 40 | -- | (4,000) |
| Total | 100 | 10,000 | (10,000) |

¹ If a patron's equity on the cooperative's books was insufficient to absorb his share of the loss, an account receivable was set up to which his future patronage refund payments could be applied.

the basis for its absorption (or distribution) is one means of assuring equitability of such allocations.

Let us now assume that instead of 1965 patronage absorbing the \$10,000 loss for that year, the cooperative (1) carried the loss forward and deducted it from 1966 net savings of \$20,000, and (2) patrons A and B shifted to another marketing organization in 1966 and were replaced by patrons X and Y doing the same percentage of business (table 38).

It is readily apparent from the table that the 1965 net loss carryover to 1966 charged patrons X and Y with losses they did not incur. They should have received net savings of \$1,000 and \$2,000, respectively, on their 1966 patronage. Instead, their refunds—after absorbing A's and B's 1965 losses—amounted to half these amounts. *This illustration*

Table 38.—Charging net loss against future year's net savings based on patronage of that year

| Patron | 1966 | | 1965 net loss carryover | Patronage refunds |
|--------|-----------------|---------------------|-------------------------|-------------------|
| | Business volume | Net savings | | |
| | Percent | ----- Dollars ----- | | |
| X | 5 | 1,000 | (500) | 500 |
| Y | 10 | 2,000 | (1,000) | 1,000 |
| C | 15 | 3,000 | (1,500) | 1,500 |
| D | 30 | 6,000 | (3,000) | 3,000 |
| E | 40 | 8,000 | (4,000) | 4,000 |
| Total | 100 | 20,000 | (10,000) | 10,000 |

indicates the inequities that can develop when a cooperative carries its losses forward and its patrons change from one year to the next.

Changes in patronage proportionality among identical patrons from one year to the next can also result in inequities when loss absorption is deferred to future years. Patrons C, D, and E, as tables 37 and 38 show, would have absorbed the same amount of loss in 1966 as in 1965 because their proportion of the cooperative's total patronage in each of the years was the same. However, if (1) C, D, and E's percentage of business shifted in 1966 to 20 percent, 35 percent and 30 percent, respectively, and (2) the 1965 net loss was carried forward and deducted from 1966 net savings before refunding the balance according to that year's patronage—such handling of a loss would be inequitable.

That is, the \$10,000 loss resulting from 1965 operations would be charged against patrons' 1966 net savings based on each one's volume of business with the cooperative for that year before distributing the balance to them as patronage refunds.

In this case, the degree of inequity can be measured by the percentage change in their patronage from 1965 to 1966. Patron C and patron D each absorbed 5 percent (or \$500) more than his fair share of the loss because of the 5 percent increase from 1965 to 1966 in their proportion of the total patronage—15 to 20 percent and 30 to 35 percent, respectively. On the other hand, patron E absorbed 10 percent (or \$1,000) less than his equitable share of the loss because of the 10 point decline (from 40 to 30 percent) in his proportion of the 1966 patronage.

POULTRY AND EGG COOPERATIVES

According to FCS records, seven regional poultry and egg cooperatives operated in the United States in 1965. Questionnaires mailed in 1966 to a sample of five produced four responses. The four respondents represent a 57 percent sample of the seven associations.

Business volumes of the four sample cooperatives ranged from \$3.7 million to \$51 million with a median volume of \$13 million. The following tabulation summarizes size and membership characteristics of the four organizations.

| Annual volume | Central- ized | Fed- erated | Mixed | Total |
|------------------------|-------------------------|----------------|-------|-------|
| <i>Million dollars</i> | <i>-----Number-----</i> | | | |
| Under 5 | 0 | 0 | 1 | 1 |
| 5-39.9 | 2 | 0 | 0 | 2 |
| 40 and over | 0 | 1 | 0 | 1 |
| Total | 2 | 1 | 1 | 4 |

The sample included cooperatives in the small, medium, and large-sized categories; organizations with centralized, federated, and mixed memberships. Based on these characteristics, the sample of four was representative of sizes and types of regional poultry and egg cooperatives.

DISPOSITION OF NET MARGINS

Each of the four sample cooperatives reported net margins or savings for 1965. Table 39 shows the sum total of these end-of-year margins and the relative importance of the different procedures used in disposing of them.

All but about 6 percent of total net margins were distributed as patronage refunds (table 39). Dividends on stock accounted for most of the 5.8 percent of margins not refunded on a volume of business basis. Retained earnings, not treated as noncash refunds by crediting them to patrons' capital accounts, and income taxes were minor deductions.

Table 39.—Handling net margins, 4 poultry and egg cooperatives, 1965

| Item | Amount | Proportion |
|----------------------------|----------------------|----------------|
| | <i>1,000 dollars</i> | <i>Percent</i> |
| Total net margins | 773 | 100 |
| Less: | | |
| Patronage refunds | 728 | 94.2 |
| Dividends on capital stock | 34 | 4.4 |
| Retained earnings | 10 | 1.3 |
| Income taxes | 1 | 0.1 |
| Total disposition | 773 | 100 |

Table 40.-Methods used to distribute net margins, four poultry and egg cooperatives, 1965

| Method | Cooperatives | Net margins | |
|---|--------------|---------------|---------|
| | Number | 1,000 dollars | Percent |
| I Patronage refunds only | 1 | 262 | 33.9 |
| III Patronage refunds and dividends on stock | 1 | 292 | 37.8 |
| VI Patronage refunds, retained earnings, and income taxes | 1 | 217 | 28.1 |
| VIII Retained earnings and income taxes | 1 | 2 | 0.2 |
| Totals | 4 | 773 | 100.0 |

Methods Used

The four poultry marketing regionals used different methods in distributing 1965 net margins, FCS found (table 40).

Patronage refunds comprised the major element in three of the four methods used to handle yearend margins. The other method employed included neither refunding of savings nor payment of dividends on a stock basis.

Evaluation of Methods

The operations-at-cost rating of methods the four poultry marketing regionals used in distributing 1965 margins was determined by ascertaining if all 1965 savings of a material quantity were refunded to patrons based on that year's volume of business.

Method I.—One cooperative, a federation operating under Section 521 of the Code, used Method I to distribute its 1965 net margins. The yearend margins of \$262,312 represented savings generated from business with patrons and the entire amount was returned to them according to their 1965 patronage. Therefore the method graded 100 percent in completing the year's activities on a cost basis.

Method III.—One regional, a Section 521 cooperative with individual farmers as members, used Method III to distribute 12 percent of its net margins on a stock basis and 88 percent on a patronage basis. It paid no income tax on margins distributed as dividends on stock because of its Section 521 status. Neither did such dividends lower the cooperative's

cost rating because the dividends, limited to going interest rates or less, represented payment for use of capital as a cost of providing services to patrons.

All margins, after dividends—equal to net savings—the cooperative refunded to patrons on a volume of business basis. The method, as the cooperative used it, graded 100 percent in completing operations at cost.

Method VI.—One association, centralized in membership structure and operating on a nonexempt basis, used Method VI to distribute 95 percent of its yearend margins as patronage refunds, 4 percent as retained earnings, and 1 percent as income taxes. The retained earnings represented that portion of margins attributable to business with nonmembers and was responsible for income tax the cooperative paid.

Margins on nonmember business retained as taxable income represented permanent capital. The cooperative was not obligated to return it to patrons at some future date as was the case with patronage refund capital maintained on a revolving basis.

Retaining nonmember margins as unallocated capital did not detract from the regional's service at cost objective because all margins accruing from business with members the cooperative refunded to them as savings on a patronage basis. *Such action was in accordance with the cooperative's code of regulations (or bylaws). Its policy was to provide services on a cost basis to members only. Patronage refunds the cooperative paid carried out this objective.* Therefore equitability of this method, as the association used it, scored 100 percent in its cost rating.

Method VIII.—Management of one cooperative reported using Method VIII because its 1965 margins (\$1,750) were too small to justify the cost of distributing them as savings on a patronage basis. Therefore, it paid the corporate rate of income tax on these margins and kept the balance as unallocated capital or retained earnings. The cooperative last paid patronage refunds in 1964 from net margins of \$12,250 on 1963 operations.

A basic purpose of the cooperative way of doing business is to provide services to patrons at cost—no more or no less. However, when a cooperative completes a year's operation at about the breakeven (or cost) level—as evidenced by very small (or immaterial) margins at the end of an accounting period—management may be justified in using this method.

COMPUTING REFUNDS

As denoted in the preceding section, three of the four sample cooperatives distributed 1965 net margins by methods in which patronage refunds was the major element. The other cooperative last refunded yearend margins as savings based on its 1963 operations.

In computing patronage refunds, all four of the marketing regionals figured average unit savings on a

total business—i.e., companywide or nondepartmental—basis.

Table 41 classifies the four regionals by function and patronage base used in computing the average unit refund rate for distributing net margins as savings to patrons.

Management of the turkey processing cooperative, a centralized organization, indicated it received patronage refunds from the turkey marketing cooperative, a federated association. These marketing refunds the processing cooperative distributed to member-producers on the same patronage basis (pounds of turkeys purchased from members) as its own processing margins. However, the processing regional kept allocated capital accounts from marketing refunds separate from allocated capital from processing refunds. This was done because marketing capital was held for a longer period of time than that from processing.

The turkey processing cooperative controlled the revolving of patrons' capital representing savings retained from its own processing operation. It did not control the length of time the marketing cooperative held patrons' capital acquired from savings on selling the birds. When the turkey marketing regional made cash redemptions to the processing regional of its oldest invested capital, it then distributed the cash to individual member-producers who had contributed it.

Table 41.—Function, patronage base, and refund rate, 4 poultry and egg cooperatives

| Function | Number of cooperatives | Patronage base | Refund rate ¹ |
|--------------------------------|------------------------|--|--------------------------|
| Poultry and egg marketing | 1 | Cost of sales ² | Percent of purchases |
| Poultry marketing ³ | 1 | Pounds of poultry purchased from all patrons | Cents per lb. |
| Turkey processing | 1 | Pounds of turkeys purchased from member-patrons ⁴ | Cents per lb. |
| Turkey marketing | 1 | Pounds of turkeys purchased from all patrons | Cents per lb. |

¹ Computed by dividing savings to be refunded by patronage base indicated.

² Dollar value of poultry and eggs purchased from all patrons.

³ Included chickens (broilers and fowls) and turkeys.

⁴ Savings on nonmember patronage, after taxes, retained as unallocated capital.

DISTRIBUTING REFUNDS

Three of the four sample cooperatives distributed patronage refunds on 1965 operations, as table 40 shows.

After paying market prices for products purchased and deducting processing costs and operating expenses, the three cooperatives still had substantial net margins at the end of 1965. *However, by prior agreement, these end-of-year margins did not belong to them. They simply represented additional income (or savings) to patrons above market prices—since the cooperatives had agreed to perform the marketing services on a cost or nonprofit basis.*⁵ Patrons, therefore, agreed to include their distributive share of the net margins (based on patronage) in their individual income tax returns.

The following tabulation shows media the three cooperatives used in distributing 1965 net margins on a patronage basis.

| Media | Total refunds (1,000 dollars) | Percent of total |
|---|----------------------------------|---------------------|
| Cash | 201 | 28 |
| Qualified written notices of allocation: | | |
| Letters of advice | 527 | 72 |
| Total patronage refunds | 728 | 100 |

Total patronage refunds (\$727,567) the three cooperatives paid on 1965 net margins qualified as deductions in computing their taxable income. On

⁵One of the 3 cooperatives did not include nonmember patrons in this agreement because their corporate policy prohibited investment in cooperative.

the other hand, patrons consented to include the refunds as taxable income in the year received.

The other cooperative in the sample of four last paid patronage refunds from savings on its 1963 operations. All of these refunds—\$12,250—were paid in cash.

To show trend in size, composition, and frequency of refund distributions, the four sample cooperatives were asked to indicate the amount of cash and noncash paid annually from 1961 through 1965. Their responses are tabulated here.

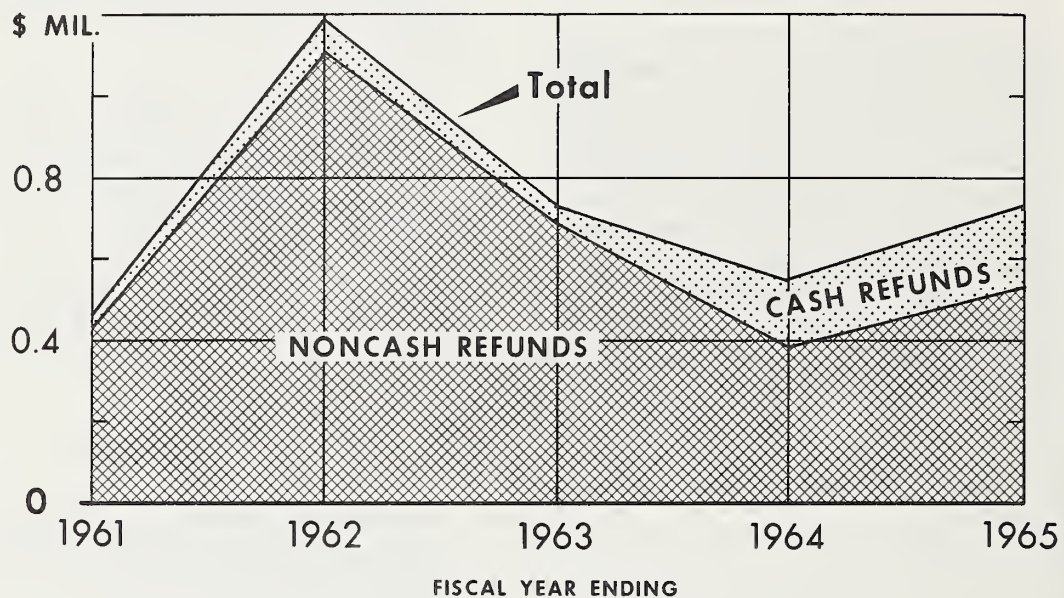
| Number of refund payments | Number of cooperatives |
|------------------------------|---------------------------|
| 5 | 2 |
| 4 | 1 |
| 3 | 1 |
| Total | 4 |

Total patronage refunds the four poultry and egg cooperatives paid during the 5-year period fluctuated between a low of \$465,000 in 1961 and a high of \$1,184,000 in 1962 (figure 25).

Overall, the trend in total dollar volume of refunds distributed over the 5-year span was downward. Three cooperatives paid refunds in 1961; four in 1962 and 1963; and three in 1964 and 1965. Altogether, total patronage refunds distributed over the 5-year period amounted to \$3 million, of which 14 percent was paid in cash and 86 percent in noncash forms.

Prior to 1964, the cash portion of refund payments was small—7 percent in 1961, 6 percent in 1962, and 5 percent in 1963. Savings refunded on 1964 and 1965 operations contained considerably larger proportions of cash—29 percent and 28 percent, respectively—reflecting, in some degree, new 1962 tax law requirements.

FIGURE 25.--TREND IN REFUND PAYMENTS



APPENDIX

Appendix table 1.-Population; size of sample; number and type of regional marketing cooperatives providing data for study, March 1966

| Type of cooperative | Population ¹ | | | | Sample | | | | Respondents | | | | Percentage of population | |
|---------------------------|-------------------------------|----------------|----------------|-------|--------|----|----|-------|-------------|----|----|-------|--------------------------|----------------|
| | C ² | F ³ | M ⁴ | Total | C | F | M | Total | C | F | M | Total | Sample | Respondents |
| | <i>Number of cooperatives</i> | | | | | | | | | | | | <i>Percent</i> | <i>Percent</i> |
| Grain and soybean | 1 | 20 | 6 | 27 | 1 | 9 | 4 | 14 | 1 | 9 | 4 | 14 | 52 | 52 |
| Fruit, vegetable, and nut | 18 | 12 | 12 | 42 | 11 | 6 | 6 | 23 | 9 | 5 | 4 | 18 | 55 | 43 |
| Special crops | 61 | 3 | 6 | 70 | 21 | 2 | 4 | 27 | 19 | 1 | 4 | 24 | 39 | 34 |
| Cotton and oilseed | 8 | 13 | 9 | 30 | 3 | 5 | 4 | 12 | 3 | 3 | 4 | 10 | 40 | 33 |
| Dairy | 32 | 13 | 12 | 57 | 11 | 5 | 4 | 20 | 9 | 5 | 4 | 18 | 35 | 32 |
| Livestock and wool | 27 | 6 | 14 | 47 | 12 | 5 | 4 | 21 | 11 | 5 | 3 | 19 | 45 | 40 |
| Poultry and egg | 2 | 4 | 1 | 7 | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 4 | 71 | 57 |
| Total | 149 | 71 | 60 | 280 | 61 | 34 | 27 | 122 | 54 | 29 | 24 | 107 | 44 | 38 |

¹ Regional marketing cooperatives, listed with FCS in 1965, that served several counties or States. Includes all federated, centralized and serving more than 8 or 10 counties, and mixed marketing cooperatives with large business volumes. Regional marketing cooperatives performing strictly a bargaining function were excluded. ² Centralized (only individual producers as members). ³ Federated (only cooperatives as members). ⁴ Mixed (both individual producers and cooperatives as members).

Appendix table 2.-Tax status of 107 regional marketing cooperatives providing data for study, 1966

| Type of cooperative | Section 521 ¹ | | | | Nonexempt ² | | | | Total cooperatives | Percentage of total | |
|---------------------------|-------------------------------|----------------|----------------|-------|------------------------|----|---|-------|--------------------|---------------------|----------------|
| | C ³ | F ⁴ | M ⁵ | Total | C | F | M | Total | | Section 521 | Nonexempt |
| | <i>Number of cooperatives</i> | | | | | | | | | <i>Percent</i> | <i>Percent</i> |
| Grain and soybean | 1 | 4 | 3 | 8 | 0 | 5 | 1 | 6 | 14 | 57 | 43 |
| Fruit, vegetable, and nut | 9 | 3 | 2 | 14 | 0 | 2 | 2 | 4 | 18 | 78 | 22 |
| Special crops | 13 | 0 | 1 | 14 | 6 | 1 | 3 | 10 | 24 | 58 | 42 |
| Cotton and oilseed | 2 | 3 | 3 | 8 | 1 | 0 | 1 | 2 | 10 | 80 | 20 |
| Dairy | 8 | 4 | 3 | 15 | 1 | 1 | 1 | 3 | 18 | 83 | 17 |
| Livestock and wool | 9 | 3 | 2 | 14 | 2 | 2 | 1 | 5 | 19 | 74 | 26 |
| Poultry and egg | 1 | 1 | 1 | 3 | 1 | 0 | 0 | 1 | 4 | 75 | 25 |
| Total | 43 | 18 | 15 | 76 | 11 | 11 | 9 | 31 | 107 | 71 | 29 |

¹ Met requirements in Section 521 of Internal Revenue Code and held letters of exemption from Commissioner of Internal Revenue. Of special significance to this study are the following requirements: (1) Both members and nonmembers must be treated in the same manner in regard to patronage refunds. (2) Dividends paid on capital stock must not exceed the legal rate of interest in the State of incorporation, or 8 percent a year, whichever is greater. ² Did not operate under Section 521 of the Code. ³ Centralized (only individual producers as members). ⁴ Federated (only cooperatives as members). ⁵ Mixed (both individual producers and cooperatives as members).

Other Publications Available

Farmer Cooperatives in the United States, FCS Bulletin 1.

Managing Farmer Cooperatives, Educational Circular 17. Kelsey B. Gardner.

Improving Management of Farmer Cooperatives, General Report 120. Milton L. Manuel.

Methods and Policies Used in Making Patronage Refunds by Selected Farmer Cooperatives, General Report 137. Donald R. Davidson.

Financial Structure of Regional Farmer Cooperatives, General Report 133. Nelda Griffin.

Financial Structure of Regional Farm Supply Cooperatives, General Report 124. Nelda Griffin.

Per-Unit Capital Retains—Tax Treatment by Cooperatives and Patrons, Information 51. D. Morrison Neely and David Volkin.

How the Revenue Act of 1962 Affects Farmer Cooperatives, General Report 105. Raymond J. Mischler and David Volkin.

Handling Net Margins Under the New Tax Law, Information 39. Raymond J. Mischler.

Revolving Fund Method of Financing Farmer Cooperatives, General Report 41. Helim H. Hulbert, Nelda Griffin, and Kelsey B. Gardner.

How Adjustable Revolving Fund Capital Plan Works, General Report 111. Nelda Griffin.

Methods of Financing Farmer Cooperatives, General Report 32. Helim H. Hulbert, Nelda Griffin, and Kelsey B. Gardner.

Sample Legal Documents for New Cooperatives, Educational Circular 19.

A copy of each of these publications may be obtained upon request while a supply is available from—

Farmer Cooperative Service
U.S. Department of Agriculture
Washington, D.C. 20250