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An Economic Analysis of Midwestern
Consumer Food Cooperatives

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David Shutes

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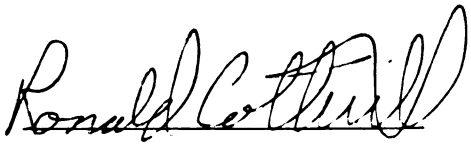

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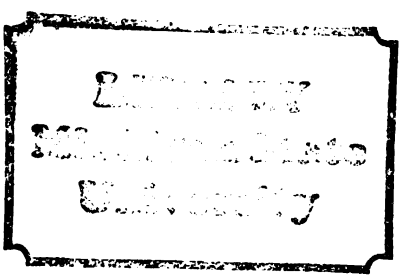

An Economic Analysis of Midwestern Consumer Food Cooperatives

By

David Shutes

ABSTRACT

This paper reports findings from a study of consumer food cooperatives formed in the 1970's. The report draws on information gathered from a mail survey of 102 food cooperatives. Analysis of the data is divided into two major areas, preorder food cooperatives, or food clubs, and cooperative food stores. The dynamics of growth and age are studied in relation to six aspects of cooperative activity.

Product selection available in cooperative stores was found to be strongly affected by age, location, number of members, and federation affiliation. Cooperative stores show more individual variation in the development of product line. Decision making procedures are strongly affected by the number of member households in preorder cooperatives, but no discernible pattern was found among cooperative stores. Distribution methods in preorder cooperatives appear to be a major obstacle to growth and stability. Product selection is a major factor in the return on time spent in cooperative activities. Volunteer labor in cooperative stores appears to be influenced by the structure of the program to a greater degree than by political or economic considerations. Both preorder cooperatives and cooperative stores suffer from a clear sense of purpose and direction in their marketing position. Financial records and the skills necessary to extract information important to the continued success of the co-op are often lacking. The structure and purpose of the co-op does not appear to significantly affect its operation or chance of success though small sample sizes limit the validity of this finding.

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CHAPTER I

Introduction

The subject of this study is midwestern consumer food cooperatives that have been operating for less than ten years. These cooperatives, often called "new wave" cooperatives for obvious reasons, differ from larger more established grocery cooperatives through their strong commitment to member participation in every aspect of cooperative activity. New wave cooperatives may be either preorder cooperatives or cooperative stores.

Members in a preorder cooperative take turns compiling orders, purchasing goods from wholesalers and distributing them from a member's home or other distribution site. The distributed items may be purchased either from commercial wholesalers or warehouses maintained by federated consumer cooperatives. Preorder cooperatives usually keep little or no inventory and sales are usually limited to members.

New wave cooperative stores in the midwest are currently small operations by industry standards. None have annual sales greater than $1 million. No two cooperatives have the same organizational structure. Each has a form that reflects a different degree of differentiation of members into customers, managers, and directors. In addition to having hourly or salaried employees, new wave food cooperatives encourage voluntary member participation, usually through the use of discounts on member purchases through the store. Some members view their co-op as a wholistic, nonalienating alternative to the promotional pressure and gimmickry of the supermarket industry. Other co-ops are less experimental; however, members who emerge as workers and managers

in all types of cooperative stores tend to see cooperatives as a vehicle for social change.

These new consumer cooperatives are different from the relatively few cooperative supermarkets that are survivors from the "old wave" of cooperative activity during the 1930's and 1940's. Old wave supermarket cooperatives have sales above $1 million and operate as a full line grocery store, including at least grocery, fresh produce, fresh meat, and bakery departments.[1] A board of directors ultimately controls the business, however, the board usually employs a manager to oversee store operations. Supermarket members do not participate in the direct operation of the store, but some do committee work on co-op education and governance.

A few new wave cooperatives have grown to supermarket proportions. The Arcata cooperative in Arcata, California and the New Haven cooperative in Connecticut, for example, are natural foods oriented supermarkets with sales of $4.5 and $1.5 million respectively. The larger young co-ops prefer to be described as the "third wave" of consumer cooperatives specifically to distinguish themselves from the traditionally operated old wave co-op supermarkets. There are no third wave cooperatives in the midwest. Yet much debate centers upon whether or not all new wave cooperative stores will grow and expand into full line supermarkets. Until recently the debate on issues of size, democratic decision making, management, and long run co-op goals has turned

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[1]Any grocery store with these attributes is usually defined as a supermarket. Superettes and convenience stores are two types of private retail outlets that have smaller sales volumes and a more limited product assortment.

primarily on philosophical points. The ultimate purpose of this study is to describe the organizational conduct and growth of preorder and store-front cooperatives, hopefully adding an empirical base to the continuing discussion of consumer cooperative development.

Description of the Survey

Our survey covers six facets of cooperative activity that are important for successful operation. The first area of the survey - supply and product mix - identifies how cooperatives use commercial suppliers and federation warehouses. It also measures the range and types of products carried by consumer cooperatives. The second area - decision making - gathers information on the decision making structures and processes used by cooperatives. The third and fourth areas - activity and market analysis - focus on the pricing methods, distribution patterns, and direct member participation policies of the cooperatives. These sections of the survey were modified in minor ways to address the unique operating forms of the preorder cooperatives vis-a-vis cooperative stores. The fifth section of the survey collects operating statistics from the cooperatives. The sixth and final area measures leaders' perceptions of their cooperative's goals, needs, and future growth.

Survey Admnistration

Consumer food cooperatives from six federations were surveyed. These federations cover all of Michigan, Wisconsin, Minnesota, and Ohio as well as parts of Indiana, Illinois, Kentucky and West Virginia. The Michigan Federation of Food Cooperatives (MFOFC) was canvassed in June, 1978. Surveys were sent to each of 113 preorder and 28 store-front cooperatives; 35 preorders and 16 stores returned the survey.

In an attempt to expand the sample and examine the influence of federation membership, the survey was sent to member cooperatives in five other federations during the summer of 1978. Surveys from 8 of 50 preorder cooperatives and 7 of 15 stores were returned from the Federation of Ohio River Cooperatives (FORC). Nine of 33 preorder and 11 of 30 cooperative stores returned surveys from the Intra-Community Cooperative Federation (Wisconsin, Michigan, and Illinois). Two of the four stores in the Greater Illinois People's Cooperative (GIP-C) federation returned surveys. Two of the 21 stores served by the Common Health warehouse (Duluth, MN) serving northern Minnesota, Michigan, and Wisconsin returned surveys. Twelve of 47 stores in the Distributive Alliance of the North Country (DANCe - Minneapolis, MN) returned surveys. Federation staff persons publicized our survey effort at regional meetings and in newsletters. Each cooperative received two copies of the survey. A cover letter explained the purpose of the survey, that it was supported by the regional federations, and pledged to mail survey results to participants.[2] Each cooperative also received a stamped return envelope. Follow-up requests for the return of the survey were placed in federation newsletters. In addition, each member of the Michigan Federation received a personal telephone call explaining the purpose of the survey and encouragement to return the survey. Personal visits were made to several of the cooperative stores to aid in the completion of the survey.

Previous Research

Early research and writings on cooperatives focused on the defin-

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[2]See Appendix 1 for a copy of the cover letter.

tion of cooperation (Emlianoff, 1942), the pure economic theory of cooperation (Robotka, 1947), and the development of models of rational behavior for cooperatives and their members (Phillips, 1952). Mather's study (1968) of the role of consumer cooperatives in food retailing is one of the few post World War II empirical studies of the old wave consumer food cooperatives. He found that prices in chain store supermarkets competing in cities with cooperative supermarkets were significantly lower than in cities without supermarket cooperatives.

Recent studies have focused on new wave consumer cooperatives. Hoyt (1974) presented a sociological profile of members and described the organization and operation of a large block preorder co-op in Sacramento, California. The Consumer's Cooperative of Sacramento had more than 600 member households in 1972, and a computerized ordering system. Each month the salaried core staff and volunteers collect and process case-lot orders from neighborhood blocks. Then they purchase and distribute the bulk items. Each neighborhood group divides its order among themselves. Hoyt found that members of the cooperative tend to be middle aged with relatively large families. More than half of the members had completed college, were employed in white collar positions, and had average or above average incomes. Women were the primary participants in the cooperative and they were less likely to be employed outside the home than women in the general population (Hoyt, 1974, pp. 45-53). Hoyt measured the costs and benefits of cooperative action by collecting data on the products purchased through the cooperative, prices on comparable products at nearby retail stores, and hours of involvement in cooperative activity. She found average savings of approximately 20% depending on the size and

and mix of one's grocery purchases. Members earned an implicit average return of $2.47 per hour of participation at 1971 prices (Hoyt, 1974, pp. 45-53).

Curhan and Wertheim (1971) studied 34 Boston area preorder food cooperatives and their members. Their research examined members' perception of the quality, nutritional value, monetary savings, and personal satisfaction from participation in cooperative activity. The authors concluded that a successful preorder requires a large amount of communication, an ability to make decisions as a group, and rapid implementation of those decisions. They also hypothesized that member satisfaction is related to the free exchange of information (newsletters, recipes, nutrition facts) and participation in the decision making process as well as saving money. Although the relationship between size and member satisfaction was not clear, they did note that small group interaction seemed very important for the successful operation of a preorder cooperative.

In 1974 Curhan and Wertheim conducted a follow-up study of the preorder cooperatives covered in 1971. They found that the preorder cooperatives studied had more firmly established procedures for the division of labor and responsibilities. Although these were often elaborate, they gave members a clear sense of the equity and legitimacy of the distribution system. Most suburban cooperatives had limited their size in the area of 30 to 50 members. Some had expanded into a block preorder cooperative structure such as the Sacramento co-op studied by Hoyt. Block or branch preorder co-ops capture the benefits of pooled purchasing as well as decentralized distribution of products. Curhan and Wertheim noted that this pattern of organization maintains

the small group interaction that is so helpful for effective operation of preorder cooperatives. Curhan and Wertheim did find one preorder cooperative in their follow-up study that had grown into a cooperative store. The choice of expansion into a store was made, in the authors' opinion, to ease problems of organization and coordination by centralizing major functional responsibilities. Store operation increases convenience and product choice for members as well as providing the cooperative an opportunity to serve a broader public and foster cooperative growth in the community. However, cooperative stores are not able to offer prices as low as preorder cooperatives due to increased cost of inventory, higher fixed costs and wages.[3]

The only recent study of cooperative supermarkets that we know of is by Marion and Aklilu (1975). They identify factors uniquely associated with success and failure of two large, full time stores in low income areas. Their findings stress the importance of community attitudes toward business in general and previous exposure to cooperative activity. An appreciation of the benefits of member control is important in the development of involvement and commitment by neighborhood residents. Another factor isolated by the study is the skill level and motivation of staff and board of directors. The government sponsored supermarket examined failued due to poor management, a lack of interest on the part of directors, and poor community relations.

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[3]One should not infer that preorder cooperatives always save the consumer more money than co-op stores because of lower markups. Preorder co-ops usually carry a more limited line of items and distribute during limited hours. Total savings on an entire market basket of goods vis a vis private retailers may be greater through formation of a cooperative store.

Marion and Aklilu's study suggests that cooperative supermarkets organized by federal community development agencies in low income areas may obtain subsidized success but will fail to become viable community controlled businesses. Their conclusions, however, have a weak factual base because they were able to find only two low income area cooperative supermarkets.

The Strongforce group in Washington, DC, has produced case studies of four consumer cooperatives (1977). Their work offers historical sketches of the cooperatives, and highlights the importance of a large pool of business and social skills in a relatively small group of commited individuals. The subsequent failure of two cooperatives (both newly organized as supermarkets) serves as a warning of the stresses on management and membership due to rapid growth to supermarket volumes and product offerings.

The supporting services and warehouse activities by new wave federations have yet to be evaluated by survey or through case studies. In a paper on growth strategies for the cooperative movement Cotterill (1978) quantitatively evaluates the economies of size that accrue through federation in food processing, procurement, warehousing, and transportation. His estimates, however, are based upon average performance data from integrated private supermarket chains. They are little more than suggestive of the savings food cooperatives may obtain from vertical integration through federation.

The continuing growth of the cooperative movement places the economic benefits of larger retail units in conflict with the movement's strong commitment to member involvement. A recent dissertation by Kreitner (1978, p. 188) characterizes this trade off as "the coopera-

tive dilemma." He argues that "without the sense of transcendent, organizational purpose provided by explicit ideology, co-op participants tend to serve individual expediency (the principal manifestation of which is non participation) and the organization falls into the cooperative dilemma, suffering one of two fates: becoming capitalistic or failing as a business." In his study of the motivation of those who join new wave cooperatives, Kreitner identified characteristics of members who participate in the cooperatives operations. He found that people attracted to the cooperative for material reasons, better quality or lower price, participated little. Kreitner (1978, p. 141-142) sees in the new wave of consumer cooperatives a "cooperative-collective" form of organization capable of avoiding the cooperative dilemma. People who join for purposive reasons, political and social concerns, were active participants. Active participants also experience a shift away from material toward even stronger purposive reasons for participation. His evidence argues for an active education program to enhance direct member participation. This emphasis on direct member participation limits the specialization (fragmentation) of members into separate roles as consumers, workers, management, and owners. Volunteer work programs enable co-op members to become familiar with store operations, staff, and fellow consumer members. Thus members may consider how changes in cooperative policy affect all aspects of cooperative activity. In addition, member participation provides a valuable training ground for future co-op staff and directors. The lack of such a functional link between the rank and file membership and the "core" leadership group has been one of the most serious problems facing old wave cooperatives.

To suggest that volunteer member participation is the only important factor in the maturation of new wave cooperatives into viable organizations would be misleading. It is within the context of the continuing discussion of the direction of growth in the cooperative movement that this study attempts to expand the base of empirical knowledge about consumer cooperatives. This study is based on a survey of midwestern cooperatives designed to identify the product lines, distribution patterns, member participation, business and social skills, decision making processes, financial performance, and long run goals associated with emerging cooperative activity. The interrelationship of many of these aspects is also examined. This study should help individual cooperatives structure their cooperative so as to obtain the mix of economic, social, and political returns they desire. The results can also serve as a guide to new cooperatives. We do not conclude with recommendations for organizing the perfect cooperative because we recognize that no one cooperative form can best serve the range of goals found among the diverse individuals attracted to cooperative activity.

CHAPTER II

Empirical Findings on Preorder Cooperatives

Preorder cooperatives or food buying clubs vastly outnumber other forms of consumer food cooperatives in the United States. This undoubtedly is due to the fact that they are relatively easy to organize and operate, and require a minimum of investment for space and equipment. This chapter reports the results of our survey of preorder cooperatives in the Midwest; based on 52 responding groups. Most respondents could not answer all the questions, therefore the sample size upon which we base our analysis of different issues will vary. Sections of this chapter contain information on procurement, product lines, decision making, distribution, marketing, operations, and a summary of respondents' perceptions of cooperative goals.

Before proceeding to these specific aspects of the preorder cooperatives a demographic overview of the sample may be helpful. Table 2.1 indicates the dominant age group and the geographical location of the 52 preorder co-ops. Forty-four of the co-ops have over 50% of their members in one age group. The largest group of co-ops is dominated by young households.[1] Note that in urban areas nine of the twelve preorder co-ops serve predominately young or old households with relatively few mature households. This may reflect the fact that there are fewer mature households in urban areas.

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[1]Previous studies by Curhan and Wertheim (1971), (1974) in Boston and Hoyt (1974) in Sacramento report that most members of preorders are also in this general age group.

Examining the geographical dispersion of the preorder co-ops in Table 2.1 indicates that 30 of 52 respondents are located in rural areas.[2] We find this somewhat surprising given the urban roots of the food cooperative movement. Rural residents' interest in preorder cooperatives may reflect the lack of nearby food stores and the need to drive substantial distances to buy food. In this situation pooling orders and trading off the trip to a nearby city could result in sizable savings of time and money. Joining a cooperative federation may have the added benefit of delivery by warehouse truck to small towns.

Table 2.1 Dominant Age Group and Geographical Location of 52 Preorder Cooperatives

	Rural	Suburban	Urban	Total
Young Adult (under 25)	--	--	1	1
Young Household (between 26 and 35)	19	6	7	32
Mature Household (between 36 and 59)	6	3	1	10
Seniors (over 60)	--	--	1	1
No dominant Group	5	1*	2	8
Total	30	10	12	52

* 50% in young and 50% in mature household categories

[2]For purposes of classification preorder cooperatives are considered to be urban if they are in the largest city of a Standard Metropolitan Statistical Area (SMSA), suburban if within the SMSA but outside of the largest city, and rural if outside an SMSA. A check of the federations' membership lists indicates that our survey is representative of the division of rural, suburban, and urban cooperatives. Response from MFOFC members is, however, biased toward rural co-ops. Roughly one third of MFOFC members are rural co-ops. One half of MFOFC respondents are rural.

Preorder cooperatives have traditionally been regarded as small, unstable consumer coalitions that rarely grow and usually disband after a short period of operation. Table 2.2 illustrates the relationship found between age and size of preorder cooperatives among survey respondents.

Table 2.2 The Relationship Between Age and Size in Preorder Cooperatives

	Less Than 12 mon.	12 to 23 mon.	24 to 47 mon.	48 to 72 mon.	Total
Less than 30 Households	8	8	7	1	24
30 to 59 Households	4	2	6	3	15
60 to 89 Households	2	1	2	1	6
90 to 119 Households	0	0	2	0	2
120+ Households	0	0	1	1	2
All preorder Cooperatives	14	11	18	6	49

r (based on ungrouped data) = .42
Significance Level < .001

Although we do not know how many preorder co-ops have been organized and disbanded, six of the responding groups have been in operation more than four years, eighteen are between two and four years old. Moreover, preorder cooperatives appear to grow in size as they age. Eight of the fourteen units less than a year old contain fewer than 30 households, whereas only one of six units in operation more than four years is this small. These are very significant observations because they suggest that only those preorder cooperatives that grow continue to operate for extended periods of time. This prompts one to ask

what factors influence the growth of a preorder cooperative. As preorder cooperatives grow and age do they carry more products? Are larger preorder co-ops more or less democratic? How do cooperatives of varying sizes organize distributional activities? Do larger preorder cooperatives use volunteer labor more effectively? These and other questions will be answered in the following sections of this chapter.

Procurement Practices and Product Availability

Locating suppliers, procuring products, and picking them up or accepting delivery are central tasks in the operation of a preorder cooperative. Table 2.3 summarizes the supply arrangements of 41 co-ops by size of the co-op. Cooperatives with less than 30 households have an average of 2.5 suppliers, receive .9 deliveries per month and make 1.2 pickups per month. Some co-ops receive no deliveries and some make no pickups. As one might expect larger preorder co-ops have, on average, more suppliers, deliveries, and pickups than smaller ones. The large groups handle as many as 18 suppliers and make up to 55 pickups per month. On average the largest preorder co-ops have 4.6 suppliers. Thus while small preorder cooperatives are often heavily dependent on warehouse operations of federated consumer cooperatives, larger co-ops develop the capacity to deal with a wide range of suppliers. This trend towards increased procurement activity may reflect several factors. Increased membership gives the group the human resources to locate and trade with more suppliers. Larger units may deal with local producers in season. They may have more frequent distributions, hence more frequent deliveries and pickups. Clearly growth allows preorder cooperatives to locate and distribute a wider selection of products.

Table 2.3 The Number of Suppliers, Deliveries and Pickups of Preorder Cooperatives Arrayed by Number of Member Households

	Less Than 30 Households	30 to 60 Households	60+ Households	Total
Suppliers	Average 2.5 Range 1-8	Average 3.3 Range 1-9	Average 4.6 Range 1-18	Average 3.1 Range 1-18
Deliveries Per Month	Average 0.9 Range 0-2	Average 1.4 Range 0-4	Average 4.5 Range 1-25	Average 1.7 Range 0-25
Pickups	Average 1.2 Range 0-5	Average 1.6 Range 0-5	Average 8.1 Range 0-55	Average 2.7 Range 0-55
Number of Observations	23	10	8	41

Federation warehouses play a very critical role in the establishment and supply of preorder cooperatives. Of 44 preorder cooperatives providing information, 15 list the federation warehouse as their only supplier. These tend to be the youngest groups. The products available through the federation warehouses serve as a foundation on which the cooperatives can build a range of products that meet the desires of its members. The ability of the federation warehouse to offer a wide product selection appears to be a function of the age and volume of the warehouse operation. Table 2.4 compares the role of three federation warehouses and other suppliers in servicing preorder cooperatives. ICC, the largest and oldest of the three federations carries 12 of 17 product categories listed in the survey; MFOFC carries 7 of 17 ; FORC carries 9 of 17. Each category contains several products but the classification is specific enough to reveal a general outliine of the supply structure. All eight ICC preorder co-ops, for example,

carry dried fruits and nuts from their warehouse and none purchase these products from other suppliers. In contrast, the 27 preorder co-ops served by MFOFC carry the warehouse items, however, seven also receive these products from other suppliers. As attention is shifted to perishable products it becomes increasingly clear that the well established federation is able to assist the individual preorder cooperative while co-ops in younger federations must rely on non-federation sources of supply or do without.

Table 2.4 also suggests that as the preorder co-ops become more established they expand their sources of supply to commercial wholesalers and local producers. The use of commercial wholesalers is often related to the supply of household products and perishable goods. With the exception of eggs, where 25% of the preorder co-ops purchase from local producers, virtually all perishable goods are obtained from commercial wholesalers.

Few of the preorder co-ops indicate that they have been refused by a private wholesaler. The 52 preorder co-ops experienced only nine rejections. Three wholesalers gave no reason for rejection. Four said that they do not do business with cooperatives. Two MFOFC members were refused because the co-ops did not have a state sales tax license. The latter reason places co-ops in a Catch-22 situation. Wholesalers use the Michigan sales tax number as a purchaser identification number. However, the state, in an attempt to minimize administration costs, has ruled that preorder co-ops need not obtain state sales tax numbers. Thus the co-ops face difficulty in obtaining a number, yet need the number to do business with some suppliers.[3]

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[3]See the bulletin from Michigan Dept. of Treasury in Appendix 2.A

2.4 Products Available Through Three Midwestern Consumer Cooperative Warehouses and and Alternative Sources of Supply for Preorder Cooperatives

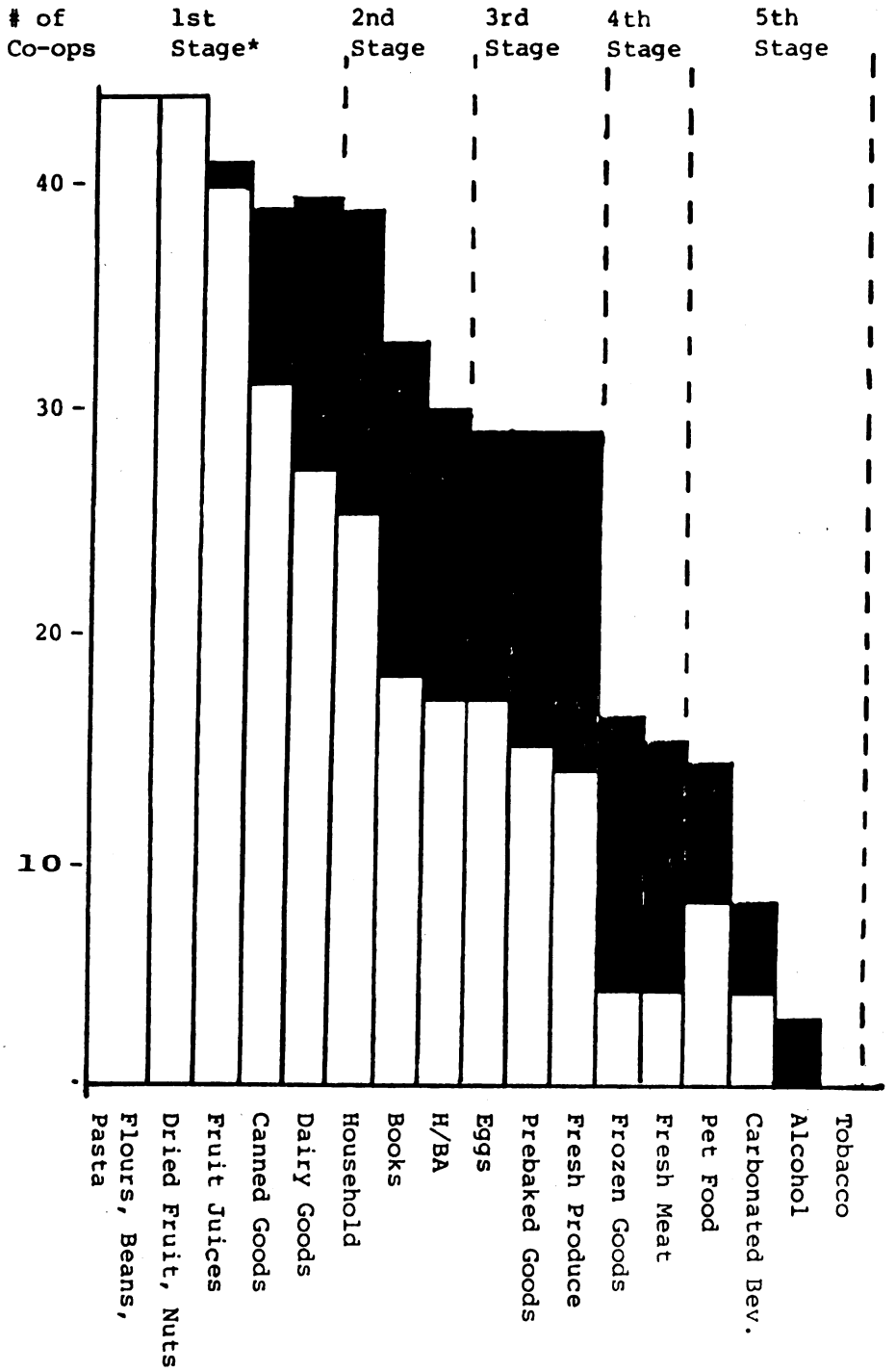
Product Category	I. C. C.			M. F. O. F. C.			F. O. R. C.		
	Avail.	Carry	Other*	Avail.	Carry	Other*	Avail.	Carry	Other*
Flour, Bean Noodles	Y	8/8	0/8	Y	27/27	5/27	Y	8/8	0/8
Dried Fruit & Nuts	Y	8/8	0/8	Y	27/27	6/27	Y	8/8	0/8
Fruit Juices	Y	8/8	1/8	Y	25/27	7/27	Y	7/8	0/8
Canned Goods	Y	7/8	0/8	Y	17/27	6/27	Y	4/8	1/8
Dairy Products	Y	4/8	1/8	Y	15/27	3/27	Y	6/8	1/8
Household Goods	Y	6/8	0/8	Y	13/27	7/27	Y	4/8	1/8
Books	Y	5/8	1/8	N	11/27	11/27	Y	2/8	0/8
Health & Hygeine	Y	3/8	1/8	Y	12/27	5/27	Y	1/8	0/8
Eggs	N	2/8	2/8	N	9/27	9/27	N	3/8	3/8
Prebaked Goods	Y	5/8	1/8	N	7/27	7/27	N	2/8	2/8
Fresh Produce	Y	2/8	0/8	N	9/27	9/27	N	4/8	4/8
Frozen Goods	Y	0/8	0/8	N	2/27	2/27	N	0/8	0/8
Fresh Meat	N	0/8	0/8	N	3/27	3/27	N	0/8	0/8
Pet Foods	Y	7/8	0/8	N	1/27	1/27	Y	0/8	0/8
Carbonated Beverages	N	0/8	0/8	N	4/27	4/27	N	0/8	0/8
Alcoholic Beverages	N	0/8	0/8	N	0/27	0/27	N	0/8	0/8
Tobacco	N	0/8	0/8	N	0/27	0/27	N	0/8	0/8

*Commercial wholesalers and local producers. For a more complete breakdown of sources of supply see Appendix 2.B.

In addition to examining how often and from whom preorder cooperatives procure products we need to examine more closely what the co-ops currently handle and what they desire to add to their product line. Preorder co-ops handling low turnover products are not likely to serve as a base for further consumer action. Further an inability to expand to a full product line limits the effectiveness of a cooperative. Figure 2.1 gives a frequency count of the number of cooperatives that carry or desire to carry products in 17 categories. When these categories are ordered from most to least frequently carried they suggest five product groups or stages. The first stage includes flours, grains, beans, noodles, dried fruit, nuts, fruit juices, canned goods, and dairy products (usually just cheese). These products have long shelf life, can be distributed with minimal refrigeration, and transported in bulk to distribution points. Each federation supplies products from these categories and most of the preorder co-ops surveyed carry them. The presence of one preorder co-op that desires to add fruit juices and six that desire to add canned goods indicates either they are not aware of the commodities currently available, or more likely, they desire specific products not offered by the warehouse.

The second stage of products includes household goods, books, and health and beauty aids. These products share the same handling characteristics as stage one products, but are not food items. Each federation warehouse supplies products from these categories except MFOFC which carries no books for retail distribution. Figure 2.1 indicates that significantly fewer groups carry Stage 2 products. Yet many co-ops desire to carry them. The large number of co-ops with non-warehouse sources of supply for these products shown in Table 2.4 suggests that

Figure 2.1 Products Carried and Unmet Demand in 43 Preorder Cooperatives



*The placement of dairy products in the first stage of product development reflects the many preorder co-ops carrying cheese. Most other dairy products have handling characteristics found in the third stage of produce development. Finer survey techniques will be necessary to accurately reflect distributional characteristics of these products.

warehouses do not carry extensive product lines in this stage. Approximately one half of the preorder co-ops in the MFOFC carrying these products rely on non-warehouse sources of supply. This indicates fertile territory for the expansion of wholesale operations at the federation warehouse level.

The third stage includes three product categories that demand sophisticated handling skills to insure quality and freshness. These products tend to be purchased either from commercial wholesalers or locally rather than through federation warehouses. These are eggs, prebaked goods, and fresh produce. Less than half of the responding co-ops carry these goods, however a substantial unmet demand exists.

The fourth stage includes frozen goods and fresh meat. Only six respondents carry these items with several others wishing to carry them in the future.

The fifth stage contains pet foods, carbonated beverages, alcoholic beverages, and tobacco products. Few preorder cooperatives carry these products and projected growth based on those seeking sources of supply is small. Many of the co-op members attach considerable importance to purchasing only healthy and nutritious products. When asked to identify goals of their cooperative, 50 of 52 respondents indicated that they wish to offer only safe and healthy food; the remaining two did not answer the question.

Figure 2.1 needs to be interpreted with some care. It may not fully reveal the dynamic forces underpinning expansion of product lines in preorder cooperatives. As the co-op expands its product lines to meet currently articulated demand, new demands may take their place. Thus preorder co-ops may eventually carry products in all of the stages

with the possible exception of stage five. Figure 2.2 presents some evidence in support of this point.[4] It plots the number of product categories carried against the age of the cooperative for each of the three federations surveyed. Preorder co-ops who are members of the ICC federation have the lowest correlation of product lines to age. These preorder co-ops are able to obtain most of the products they desire from the warehouse and thus have little need to expand product lines through time. Members of MFOFC, which has the fewest product lines available through its warehouse, has the highest correlation of product lines to age. Both the influence of the federation warehouse operation and the correlation of product lines available to age of the cooperative suggest that at least in the near future preorder cooperatives will continue to expand the product selection available to members.

Decision Making

Decision making is an important element in the product selection process, member satisfaction, and the smooth operation of a preorder cooperative. Members should enjoy easy, open access to decision making forums. Information must flow freely and be ordered and condensed with as little distortion as possible. Traditionally, cooperatives have attempted to meet these standards through the use of the one member - one vote principle. In our sample 45 of the cooperatives use this method; three use concensus; one does not use equalitarian voting but did not indicate how decisions were made, and three did not respond.

Although voting methods are important they do not fully describe a cooperative's decision making process. Structures within which

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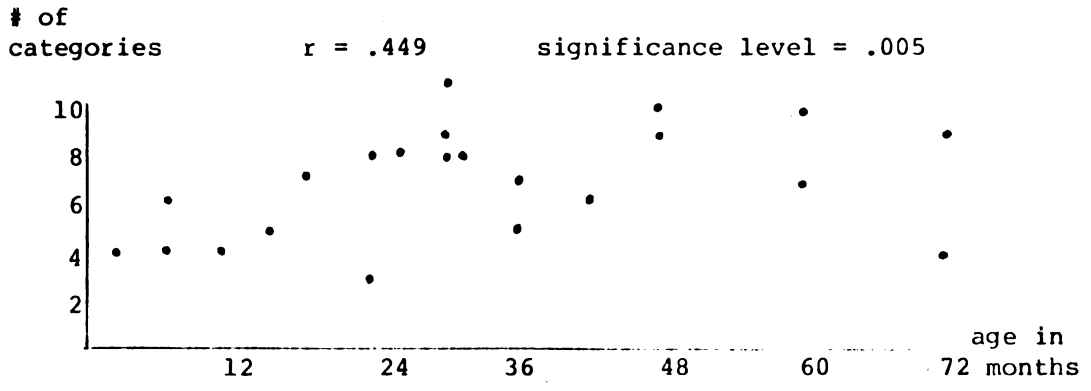
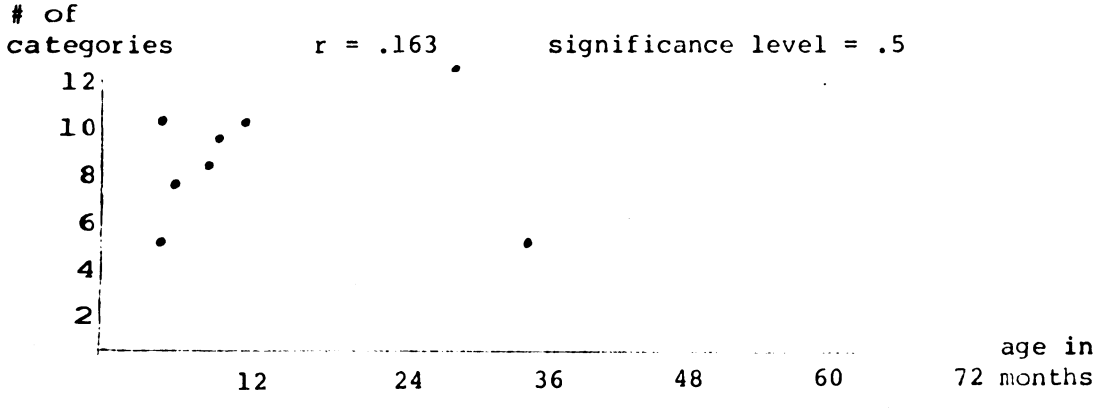
[4]The data base for Figure 2.2 is available in Appendix 2.C.

Figure 2.2 The Number of Product Categories Carried Arrayed by Age of Preorder Cooperative

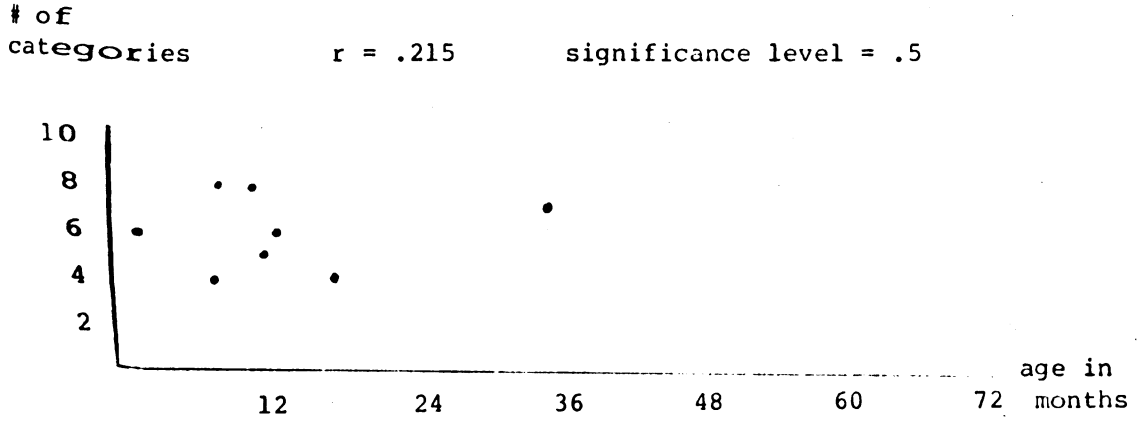
a) M. F. O. F. C.



b) I. C. C.



c) F. O. R. C.



decisions are made must be examined. A cooperative may have general membership meetings, a board of directors, a staff, or some combination of these. Demographic characteristics such as the age, sex, and educational level of a preorder co-op's leadership may indicate the tenor and quality of the decision making process. Other important indicators of the process include the frequency of meetings, who initiates proposals, and who decides if they are to be implemented.

All preorder cooperatives in the survey have general membership meetings. The number of meetings per year ranges from one to twelve. In fact, the upper and lower values of the range occur most frequently. Small preorder co-ops tend to hold monthly meetings at the time food is distributed. The larger groups, on the other hand, tend to have annual membership meetings and delegate short run decision making to boards or staff.

Of the 52 preorder cooperatives, 23 have a board of directors. Thirteen co-ops operate only with a staff. The remaining 16 have neither a board nor a staff.[5] Only 14 of the 23 preorder co-ops that have board of directors indicated the frequency of the board meetings, perhaps an indication of the informal nature of many of the co-ops' leadership structures. Board meetings vary from three to twelve per year, with an average of seven. Members of the boards of directors serve terms ranging from six months to two years with directors in five co-ops serving indefinite terms. The boards range in size from three to fourteen with an average of 6.4. Thirteen have an odd and

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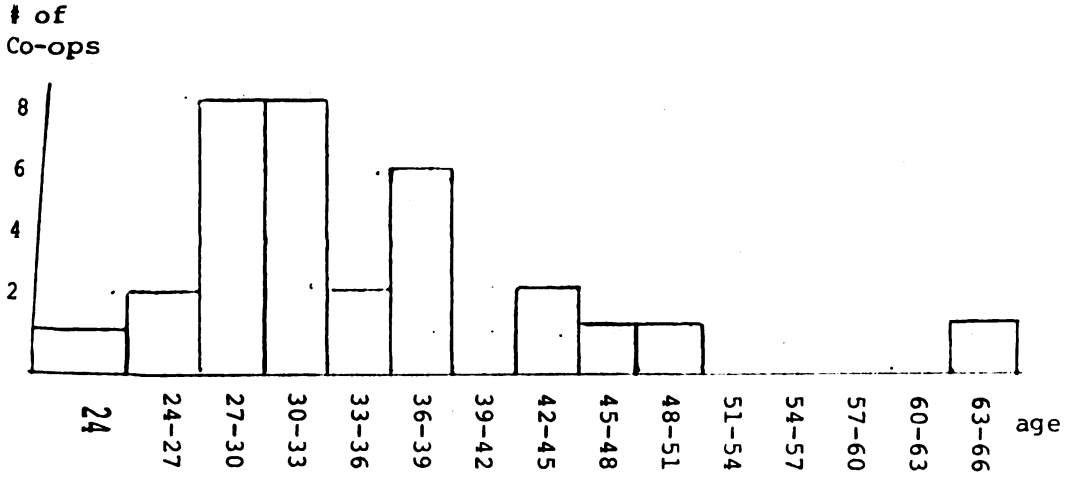
[5]In addition ten preorder co-ops have both a board of directors and a staff.

nine an even number of members. Among boards furnishing information six have experienced a total of 31 resignations in the last two years while the remaining 17 experienced none. As will be shown in Chapter 3 these boards are relatively stable compared to the leadership of cooperative stores.

Data from 133 board and staff members from 34 preorder cooperatives allows the development of a leadership profile. Figure 2.3 displays the frequency distribution of the leaderships' average age in 33 preorder cooperatives.

Figure 2.3 Average Age of Leadership Group in Preorder Cooperatives

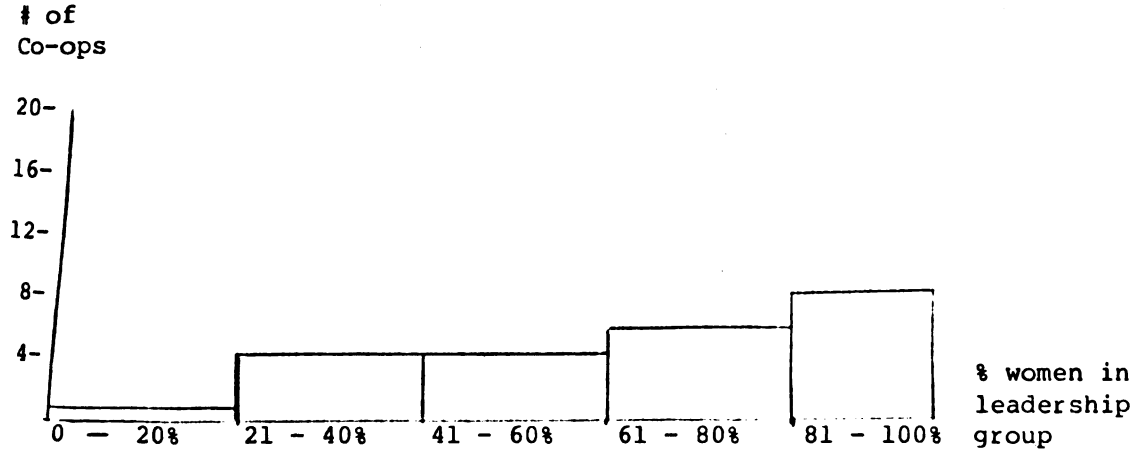


Leaders reflect the general age distribution of co-op members with 55% of leaders coming from the young household group compared with 62% of the units dominated by young households. One co-op is led by two senior citizens.

Women are decidedly more active in preorder cooperatives than men. Figure 2.4 reveals that over 80% of the leaders in 18 of the 31 co-ops are women. Since most leaders come from young households these women may be caring for young children and not employed outside of

the home. This suggests that preorder co-ops would be an excellent vehicle for child nutrition programs and family economics programs offered by the cooperative extension service and other social service agencies. These households are also more likely to experience economic stress. In their situation the preorder co-op may be a form of part time employment that enables participants to enhance their families' economic position by saving on food costs.

Figure 2.4 Percent of Leadership Positions Held by Women in Preorder Cooperatives



If preorder co-op leadership reflects traditional sex roles, one might expect that men would take over leadership roles as a co-op becomes larger, more complex, and successful in the community. To see if this occurs we examined the relationship between the proportion of leadership positions held by women and the size of the co-op. Our analysis strongly indicates that larger preorder co-ops continue to be run by women.[6]

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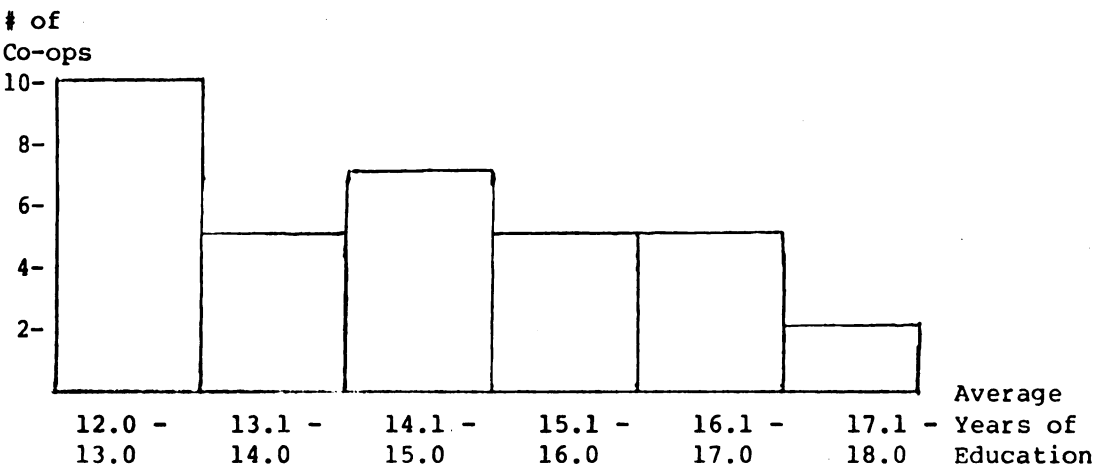
[6]The correlation between the percent of leadership positions held by women and size of co-ops, as measured by cost of goods sold is only -.07.

This suggests that preorder cooperatives may attract women who wish to step out of traditional roles and develop entrepreneural and management skills.

Whether they are men or women preorder co-op leaders have at least a high school education. The largest number of co-op leadership groups have an average education of 12 to 14 years. All of the leadership groups have at least one member with a college degree and seven co-ops have an average educational level of more than 16 years.

Figure 2.5 Average Years of Formal Education of Leadership Groups in Preorder Cooperatives



A composite leader of a preorder cooperative would be a woman between 27 and 35 years of age with some college education. The average length of service of board and staff members indicated by survey respondents is less than one year. Since many of the leadership groups in preorder cooperatives are very informal with rapid rotation of functional responsibility among members this leadership profile is probably a reasonable accurate description of the active membership in preorder co-ops.

In an attempt to move beyond the structure of decision making toward the process of decision making respondents were asked who normally proposes changes in co-op operations and who decides to implement them. This was done by presenting survey respondents with a list of 14 commonly faced issues and asking them to indicate the role of the general membership meeting, standing committees, boards of directors, staff, and manager in the decision making process. As the decision areas shift from the general membership meeting toward a staff or manager the process becomes more centralized with fewer persons sharing responsibility. Conversely, decision making by general membership meetings are more decentralized than those made by boards, staff or managers. For each of the preorder co-ops we constructed an index based on the 14 issues listed, reflecting the average location of the policy initiators in the decision structure. If respondents indicated that all proposals are developed in a general membership meeting the index equaled five; if all emanate from standing committees the index equals four, if from a board of directors it equals three, if staff it equals two; if from a manager the index equals one. A similar index indicates the location on average of the group that ultimately decides to implement policy changes. Appendix 2.D uses a numerical example to illustrate the calculation of these indices.

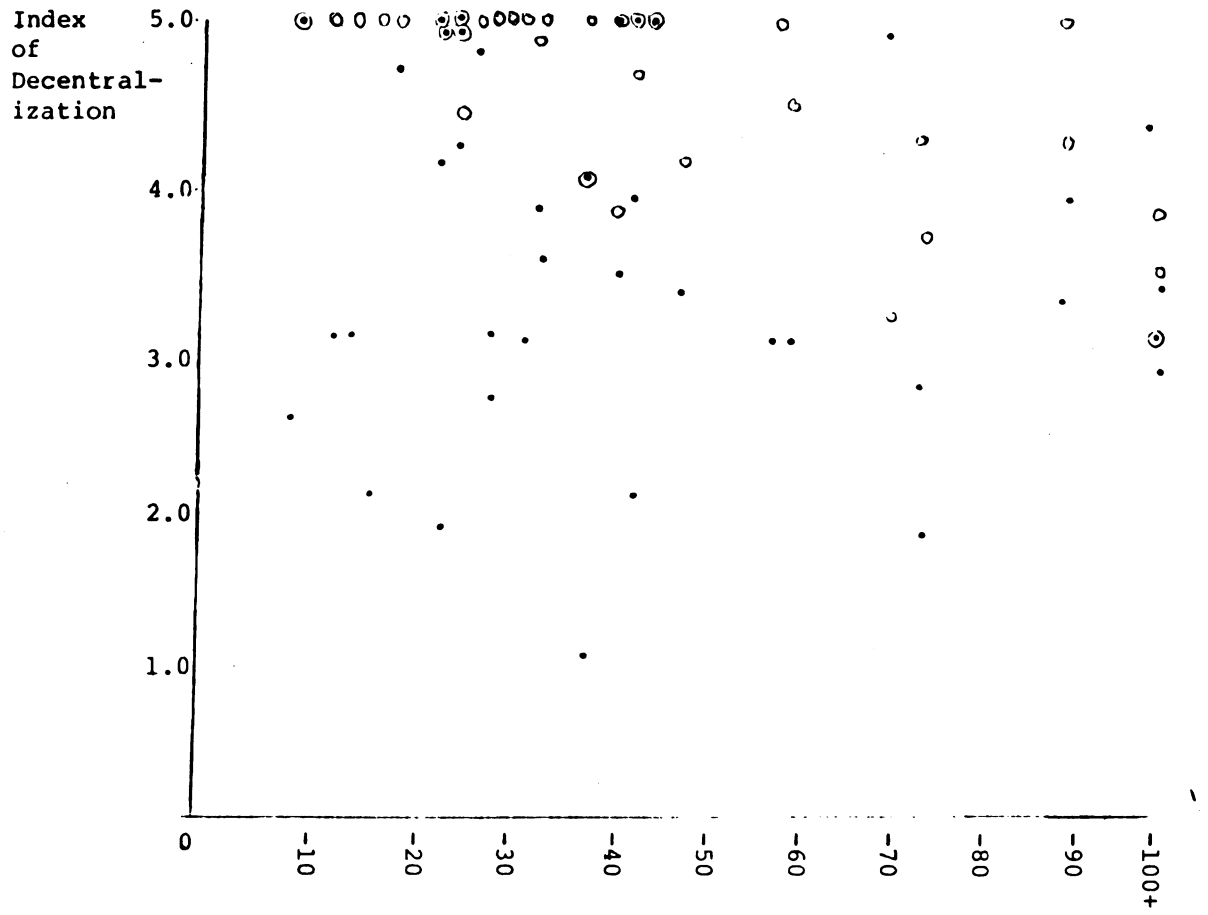
We hypothesize that proposal development occurs on average near the top of the decision making structure (manager-staff) and that the implementation decisions occur in a more participatory setting. That is, cooperatives are hypothesized to operate in a democratic rather than autocratic manner. Policy alternatives flow from the leadership to the membership who in turn decide upon implementation. As the size of

preorder cooperatives increase we hypothesize that both aspects of the decision making process will become more centralized. As operations become more complex not all members will wish to invest the time necessary to make all decisions.

Figure 2.6 shows the relationship between increasing numbers of member households and the policy development and decision to implement indices. The results clearly support the first hypothesis. Excepting one group with 70 households all of the preorder co-ops surveyed decide upon implementation of proposals in a decentralized arena after developing them in the same or a more centralized arena. To appreciate the significance of this finding visualize a cooperative where the opposite is true. In such a cooperative members desiring a change of operations would formulate a proposal. Even if they do this by voting among themselves in a democratic manner they must still petition a smaller group for approval. This is reminiscent of the relationship between consumer advocates and private retailers. Consumer advocates in effect petition for change in the food system, but have no control over the options considered, information made available, or the choice of whose preferences are considered. Since consumers establish cooperatives in accord with their tastes and preferences, and since the organization's general policies change only with the approval of the membership, the consumer has a sovereignity not offered by other options in the market place. They can signal approval directly on the several facets of their operation rather than signalling approval or disapproval by shifting their patronage among competing retailers.

The second hypothesis is partially confirmed. A visual inspection of Figure 2.6 indicates that policy decisions tend to become more

Figure 2.6 Indices of Policy Proposal Development and Implementation Decentralization in Preorder Cooperatives Arrayed by Number of Households.[7]



KEY: Development of Proposal

Decision to Implement Proposal

Development and Decision to Implement Always at the Same Level

Value Scale: 1 = manager, 2 = staff, 3 = board of directors
4 = standing committee, 5 = general membership

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[7]Table E in Appendix 2 contains the numerical data (number of households, development index value, and implementation index value for each co-op from which Figure 2.6 is constructed.

centralized with increasing size, as hypothesized. In preorder co-ops with less than 25 households virtually all decisions are made in general membership meetings. Between 25 and 100 households increasing size shifts the average site of resolution towards standing committees and boards of directors. In preorder co-ops with more than 100 households the boards of directors appear to be the site of approval for implementation.

Initiatives to change policies do not become more centralized as preorder co-op size increases in the range of size covered in the survey. Initiatives seem to come from all levels in the decision making structure for preorder co-ops serving less than 50 households. In larger units the range of input into policy formation narrows and settles upon values near 3.0 suggesting that the board of directors assumes increasing responsibility for initiating change in larger co-operatives.

One must recognize that these indices illustrate the flow of information and decision making in a very aggregated and elementary fashion. Averages can be misleading. A co-op whose board of directors makes all decisions and a co-op where the decision making is split evenly between the manager and the general membership have the same index value, three. The decision making process in these two co-ops would be very different. The index values also indicate only rank, not intensity; a value of 4.0 is more democratic than 2.0, but is not twice as democratic.

Many participants in the cooperative movement are motivated by the goal of decentralized decision making. The results displayed in Figure 2.6 suggest that these individuals should organize preorder co-ops with

fewer than fifty households. In these small cooperatives both the initiative for policy change and implementation can be found at the general membership meeting. Promoters of these relatively small groups may, however, find the dynamics of survival and growth working against them. Our previous evidence suggests that preorder co-ops grow or disappear as they age. Expanding preorder co-ops will likely gravitate toward the moderately decentralized and democratic decision making structure employed by the larger cooperatives in Figure 2.6. The participatory democracy of the general membership meeting will be increasingly replaced by the representative democracy of elected deliberating bodies.

Activity Analysis

The preceeding sections have analyzed the sources of supply used by preorder cooperatives, the products they carry, and how they make decisions. This section examines the specific tasks necessary to distribute food, who does them, how tasks are allocated among members, and how the member workers are trained.

Volunteer action by members is the very essence of a preorder cooperative. Member training is absolutely necessary to make participation pleasant and rewarding in the social as well as economic dimension. The most straight forward way to train members is to have an experienced member show them how to do difficult tasks such as cheese cutting and cashiering. All responding preorder co-ops indicate that this is done in their organizations. Fourteen of the co-ops have in addition developed written instructions. Three cooperatives also indicate that they conduct training sessions for new members. Four of the five cooperatives with more than 90 members use all of these methods to train members.

Most preorder cooperatives operate on an honor system and allow members to sign up for the time and task that best suits them. Table 2.5 summarizes the methods for allocating tasks in preorder cooperatives. More than one may be used at a given time.

Table 2.5 Methods for Allocating Tasks in Preorder Cooperatives

Method	Frequency
Members sign for time and task	28
Assigned to members as needed	12
Assigned to members and rotated	11
Members join work teams and rotate	2

Voluntary sign-up can result in an unequal distribution of work among members. Perhaps this is why 64% of the preorder co-ops require all members to work in the co-op. Few co-ops, however, have felt it necessary to assign jobs to specific individuals in order to make sure that jobs are completed in a timely and fair fashion. As indicated in Table 2.5, there are 23 instances where tasks are actually assigned to members. Peer group pressure and common shared goals are the most probable incentives underlying the success of voluntary work allocation systems.[8]

In a study of a large preorder cooperative in Sacramento, Hoyt found a group of members that worked more than three times the average

[8]Seven preorder co-ops offer discounts to members who work and allow membership for those who chose not to work. The discounts range from 5% to 15%.

co-op member. Our sample indicates that this is a common phenomena. Only six of the 43 preorder co-ops responding indicate that no member works more than three times the average. Some co-ops indicate as many as 10% of the members work this extra amount. The percent of members working this extra amount tends to increase as the number of member households increase.[9]

The fact that some members work more than others does not necessarily imply that the work load is being unfairly distributed. Those hard working members may do so because they value non-monetary rewards more highly than others. Moreover, many of the preorder co-ops rotate the time consuming jobs such as coordinator on a regular basis. This procedure generates a large fund of organizational skills within the co-op, enhances the organizational stability of the co-op and may in the long run facilitate the formation of additional cooperatives. At any point in time, however, it appears as if a relatively small group of individuals contribute heavily to the co-op's operations.

In four fifths of the cooperatives over one half of the member volunteers are women. In more than one third of the co-ops women constitute over 80% of the volunteers. These proportions do not vary among rural, suburban, and urban preorder cooperatives.

The preorder cooperatives were asked to estimate the proportion of their efforts spent on six aspects of food distribution; collating member orders, placing orders with suppliers, unloading and assembling

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[9]The simple correlation between the percent of the membership working three or more times the average member and the number of households in the co-op is .226, significant at 10% level.

orders at the distribution site, packaging and pricing, bookkeeping, and other activities. It is undoubtedly difficult for anyone to estimate these percentages, and unlikely that the co-ops would maintain records of the time involved, therefore our results should be considered only as very crude measures of the time allocation. Table 2.6 presents the estimates, grouped by size of cooperative and averaged. There is no discernable relationship between allocation of time among the tasks and the size of the co-ops. On average ordering takes the least amount of time, five percent. Packaging and pricing take the most time, 30%.

Table 2.6 Average Estimated Percent of Effort Spent on Six Aspects of Food Distribution Arrayed by Number of Member Households

Task	Less Than 30 Households	30 to 60 Households	60+ Households	Full Sample
Collate Orders	23	14	20	20
Place Orders	5	4	7	5
Unload & Assemble	17	13	19	16
Packaging & Pricing	25	50	20	30
Bookkeeping	27	15	28	24
Other	5	4	6	5
Totals	102%	100%	100%	100%

The allocation of effort among tasks does, however, vary systematically when preorder co-ops are grouped by their attitudes toward growth. The co-ops were asked if their response to pressure for growth would be 1) limit their size and establish a waiting list, 2) limit size and help others form a separate cooperative, 3) restructure the

cooperative to handle more members, 4) simply get larger, or 5) start a store. Ordered in this way the growth options tend to measure an increasing importance attached to extending the benefits of cooperation to others and a willingness to reorganize their cooperative to accomodate more members. Table 2.7 groups these options into three categories; no growth (1,2) growth as a preorder cooperative (3,4), and establish a store (5). Using this grouping there is a clear trend in the percent of time allocated to each task. More growth oriented preorder co-ops tend to spend less time collating and placing orders and bookkeeping, spending more time on unloading, assembling, pricing, packaging, and activities in the other category. The no growth co-ops spend considerably more time on the information transfer aspects, collating, ordering and bookkeeping. These no growth co-ops represent 31% of our sample with an average size of 37.1 member households.

Table 2.7 Average Estimated Percent of Effort Spent on Six Aspects of Food Distribution Arrayed by Strategies to Accommodate Future Growth

Task	No Growth	Growth as A Preorder	Establish Store
Collate Order	25	16	15
Place Orders	4	6	6
Unload & Assemble	13	19	24
Packagins & Pricing	29	31	32
Bookkeeping	26	23	17
Other	3	5	6
Totals	100	100	100

It is possible that members in these small groups enjoy the experience of buying collectively with their neighbors and prefer the status quo although it appears to entail a disproportionate amount of time spent on information handling. Alternatively it may be that organizational problems have caused these co-ops to limit membership. Limits may be imposed due to the lack of viable structures for collating member orders or the distribution of food which allow successful operation of larger co-ops. If, as is likely, both explanations are true in some cases, the exchange of ideas on alternative structures and procedures may allow small cooperatives to gain the benefits of larger size without sacrificing the social atmosphere existing in their co-op.

Marketing Analysis

Preorder cooperatives may seem like odd candidates for marketing analysis. After all eliminating the promotional gimmickry of supermarkets is raison d'etre of preorder cooperatives. One must be careful not to confuse one kind of marketing with the study of market strategies. In recent years there has been a proliferation of market strategies: the convenience stores, generic label products, warehouse stores, limited assortment stores. In this section the strategic features of the preorder cooperative are examined.

The preorder cooperatives fundamental strategy is to offer dramatically lower prices that border on wholesale prices. The retail distribution costs can be cut to nil because members perform the distribution functions and order in advance. Integrating back toward the producers and ordering in advance improves what economists call vertical coordination. When the co-ops' buyers go to a wholesale market, for example, they know exactly how much members want. There is no waste and

no unsold inventory to carry. This means lower prices for the member consumer. Pricing methods of preorder cooperatives are relatively simple. The co-ops were asked to rank seven pricing strategies listed in the survey in the order of importance to their pricing strategy. Of the 33 cooperatives responding, 25 ranked a constant percent of cost markup first, two felt that pricing to match or beat local competition was most important, and seven use a direct charge system. In a direct charge system members pay a flat fee each month, regardless of the size of purchase, in addition to the wholesale cost of goods purchased. The flat fee covers the operating expenses of the cooperative. No cooperative gave more than nominal consideration to pricing by nutritional value, degree of processing, or product identity. Since the preorder process is designed to minimize inventories and waste, product turnover and shrinkage are not important factors in preorder co-op pricing.

Method and frequency of distribution are other important dimensions of a preorder cooperative's market strategy. Among the cooperatives responding, forty distribute on a monthly basis, six less frequently, and six more frequently. Thus preorder co-ops require shoppers to plan their grocery needs and purchase large amounts relatively infrequently. There is no reason why preorder co-ops cannot operate on a more frequent basis. Two preorder co-ops in the sample operate on a weekly basis.

The time between distributions is usually the maximum span between placing orders and receiving groceries. Among co-ops surveyed the span varies from one month to two days. In 56% of the co-ops ordering is done within seven days of delivery.

There are three methods of organizing preorder distribution and

all three are present in this sample.[10] The simplest method is to rotate the distribution point among member households. Seventeen of 51 respondents use this method. All but two of these co-ops are less than one year old and serve fewer than 40 households.

A second method of distribution uses a permanent distribution point such as a room in a church or community building. Often the space is free of charge although larger co-ops rent space. Twenty-eight of 51 respondents maintain selling space or a storage area. The area involved ranges from 108 to 1150 square feet. The maintenance of permanent space allows these co-ops to invest in refrigeration equipment and carry perishable and frozen products.

The third distribution method uses a branching distribution network. The co-op has a fixed distribution point where a member of each block picks up the block's consolidated order and returns to a neighborhood point for final distribution to other block members. These branch preorder co-ops are regional co-op federations in miniature. Six co-ops indicate that they use a branching system. They range in size from 20 to 130 households. This system is attractive to groups with members scattered over a wide geographical area and to apartment dwellers that are naturally clustered but lack distribution space for large groups. Several senior citizen groups based in clusters of seniors' housing have been attracted to this approach.

We were not able to evaluate the relative efficiency of these three distribution methods. It appears, however, that the branching

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[10]For an extended description of these three types of preorder cooperatives, see Food Co-op Handbook (1975).

method of distribution allows further expansion of preorder activity in areas where the size of a distribution site limits growth. It also provides a means of order consolidation allowing the preorder cooperatives to capture gains from large scale purchasing and wield greater influence over matters of product quality while maintaining small group interaction.

Operational Analysis

While 34 preorder cooperatives indicate that they have financial data, only 23 furnished reasonably complete data. The display of this data in Table 2.8 is arranged by volume of cost of goods sold rather than sales. Cost of goods sold (the amount a co-op pays its suppliers for products) is used because it more accurately reflects the volume of goods handled through the cooperative. Gross margins, the difference between sales and the cost of goods sold, varies among the cooperatives based on the degree of member participation, volunteered or cooperatively furnished distribution supplies, and the accounting method used when direct charges are used for operating expenses.

An examination of the figures in Table 2.8 shows the wide range of gross operating margins in the preorder cooperatives. Nine of the gross margins reflect the basic operating style of the preorder co-op process, member labor producing goods available at or near wholesale prices. Four of the cooperatives have negative gross margins which reflect the strong efforts made to provide goods at the lowest possible price. The bookkeeping anomaly of negative gross margins may be attributed to organizational slack and/or the use of direct charges not added to cash receipts from goods sold. Six of the preorder co-ops have gross margins above 10 percent. The unexpectedly high gross margins for two young co-ops may reflect the generation of funds for buying deposits with

Table 2.8 Selected Operating Data for 23 Preorder Cooperatives

Preorder Number	COGS	Gross Margin	Distri-[A] bution	# of Hsehld.	COGS/ Hsehold.	Efficiency[B] Ratio
35	$ 1,500	16.7	1F	30	$ 50	4.56
11	1,836	25.7	1V	7	262	3.66
43	1,900	20.8	2F	22	86	.55
8	2,619	(1.7)	1V	12	218	3.85
2	2,771	12.0	4F	60	46	14.1
26	3,841	(2.9)	1B	18	213	3.37
34	4,042	(0.7)	2F	20	203	1.18
46	5,095	3.2	1F	25	247	1.36
19	6,175	6.1	1V	25	203	1.18
5	7,200	5.7	1V	13	554	1.30
52	7,500	25.0	1V	45	167	1.85
36	7,829	3.9	1V	35	223	.88
27C	9,860	1.0	1F	26	379	.62
15	9,960	(2.2)	1F	90	111	6.52
41	10,252	14.6	1F	75	137	2.63
12C	10,290	9.5	1F	42	245	5.88
32	12,073	.1	1F	30	402	2.97
20	13,279	2.2	1F	100	133	5.80
3	14,215	3.4	1F	75	190	1.64
7	18,000	.0	1F	25	720	.33
14	21,733	.1	1F	86	253	1.89
31	29,000	7.1	1F	175	166	7.18
29	65,649	.9	4F	300	218	3.30

A) The number of distributions per month and the distribution method.

F = fixed distribution site
V = variable distribution site
B = branching distribution system

B) The efficiency ratio is a measure of the number of hours required in the cooperative to distribute an average purchase of $20 valued at the cost of goods sold.

$$E = \frac{(\text{\# members working})\ (\text{ave. hrs. per month})}{(\text{annual COGS}/12} \times \$20$$

C) These cases were not used in the regression study of the influence of product mix on the efficiency ratio due to a lack of product mix information. Product mix information is available in Appendix 2.F.

suppliers. Data collected on sales, cost of goods sold, total operating expenses and retained earnings was not sufficient to identify the reason for high gross margins in four co-ops.

The formation of capital is not a major element in the gross margins of the preorder cooperatives. Often the only capital requirement is the payment of a buying deposit with suppliers. Preorder co-ops interested in expanding product selection may need to make modest investments in refrigeration equipment. Thirty-five of the preorder co-ops responding do not seek to generate capital through markups on products handled. Capital needs, if any, are met through direct contributions or other methods. Fifteen co-ops did indicate attempts to generate capital through product markups. Six of these are less than one year old, the remaining are either large, operate from a permanent distribution site, or are accumulating capital to become a cooperative store.

The distribution process is the major organizational problem in preorder cooperatives. The distribution process, extending from the collation of member orders, through assembly and pricing of orders, to the point where the member leaves with her order, is marked by the use of free, largely unaccounted member labor. Processing the co-ops combined order should be done in a manner as efficient as possible given member preferences for pleasant, rewarding participation. Traditional retail analysis uses the gross margin of a firm as a measure of the percentage of total product cost associated with the distribution process. Since the use of member labor is not accounted for in the dollar and cents measurement of gross margins, an alternative means of measuring the cost efficiency of co-op operations must be used.

One approach would be to calculate an implied wage for each member.

Hoyt (1974), in a study of a large preorder cooperative in Sacramento, calculated the implied wage from co-op participation based on specific information concerning price, quality, and quantity of member purchases as well as hours of participation. This measure of return to the individual allows the identification of efficient allocation of members' time between cooperative and alternative activities.

We have chosen to measure the cooperative's efficiency in the use of total member labor, based on a set quantity of goods. Given the small amounts of capital involved in the preorder process efficient cooperative activity can be approximated by its efficiency in using member labor.

Table 2.8 contains a measure of the efficiency in using member labor. Called the efficiency ratio, this measure is the number of hours the group must work per month to distribute $20 of groceries valued at invoice cost. This value was calculated from member hours worked per month and cost of goods sold. Lower values of the efficiency ratio (E) indicate higher levels of efficiency. The ratio ranges from .33 to 14.1 with most values falling between one and six. A value of one, for example, indicates that each month the group must contribute one hour of labor to distribute $20 of groceries valued at cost.[11] Note that E is an average index; it says nothing about how the actual work load and

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[11]The highest value observed for E, 14.1, stretches credulity. Based on estimates from this co-op, members spend 14.1 hours to distribute $20 worth of food per month. Inspection of other operating statistics explain some of the labor input. COGS per household is the lowest of all co-ops listed, yet this co-op is one of the two units that distributes food on a weekly basis. Weekly operations require more effort. They also began a change of operation to a store shortly after the survey date. The combined influence of these factors explain in part the large labor input found in this co-op.

purchases are distributed among members. Although individual efficiency ratios will vary, the average efficiency ratio for a preorder cooperative is sufficient to compare aggregate performance among preorder units.

The efficiency ratio is roughly analogous to the inverse of the sales per man hour used by private retailers to measure labor productivity. We choose hours per twenty dollars as a matter of convenience in computation and to reflect the approximate monthly purchase per household found in our sample. Hours per $20 COGS is more appropriate than COGS per hour because we are analyzing the voluntary decisions of members to shop and work at the co-op rather than changes in output for a given set of employees. In a preorder setup the operational strategy is to distribute a given amount of food with the least amount of effort, rather than sell more food for a given amount of labor.

Although the natural inclination is to value efficiency positively, one caveat should be kept in mind when dealing with preorder co-ops. Their members may value the socializing that accompanies food ordering and distribution. Thus some preorder cooperatives may want to spend more time than is necessary to get the job done.

Irrespective of why a preorder cooperative's E ratio has a certain value, the ratio can be used to predict the average shadow wage earned by co-op members. A shadow wage is the hourly compensation an individual would have to earn to compensate forgoing the lower prices of the preorder co-op. As indicated in Table 2.9, a preorder co-op's E ratio has a dramatic impact on its average shadow wage. To illustrate let us assume that the co-ops prices are 15% less than private supermarkets (D = .15) and the marginal income tax rate facing members is 20% (t =

.20). The shadow wage (SW) can be calculated from:

$$SW = \left(\frac{\$20}{(1-d)} - \$20\right)\left(\frac{1}{1-t}\right)\left(\frac{1}{E}\right)$$

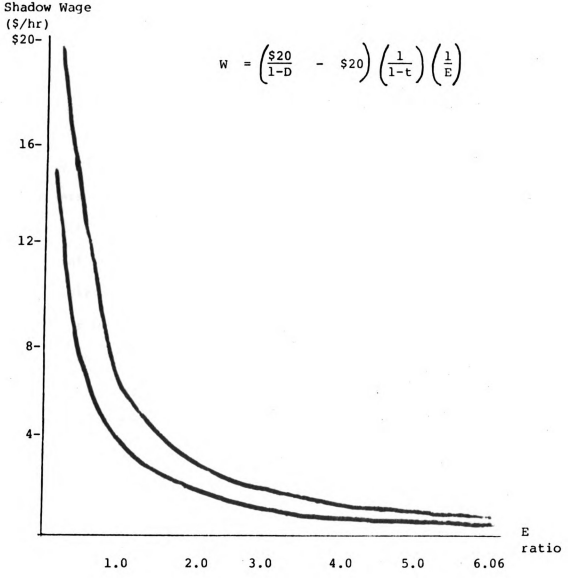
If the E ratio is 1.0 the average shadow wage rate is $4.41/hr. If E is .3 the wage rate is $14.70/hr; if the E is 10.0 it drops to $.44/hr. The average shadow wage is more sensitive to changes in the price differential than to changes in the marginal tax rate.

Table 2.9 Average Shadow Wages ($/hr) Given Levels of the Efficiency Ratio, the Marginal Income Tax Rates, and the Price Differential

E Ratio	Price Differential (D)	.15	.15	.20	.20
	Marginal Income Tax (t)	.20	.25	.20	.25
.3		$14.70	$15.70	$20.83	$22.23
.6		7.35	7.85	10.42	11.12
1.0		4.41	4.71	6.25	6.67
2.0		2.20	2.35	3.12	3.33
3.0		1.47	1.57	2.08	2.22
4.0		1.10	1.18	1.56	1.67
7.0		.63	.67	.89	.95
10.0		.44	.47	.63	.67

The relationship between the efficiency ratio and the average shadow wage is drawn in Figure 2.7. These curves illustrate in a powerful way how time volunteered in an efficiently operated preorder co-op is extremely well paid. Four of the 23 co-ops in Table 2.8 have E ratios less than 1.0; 11 have E ratios less than 2.0, and 17 have E ratios less than 4.0. Assuming a price differential of 15% the lower curve in Figure 2.7 approximates a shadow wage over $13/hr for case number 20

Figure 2.7 The Relationship Between the Efficiency Ratio and the Average Shadow Wage Given a Marginal Income Tax Rate and an Average Price Differential



and $.31/hr. for case number 5 with other cases falling between.

Clearly there are a number of factors that influence the magnitude of the E ratio. Multiple regression analysis, a statistical measurement technique, can assess the strength of impact of competing factors upon the efficiency ratio. Three influences that can be analyzed used the collected data are: size, cost of goods sold per distribution, and product mix.

Number of Households (H): Perhaps the most interesting factor influencing time requirements is the size of the preorder unit. How is size related to efficiency? Answering this question would enable us to help consumers to attain the preorder size that produces their desired level of efficiency. We might hypothesize that smaller buying clubs are less efficient (higher E ratio) because neighbors would socialize more while performing tasks. Also smaller units may not be able to meet minimum wholesaler order requirements for some foods or, more generally, to procure a broad line of products. These may be economies of size in procurement and distribution.

On the other hand there may be diseconomies of size. Smaller units may be more efficient than larger preorder co-ops because there is less need for supervision, training, and coordination of group efforts per order. Also co-ops whose membership has expanded rapidly may not have identified systems of operation that handle increased volume smoothly. Since we can construct equally plausible and conflicting theories the relationship between size and efficiency is an empirical question. The survey data may reflect a positive or negative relationship or some combined effect (possibly no net effect) depending upon the strength of these conflicting factors.

Cost of Goods Sold per Distribution (CD): This variable is calculated from annual cost of goods sold and the number of distributions per year. Handling small volumes of goods is not conducive to specialization of tasks or full utilization of volunteer labor. Setup and clean up tasks can represent significant time costs particularly for small order sizes. Preorder cooperatives handling larger volumes per distribution may allocate these fixed time costs over a larger volume. Therefore increasing cost of goods sold per distribution can be expected to lower the time requirements per order and hence lower the E ratio of the cooperative.

Binary Product Stage Variables (P2, P3, P4): Products handled by the cooperative will vary in their value and time requirements for distribution. Low cost bulk items requiring repackaging such as flour and beans will require large inputs of time to fill a $20 order. Products requiring less handling such as plastic or aluminum wrap or high cost items such as fresh meat may be expected to have a low time input per $20 order. The product stages developed in the analysis of product mix are used to classify products distributed through the cooperative. Preorder cooperatives with second, third, and fourth state products in their distribution process are identified with binary variables.[12] Product stage II contains products relatively more expensive and easier to distribute than stage I products. Therefore a co-op with products in stage II (P2=1) is expected to have a lower E ratio than other cooperatives. Stage III products are more expensive than stage I products but may take more time and care in the distribution process, particularly

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[12]No preorder co-op within the sample analyzed offers products in the fifth product stage.

if these products are available only from non-warehouse sources. Therefore a co-op with stage III products (P3=1) may be expected to have a higher E ratio. Stage IV products are often more expensive than other products. The time required to distribute these products is small so co-ops offering stage IV products are expected to have a lower E ratio.

One way to summarize these hypothese is to present them in the form of an algebraic equation. The alphas (a) are the impact coefficients. They measure the magnitudes of the relationships we wish to measure.

$$E = a_0 + a_1 S + a_2 Pw + a_3 P2 + a_4 P3 + a_5 P4 + e$$

Hypotheses: $a_1 > 0$, $a_2 < 0$, $a_3 < 0$, $a_4 > 0$, $a_5 < 0$

Where:
- E = the efficiency ratio (Hrs/$20 COGS)
- S = number of member households
- CD = cost of goods sold per distribution
- P2 = binary variable identifying product stage II
- P3 = binary variable identifying product stage III
- P4 = binary variable identifying product stage IV
- e = the error term (the portion of variation of E not explained by the specified variables)

Table 2.10 presents the statistical results of the multiple regression analysis. Equation 1 evaluates the relationship between the efficiency ratio (E) and the number of member households (S). If a preorder co-op has 100 households, equation 1 predicts that the E ratio would be 3.48 (E = 2.28 + (.012) (100) = 3.48). The number in parentheses under the regression coefficient (1.83) is the t ratio, a measure of the strength of the relationship. Higher t ratios indicate stronger or more significant relationships. A t = 1.83 is significant at the ten percent level (that is the positive relationship reported has only a 10 percent chance of not existing.) The F ratio in the last column indicates the significance of the complete equation in an analogous manner. Equation 1 is significant at the 10 percent level. The R^2 value of .137 indicates

that the equation explains only 13.7 percent of the observed variation in E. In summary, there is a moderately strong relationship between the number of member households in a preorder co-op and number of hours needed to distribute a $20 order. This supports the hypothesis that small preorder co-ops are more efficient than larger co-ops.

Before concluding that small is more efficient one should explore the sensitivity of this simple relationship to other explanations in several ways. Equation 2 introduces size squared into the model in order to test the possibility that the relationship between size and efficiency is non-linear. The results are surprising. The quadratic specification (S,S^2) produces a stronger relationship that is significant at the 5 percent level and explains 29.5 percent of the variation of E ($R^2 = .295$).

The size efficiency relationship has a hill like shape. As size increases, the E ratio increases, but flattens and peaks near 180 households. As size increases beyond this value the E ratio decreases at an increasing rate. These findings suggest that preorder co-ops in the 150-250 households size range are the least efficient. Although Equation 2 is more significant than Equation 1, caution is necessary because only two co-ops in our sample have more than 100 households. We can be fairly certain that there is a reasonably strong positive relationship between size and the efficiency ratio in preorder co-ops with less than 100 households.[13] The data are so sparse above this size that we cannot

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[13]See Appendix 2.F for a comparable set of regression results with the two largest co-ops deleted from the sample. A strong linear relationship exists between S and E. We also estimated the relationships after dropping case 5 from Table 2.8 (the unit with the very large E ratio of 14.1). This extreme value does not account for the relationship between S and E reported in the text.

test conclusively whether very large preorder co-ops regain the low E values (high efficiency levels) of the smaller preorder co-ops.

Equation 3 introduces the variable cost of goods sold per distribution (CD) to control for the influence of throughput economies. CD has the expected negative impact on E and is significant at the 10 percent level. Increasing the cost of goods sold per distribution by $1,000 ($12,000 yearly for co-ops distributing once a month) reduces the time requirement for a $20 order by 1.4 hours. The inclusion of CD in the model strengthens the relationship between size and the efficiency ratio (t ratios for S and S^2 are higher). The complete model is significant at the five percent level and explains 30 percent of the variation in E.

Equation 4 introduces the binary variables that control for the influence of product mix. Each has the hypothesized sign and all are significant at the 10 percent level. Size continues to be an important explanatory factor. Equation 4 explains 46.2 percent of the observed variation in E.

On the basis of t-ratios, R^2, and most importantly, simplicity, equation 3 seems to best control for throughput and product mix and identify the relationship between size and efficiency. Figure 2.8 illustrates this size efficiency curve. The curve attains a maximum at 436 households. Increasing the size of a preorder co-op from 25 to 50 households without increasing the co-op's volume can be predicted to increase the time required to distribute a $20 order of food by two hours and thirty-six minutes.

The evidence marshalled here indicates that small preorder co-ops use member's time at least as efficiently as larger preorder co-ops, and they appear to be more efficient than most large co-ops. The results

also seem to dispel the idea that socializing is an important attribute of preorder performance. As preorder co-ops increase in size within the well populated range of our sample (7 to 100 households) group dynamics suggest less socializing and more impersonal contacts among participants. The results suggest that larger preorder co-ops need strong member participation programs and coordination of volunteer labor not only to help members to meet each other, but also to ensure that the work experience goes smoothly and is productive. Otherwise the economic returns to participation are very low.

Although these statistical results identifying the relationship between size and efficiency in preorder cooperatives are very exciting and suggestive of the technical assistance needs of large preorder co-ops, the analysis rests upon only 23 observations. Ideally one would prefer a larger sample and data on other explanatory factors. Then one could control for more competing influences than was possible in the present study. One might, for example, consider the impact of various collating and distribution systems upon labor efficiency. More research needs to be done before the answers given above can be regarded as definitive.

Goals

The study of co-op operations must be guided by the goals towards which the cooperative's activity is directed. Cooperatives can pursue social and political goals such as community development and social reform, as well as more narrow economic goals. The primary goal of the preorder cooperatives is obvious from the basic mode of operation, direct participation to secure the lowest possible price. The preorder cooperatives other goals can be seen in the programs of information

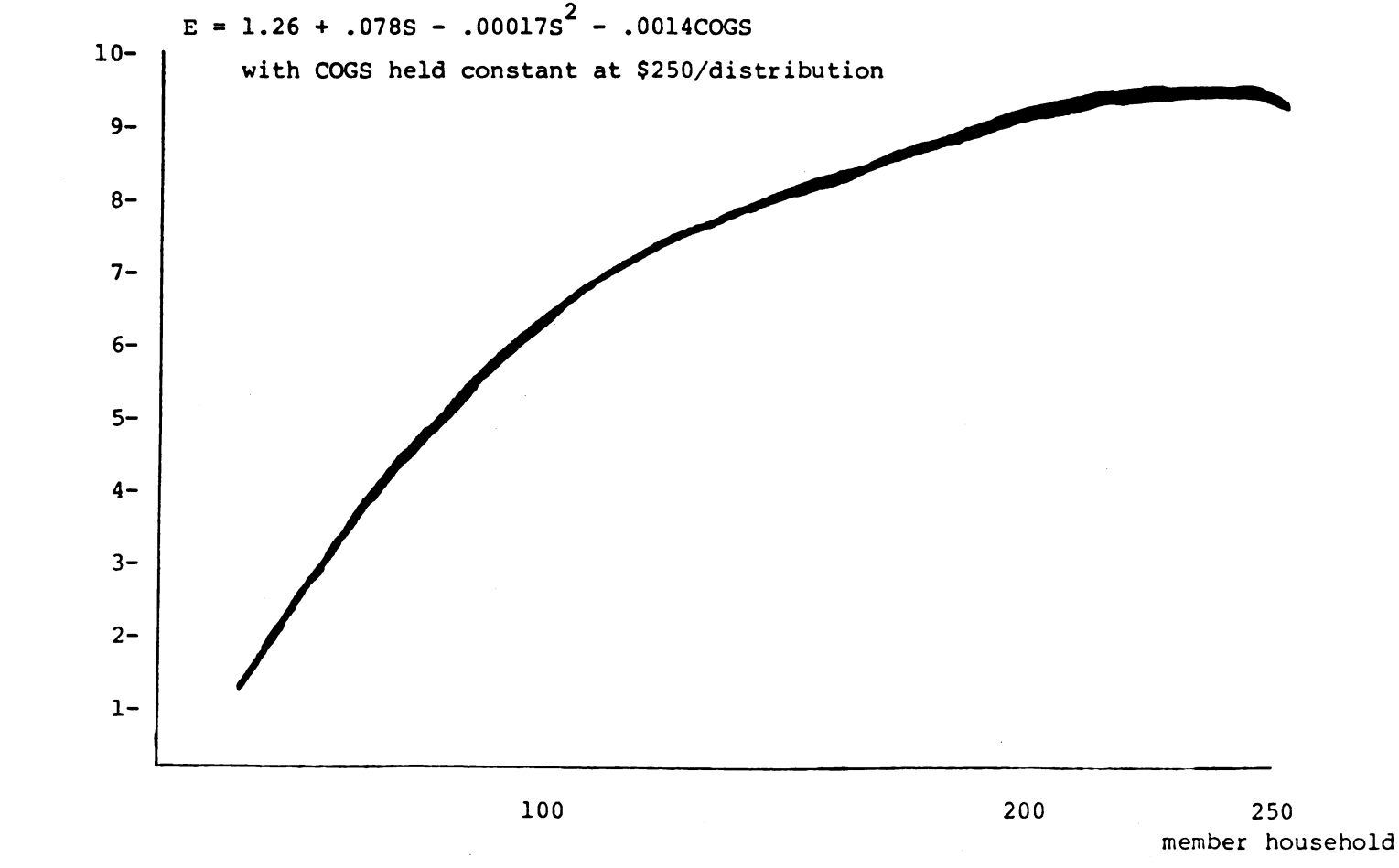
Table 2.10 Estimation of Efficiency of Member Participation in Preorder Cooperative Food Distribution

Equation	Constant	Households (S)	Households $(S)^2$	COGS/ dstbn (CD)	Stage II (P2)	Stage III (P3)	Stage IV (P4)	NOBS	F/ R^2/ Significance Level
1	2.28	.012 (1.83)						23	3.34 .137 +
2	1.08	.051 (2.63)	-.00014 (2.12)					23	4.19 .295 *
3	1.26	.078 (3.25)	-.00017 (2.81)	-.0014 (1.76)				23	4.12 .394 +
4	.759	.085 (2.65)	.00021 (1.94)		-3.16 (1.87)	2.44 (1.57)	-2.00 (1.29)	21	2.32 .462

\+ = significant at the 10% level

* = significant at the 1% level

Figure 2.8 The Relation Between the Efficiency Ratio and the Number of Member Households



distribution maintained both within the cooperative and for the benefit of the community.

The most widely shared goal of the preorder cooperatives is the development and maintenance of sources of safe and healthy food. The preorder cooperatives have to a significant degree incorporated their concern for nutrition into information programs within the cooperative. Twenty-one of the cooperatives offer nutrition information on products handled within the cooperative, and an additional twenty-seven desire to do so. Interest in general nutrition information is also high with twenty-four offering and twenty-three desiring to offer such information. This keen interest in nutrition can be observed in the absence of alcoholic beverages, carbonated beverages, and tobacco from cooperative distribution. The federation warehouses also offer a variety of organic and health foods.

Information on the deficiencies of the food distribution system can serve as reinforcement of members' perception of the value of cooperative action. Thirty-nine of the preorder co-ops offer or would like to offer information on the current food distribution system. Consumer control of the distribution system offers a means of correcting many preceived shortfalls of the existing system. Exchange of information about cooperatives enhances consumer control of the distribution system. Twenty-two of the cooperatives offer information on cooperative activity and nineteen more would like to offer this information.

This interest in altering the food distribution system to meet consumer concerns make preorder cooperatives logical vehicles for individuals, groups, and public agencies interested in improving nutritional awareness among the general public. The cooperatives provide a means

for the identification of sources of healthy food, for the procurement and distribution of the food, as well as the means of sharing information on the value and preparation of nutritional meals. Fourteen of the pre-order cooperatives expressed an interest in providing a "reading corner, lounge, or some other form of community space." This space could easily be put to use on nutrition issues.

CHAPTER III

Empirical Findings On Cooperative Stores

Cooperative stores are much less common than preorder cooperatives, however the physical presence of the cooperative store may make them better known. It is the maintenance of permanent space, larger scale operation, and more diverse membership that require more sophisticated business and social skills of cooperative store members and separate them from preorder cooperative members. Cooperative stores operating in six federations were contacted in an effort to obtain a sample of at least 50 cooperatives. This sample size could not be maintained throughout the study because some stores did not answer all of the survey questions. This chapter will analyze survey data in the areas of product procurement and selection, decision making, operational organization, marketing, and cooperative goals.

The sample of cooperative stores is not as homogeneous as the sample of preorder cooperatives. A variety of organizations exists reflecting the genesis of the cooperative stores. Forty-four of the stores may properly be called consumer cooperatives. These stores place final right of approval with the membership. Yet there exists within these 44 co-ops a spectrum of membership input into the development of policies and the physical operation of the store. Some consumer cooperatives have highly centralized decision making, a large measure of staff input, or a small membership combined with a large percentage of sales to nonmembers. Thus some consumer cooperatives approach the organization of a worker cooperative in practice. In addition, three of the stores in the sample clearly are worker cooperatives. These stores

were organized by those employed in the cooperative with little or no means for formal input from customers. A third form of cooperative in the survey is the religiously sponsored cooperative. These stores are run for the benefit of the membership, but there appears to be little provision for membership input into the decision making process or participation through boards of directors. This variety of formal and defacto decision making structure is dealt with in more detail in the analysis of decision making. In other areas of the study no attempt to control for these differences was found to be necessary as all the groups face common problems of identification of suppliers and product, formation of appealing work situations, attracting new patrons, and operation on a small scale.

Table 3.1 presents a summary of the geographical location of the stores as well as a summary of the dominant age group within the membership. The cooperative stores are predominately located in rural towns and in urban areas. These two areas have to a large extent been abandoned or ignored by large chain supermarkets.

The cooperative stores attract a broad spectrum of members from all age groups. One half of the stores have over 50 percent of their membership in one age group, eight in the under 25 age group, and 17 in the 26 to 35 age group.[1] All remaining stores have membership spread among all age classifications. Senior citizens are consistently the smallest group with membership varying from less than one percent to 25%.

The stores in the study sell to as few as 65 families in some rural

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[1]Kreitner (1978) found most co-op stores dominated by the under 25 age group. His sample, however, contained a high percentage of stores based in college communities and may not be representative of cooperative store patrons.

Table 3.1 Dominant Age Groups in Cooperative Stores Arrayed by Geographical Location[2]

	Rural	Urban	Suburban	Total
Under 25 yrs.	3	5	0	8
26 to 35 yrs.	8	8	1	17
36 to 59 yrs.	0	0	0	0
60+ yrs.	0	0	0	0
No dominant group	6	16	3	25
Total	17	29	4	50

areas; to as many as 5000 customers in urban areas. The stores' sales volume range from $10,000 to $632,000 annually with over 50% of the stores selling less than $100,000. This small sales volume is not unexpected given the youth of the cooperatives. Table 3.2 presents the sales volumes and age of the 50 stores. Fourteen of the stores are less than three years old, only two older than seven years.

Procurement Practices and Product Availability

The large number of suppliers maintained by cooperative stores is the most striking aspect of their product procurement. This may in part be explained by a lack of a full line of goods available from federation warehouses. In addition many of the stores are committed to supporting

[2]For purposes of classification a cooperative store is considered to be urban if it is within the largest city of a Standard Metropolitan Statistical Area (SMSA), suburban if within the SMSA but outside of the largest city, and rural if outside an SMSA.

Table 3.2 Age and Sales Volume of Cooperative Stores

	No Financial Statement	Less than $50M	$50M to $100M	$100M to $200M	$200M to $400M	$400+	Total
Less than 1 yr.	2	0	0	0	0	0	2
1 to 3 years	3	5	0	3	1	0	12
3 to 5 years	1	4	6	3	5	1	20
5 to 7 years	1	0	7	2	3	1	14
7+ years	0	1	0	1	0	0	2
Total	7	10	13	9	9	2	50

local producers. Local producers of perishable goods, particularly seasonal produce, represent a large number of suppliers in some stores. A third contributing factor is the strong commitment in some stores to "natural" and "organic" products. These stores often were formed as a means of obtaining a wide range of organic products from small scattered producers. Table 3.3 summarizes the supply, delivery, and pickup arrangement of the stores. The large pool of suppliers require the acceptance of many deliveries and pickups by members or staff. Note, for instance, the stores in the $200,000 to $400,000 classification. These stores have from 15 to 75 suppliers with an average of 40. They average over 100 deliveries per month with one as high as 225. In addition they must make pickups from some suppliers, stores in this classification averaging 15 per month.

The maintenance of the large number of suppliers necessary to obtain

Table 3.3 Number of Suppliers, Deliveries, and Pickups per Month in Cooperative Stores Arranged by Annual Sales Volume

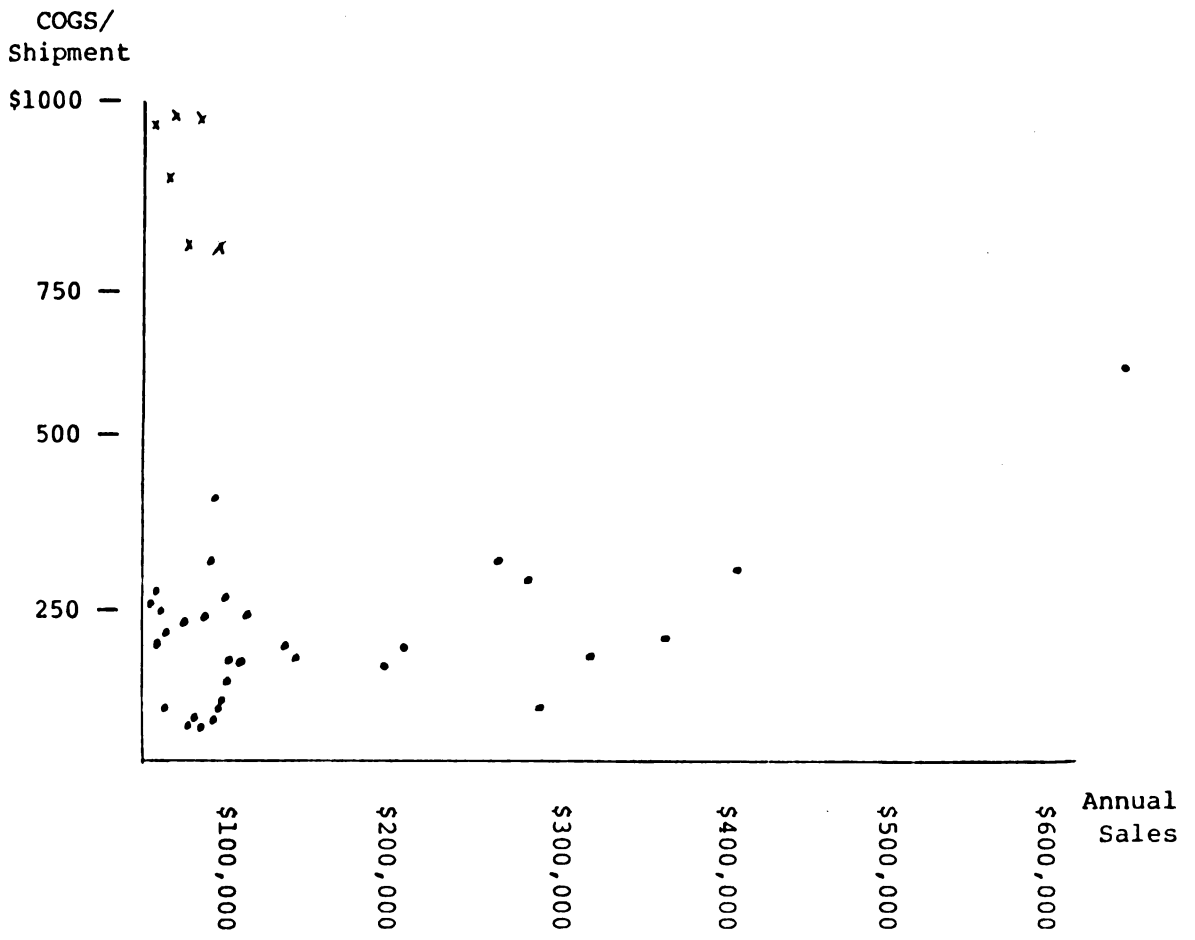
	No Financial Statement	Less Than $50,000	$50,000 to $100,000	$100,000 to $200,000	$200,000 to $400,000	$400,000 to $650,000	TOTAL
SUPPLIER	Range 4,20 ave. 9.6	Range 2,20 ave. 7.8	Range 7,35 ave. 16.8	Range 9,65 ave. 20.8	Range 15,75 ave. 40.9	Range 20 ave. 20	Range 2,75 ave. 18.7
DELIVERIES	Range 2,26 ave. 17.2	Range 1,49 ave. 10.3	Range 10,70 ave. 28.6	Range 6,100 ave. 47.2	Range 15,225 ave. 106.5	Range 65 ave. 65	Range 1,225 ave. 41.1
PICKUPS	Range 0,20 ave. 9.2	Range 0,7 ave. 2.8	Range 0,25 ave. 9.9	Range 0,28 ave. 13.4	Range 2,35 ave. 15.4	Range 24 ave. 24	Range 0,35 ave. 10.6
	(n=5)	(n=10)	(n=12)	(n=9)	(n=9)	(n=1)	(n=46)

the desired product lines can represent a significant percent of staff time. Even small operations must develop bookkeeping systems capable of handling a large number of suppliers and facilitate the coordination of inventory control and purchasing. In addition staff must coordinate delivery and pickups with available workers.

A clearer image of the importance of the large number of shipments received can be seen in Figure 3.1. An average order size was calculated from cost of goods sold figures and number of deliveries received plus pickups made. A clear tendency for larger stores to have higher order size is visible. Yet the largest stores could spend even less time on procurement and receiving if full line wholesaling were available from federation warehouses. The extent to which this is true can be seen in the large average order size found in the group of five small stores in rural locations and one urban stores undergoing massive reorganization, each largely dependent on four or fewer suppliers.

Federation warehouses benefit member stores in several ways. They allow access to suppliers otherwise too distant or with large minimum order sizes. Federation warehouses also capture other benefits of large scale purchasing; develop a staff of expert buyers, and increase the leverage of the stores to influence product quality. Based on the supply arrangements presented in Table 3.3, however, one would expect that the warehouses do not play a critical role in the supply of cooperative stores. Table 3.4 shows the product categories carried by each of the six federation warehouses, the number of stores carrying the product, and the number of stores with non-federation warehouse sources of supply. The federations are listed in the order of increasing

Figure 3.1 Average Size of Shipment Received by Cooperative Stores Arrayed by Annual Sales[3]



x = rural or recently organized stores dependent upon 9 or fewer suppliers.

[3]See Appendix 3.A for the data upon which this figure is based.

warehouse volume.[4] Table 3.4 projects a pattern of interactive growth of product availability in member stores and warehouses. In the youngest federation, Common Health, the warehouse carries only non-perishable food items, meeting the demand of the two stores in our sample for these items. In all other categories the stores must rely on other sources of supply with one store carrying only a very truncated selection due to lack of other suppliers. In the F.O.R.C. organization, by comparison, the warehouse offers a wider selection of products, carrying non-food items in addition to the categories carried by Common Health. Member stores of F.O.R.C. also seem capable of finding non federation sources of products not available from the federation warehouse. Extending the analysis to the largest federation warehouse, I.C.C., the interaction between stores and the warehouse becomes clear. The larger warehouse operations offer a wider product selection to member stores. Yet member stores do not appear to receive a larger portion of their total product from the warehouse. Rather, the warehouse appears to provide a base for expansion product suppliers. Product selection both in terms of product categories and individual items is greater in individual stores than warehouses. Operating on a base of products from the federation warehouse new stores expand product selection using other sources of supply. The development of non-warehouse sources of supply may continue until articulated demand is sufficient to allow for warehouse operations to offer the new products. The critical point is influenced by the handling characteristics of the product and the density

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[4]For a more specific list of sources of supply for cooperative stores, see Appendix 3.B.

Table 3.4 SUPPLY ROLE OF FEDERATION WAREHOUSES

	COMMON HEALTH			GREATER ILLINOIS PEOPLES' COOPERATIVE			FEDERATION OF OHIO RIVER COOPERATIVES		
	Carried	Stores Carrying	Stores/w Other Sources	Carried	Stores Carrying	Stores/w Other Sources	Carried	Stores Carrying	Stores/w Other Sources
Flour, Grain, Beans	Yes	2/2	0/2	Yes	2/2	1/2	Yes	7/7	0/7
Dried Fruit	Yes	2/2	0/2	Yes	2/2	2/2	Yes	7/7	0/7
Fruit Juices	Yes	2/2	1/2	Yes	2/2	2/2	Yes	7/7	3/7
Dairy Products		2/2	2/2	Yes	2/2	2/2	Yes	7/7	7/7
Eggs		1/2	1/2		1/2	1/2		7/7	7/7
Pre-Baked Goods		1/2	1/2		2/2	2/2		6/7	6/7
Fresh Produce		0/2	0/2		2/2	2/2		7/7	7/7
Books		2/2	2/2		1/2	1/2		5/7	5/7
Health/Hygiene		1/2	1/2		2/2	2/2	Yes	7/7	5/7
Canned/ Processed		0/2	0/2		0/2	0/2	Yes	7/7	3/7
Household Products		1/2	1/2	Yes	1/2	1/2	Yes	4/7	2/7
Frozen Goods		0/2	0/2		2/2	2/2		2/7	2/7
Pet Supplies		0/2	0/2		1/2	1/2	Yes	4/7	3/7
Carbonated Beverages		0/2	0/2		1/2	1/2		0/7	0/7
Fresh Meat		0/2	0/2		0/2	0/2		0/7	0/7
Alcoholic Beverages		0/2	0/2		0/2	0/2		0/7	0/7
Tobacco		0/2	0/2		0/2	0/2		0/7	0/7

TABLE 3.4 Continued

	M. F. O. C.			D. A. N. C.			I. C. C.		
	Carried	Stores Carrying	Stores/w Other Sources	Carried	Stores Carrying	Stores/w Other Sources	Carried	Stores Carrying	Stores/w Other Sources
Beans, Flour, Grain	Yes	16/16	5/16	Yes	12/12	3/12	Yes	10/11	0/11
Dried Fruit	Yes	16/16	12/16	Yes	11/12	3/12	Yes	9/11	0/11
Fruit Juices	Yes	15/16	14/16		10/12	10/12	Yes	10/11	0/11
Dairy Products	Yes	15/16	14/16		12/12	12/12	Yes	9/11	9/11
Eggs		14/16	14/16		9/12	9/12		10/11	10/11
Pre-Baked Goods		14/16	14/16	Yes	9/12	8/12	Yes	9/11	8/11
Fresh Produce		12/16	12/16		9/12	9/12	Yes	9/11	8/11
Books		12/16	12/16		7/12	7/12	Yes	8/11	7/11
Health/Hygiene	Yes	13/16	12/16	Yes	8/12	7/12	Yes	8/11	8/11
Canned/ Processed	Yes	14/16	12/16	Yes	6/12	2/12	Yes	9/11	5/11
Household Products	Yes	10/16	8/16	Yes	5/12	5/12	Yes	6/11	5/11
Frozen Goods		7/16	7/16		5/12	5/12	Yes	6/11	5/11
Pet Supplies		3/16	3/16	Yes	3/12	0/12	Yes	5/11	4/11
Carbonated Beverages		2/16	2/16		5/12	5/12		2/11	2/11
Fresh Meat		0/16	0/16		1/12	1/12		3/11	3/11
Alcoholic Beverages		0/16	0/16		0/12	0/12		2/11	2/11
Tobacco		0/16	0/16		0/12	0/12		1/11	1/11

of member stores. This process is operative not only in expansion of product categories such as fresh produce, for instance, but also for individual products as well. In reasonably well established federations such as the M.F.O.F.C. many stores obtain products from non-warehouse sources even though the products are well within the warehouse's technical supply capacity. Failure to coordinate member demand through existing federation warehouses is a significant problem in the development of strong, effective procurement practices in the new wave cooperative federations.

The use of commercial wholesalers is most common in the procurement of health and personal hygiene goods, books, fresh produce, and dairy goods. Health and personal hygiene goods and books require substantial volume purchases to obtain volume discounts necessary to offer competitive prices. Fresh produce and dairy products require sufficient volume to support refrigerated delivery. Local commercial wholesalers serving several area outlets can offer these products more cheaply than the federation warehouse which must serve a more widely scattered membership. Product areas substantially procured from commercial wholesalers are areas of potential expansion of warehouse activities as the frequency of delivery and density of member stores increases.

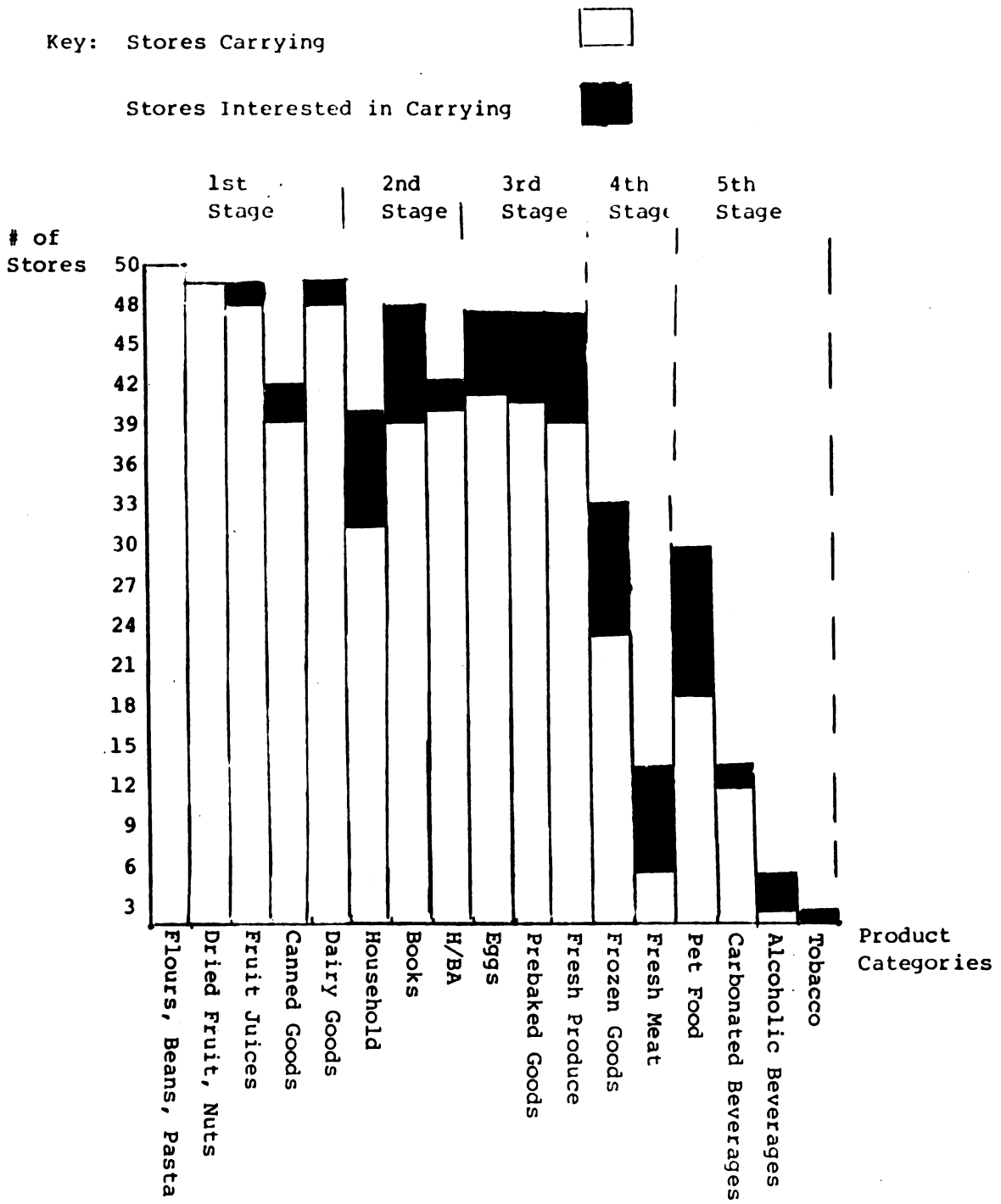
Local networks for the identification of sources of supply as well as the inter-cooperative exchange of goods serve as a complement to existing federation operations and allow stores to limit their dependence on commercial wholesalers. These networks would be especially valuable in support of local producers and efforts of cooperatives to produce goods within their store. Currently 32% of the stores sell to other cooperatives with three stores operating their own bakery.

Associated with the use of commercial wholesalers in product supply is the refusal of some suppliers to do business with cooperatives. Incidence of rejection by suppliers is higher in stores than in preorder cooperatives. Eighteen of the stores have been rejected by suppliers and 32 have not. Sixteen of the stores included the stated reason for their rejection. Three were told that their sales volume was too low, thirteen were rejected for being a cooperative. This greater incidence of rejection by suppliers may be due to more extensive search for sources of supply, wholesalers' fear of the store's inability to pay promptly, pressure from commercial outlets, a general adversion to the cooperative form of business, or a combination of these reasons.

Despite the possibility of rejection by commercial suppliers lack of a source of supply does not appear to be a serious problem among cooperative stores. Fifteen of the stores indicate a lack of supply in some product category. The problem is most acute in stores in rural areas lacking commercial suppliers. There the supply of perishable goods is limited, except produce in season.

The products offered by cooperative stores appear to be determined largely by handling characteristics. The distribution of stores carrying products in seventeen product categories illustrated in Figure 3.2 indicates five stages of product growth. The product categories are not as clearly delineated as in the preorder cooperatives due to the influence of traffic and equipment characteristics of store operations. The first product stage contains products with long shelf life, such as flours, grains, beans, noodles, nuts, dried fruits, and canned goods. The ease of handling allows these products to be carried by most stores. A second group of products includes non food items such as household

Figure 3.2 Products Available and Desired in 50 Cooperative Stores



products, health and personal hygiene products, and books. These products are not as universally carried due to lower availability from federation warehouses and insufficient volume to obtain discounts from local wholesalers. The third group includes perishable goods such as eggs, prebaked goods, produce, and most dairy goods. These products are much more common in cooperative stores than in preorder cooperatives. The higher incidence of these goods reflects more rapid turnover due to longer operating periods and higher traffic through the store plus the permanent retail space to support equipment necessary for distribution of perishable products. The fourth stage of product growth is the handling of frozen goods and fresh meat. These products require more sophisticated procurement, storage, handling skills and equipment. A fifth product stage includes products that may fit into one of the previous categories on the basis of handling characteristics yet have substantially different sales patterns due to the many cooperative stores which operate in the health food submarket. These products include pet supplies, carbonated beverages, alcoholic beverages and tobacco products.

The substantial decline of stores carrying fourth and fifth stage products warrants further comment. Expansion into fourth stage products appears to require sufficient store sales volume to support procurement and equipment costs. A sales volume of at least $50,000 appears necessary for fourth stage products, no store with less than this amount carries these items. A sales volume of $150,000 may be a more representative figure as four of the nine stores with sales between $100,000 and $150,000 indicate a desire to carry frozen products but are unable to do so for a reason other than a lack of supply. The sales volume necessary to sell fresh meat appears to be higher. All the stores indicating the

sale of fresh meat have sales in excess of $250,000. As indicated earlier federation warehouses do not offer full lines of these products and small volume may prevent stores from obtaining these products in sufficient volume to compete with larger retail outlets. However, 22 of the 50 stores in the sample have sales volumes within the critical range of $50,000 to $150,000 signaling that federation warehouses may soon receive sufficient demand to expand into frozen items.

The decline in demand for products in the fifth stage signals the influence of cooperative members' strong interest in good nutrition. Their interests in safe and healthy food limits the appeal of alcoholic beverages and tobacco. The low demand for carbonated beverages is presumably due to efforts to limit the intake of processed sugar.

Decision Making

Democratic decision making in cooperative stores allows individual members to voice their concerns and influence store operations. The survey respondents were asked if they "provide a distribution system that emphasizes individual awareness, action and control." Of the 44 responding 28 felt that they do offer such a system, 13 would like to offer such a system but do not feel that they currently do so, and three do not desire to offer such a system. The three that do not desire to emphasize member involvement are worker or religiously affiliated cooperatives.

The most common method of insuring member input into cooperative decision making is the use of the one member, one vote principle. Thirty-four of the 46 stores responding use this method, five use concensus,

and seven do not solicit egalitarian customer input. Of this seven, six are worker or religiously affiliated cooperatives. Four of the six indicate egalitarian decision making within the restricted governing body.

Although some of the stores surveyed are smaller than the largest preorder cooperatives surveyed, in general the stores are larger and more sophisticated organizations. As a result cooperative stores exhibit a wide range of decision making structures, ranging from general membership meetings to elected boards of directors and store managers. In the 50 stores surveyed 23 elect a board of directors from the membership. In an additional 13 co-ops elected boards also include voting representation from the store staff. In three of these stores over half of the board positions are filled by staff. Three stores are run by boards nominated by religious organizations that do not appear to allow customers to serve on the board. Finally, one store was in a state of transition and was not classified. The remaining ten stores do not have a board of directors. Two of these stores serve fewer than 100 households and rely on general membership meetings. Five stores rely on a combination of general membership meetings (from 12 to 40 per year), standing committees, and open staff meetings. Three stores are completely run by worker collectives.

Information on the legal structure of the cooperatives was not collected. Forty-four of the stores are incorporated with several indicating the incorporation was not as a cooperative. The six stores that are not incorporated are very small stores, predominately in the younger federations.

The degree of involvement in daily decision making by members and board personnel is related to the size of the cooperative and the structure of the decision making process. Members may remain active through general membership meetings and serve on standing committees. All of the 44 consumer cooperatives regularly hold general membership meetings, ranging from one to 40 meetings per year with the most common being quarterly or semi-annual meetings.

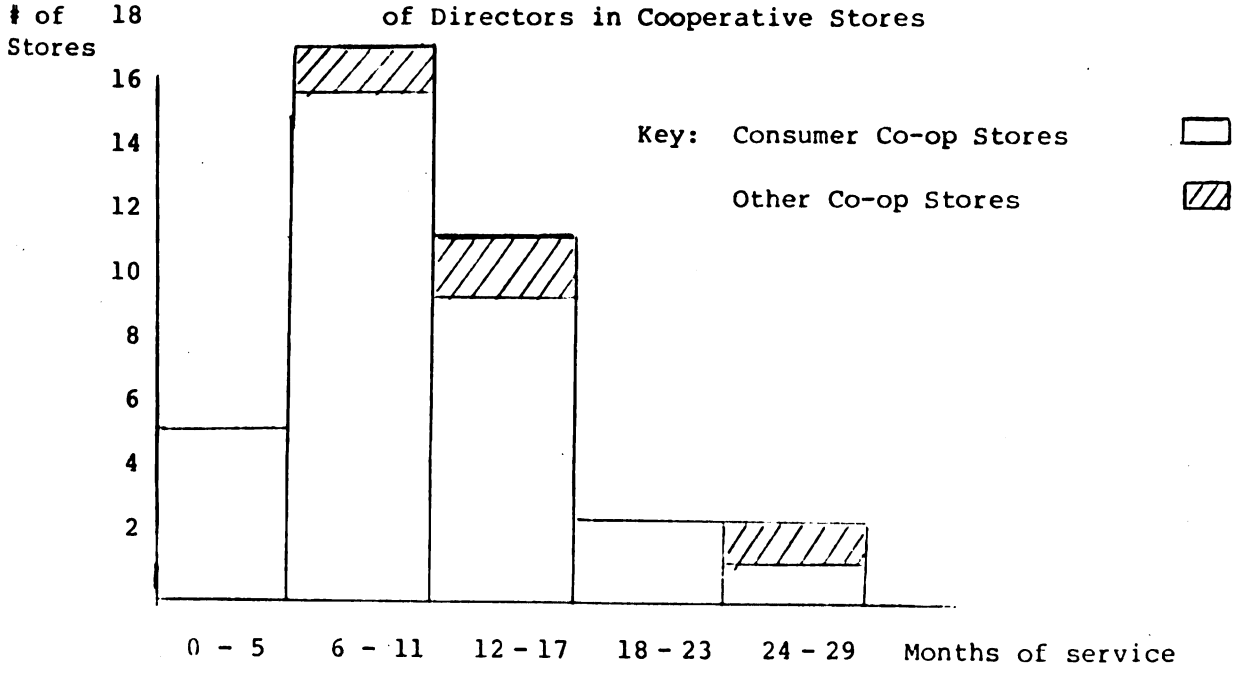
The involvement of the board of directors in daily decision making is determined by the structure of the board and the commitment and expertise of its members. The boards vary in size from three to twelve with no relationship between board size and store sales volume. Twenty five of the boards have an odd and 15 an even number of members. Twenty-eight of 39 boards indicate the use of functional assignments. One might expect that directors of larger stores would be more likely to have functional assignments and board size. No assignment relationship was found. Larger boards do tend to delegate tasks to individual members or committees. Frequency of board meetings also influences the degree to which board members are involved in daily decision making. Among 44 consumer cooperatives board involvement varies greatly with board meeting from one to 35 times per year. Once again no significant relationship was found between the number of board meetings and the size of the co-op.

Leadership is critical to the success of any organization. In their study of two urban cooperative supermarkets Marion and Aklilu (1975) identified poor board participation as a leading factor in the failure of one cooperative. Perhaps the critical indicator of commitment by cooperative leadership is the turnover in board and staff positions due to resignation. Experienced leaders can avoid many mistakes

which a continual flow of new leaders will make. Information collected from the survey indicates that the term of boards of directors, which ranges from six months to two years, is not significantly related to the percent of board members resigning in the last two years. Nor is store size, as measured in sales volume, correlated to the percent of board members resigning. Resignations do represent a significant problem in some stores, however. Five stores experienced the equivalent of their entire board resigning in the last two years. Only seven stores reported no resignation in the last two years.

A rapid turnover of board members from resignation and members serving only one term is compensated for, in part, by the strong commitment of a small group of board members serving more than one term. Forty-three percent of all board members at the time of the survey were serving a second consecutive term. As Figure 3.3 indicates the commitment of this group is not sufficient to produce an extensive fund of experience on boards of directors. Only four of 37 cooperative stores responding have boards with an average of more than 18 months experience.

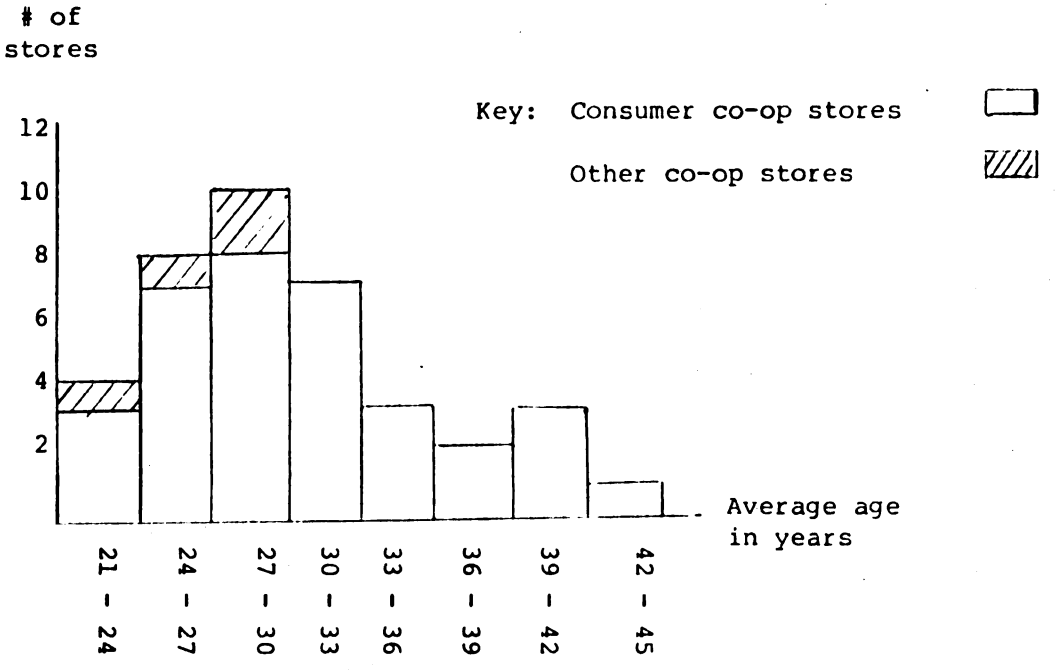
Figure 3.3 Average Months of Service of Board of Directors in Cooperative Stores



The skills, experiences, and education of the members of the board of directors may impact on the quality, and style of the decision making process of the cooperative store. Based on information concerning 205 board members in 38 cooperative stores a composite leader and an outline of cooperative leadership can be constructed.

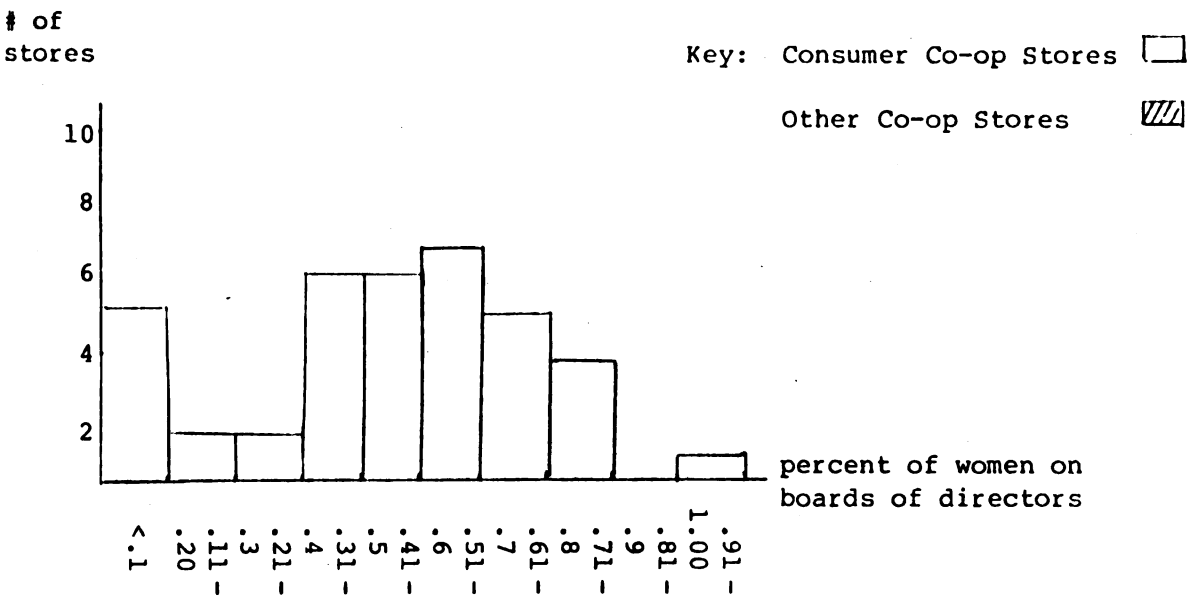
Members of the boards of directors range in age from 20 to 73 years of age. Board members tend to be slightly younger than the general membership. Figure 3.4 presents the average age of board members for each store. The cross hatched sections indicate the average age of boards of directors in worker and religiously affiliated cooperatives. Board members in these stores are on average younger than consumer cooperative store directors.

Figure 3.4 Average Age of Members of Boards of Directors in Cooperative Stores



Representation of women on boards of directors is strong but not nearly as dominating as in the preorder cooperatives. Women hold a majority of positions on 17 of the 38 boards. This high visibility of women in leadership positions in cooperative stores stands in marked contrast to private retail food operations. As was found in preorder cooperatives the cooperative movement offers women the opportunity to develop business and leadership skills. The high visibility of women in leadership positions attests to the strength of the cooperative movement's commitment to nonsexist operations.

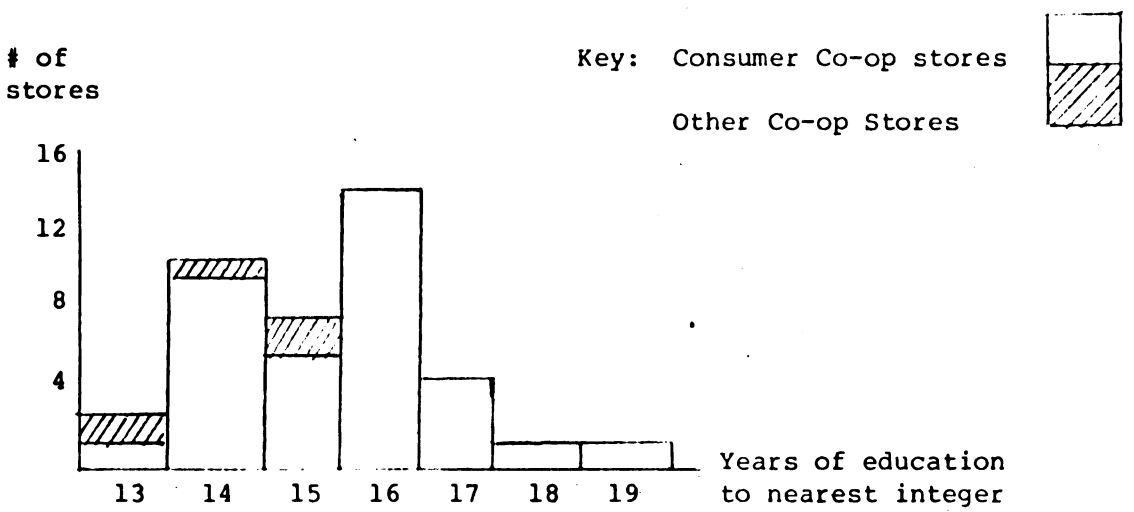
Figure 3.5 Women as a Percent of Members of Boards of Directors in Cooperative Stores



Members of the boards of directors have extensive formal educational experience. Their high level of education is perhaps the most encouraging indicator of the capacity of cooperative stores to integrate the social and economic concerns of the membership into a successful cooperative enterprise. Average educational experience of board

members presented in Figure 3.6 indicates that most stores have boards of directors with an average of at least four years of college. A significant number of board members have post graduate degrees. Indeed, one store operated by graduate students has an average educational experience in excess of a Master's degree. Information on the field of board members' education was not collected. Information on the occupation of board members indicates a wide range of backgrounds. Some stores have board members with advanced degrees in Economics, M.B.A.'s, or C.P.A. licenses. In general, however, the boards do not appear to have training in fields closely related to food retailing.

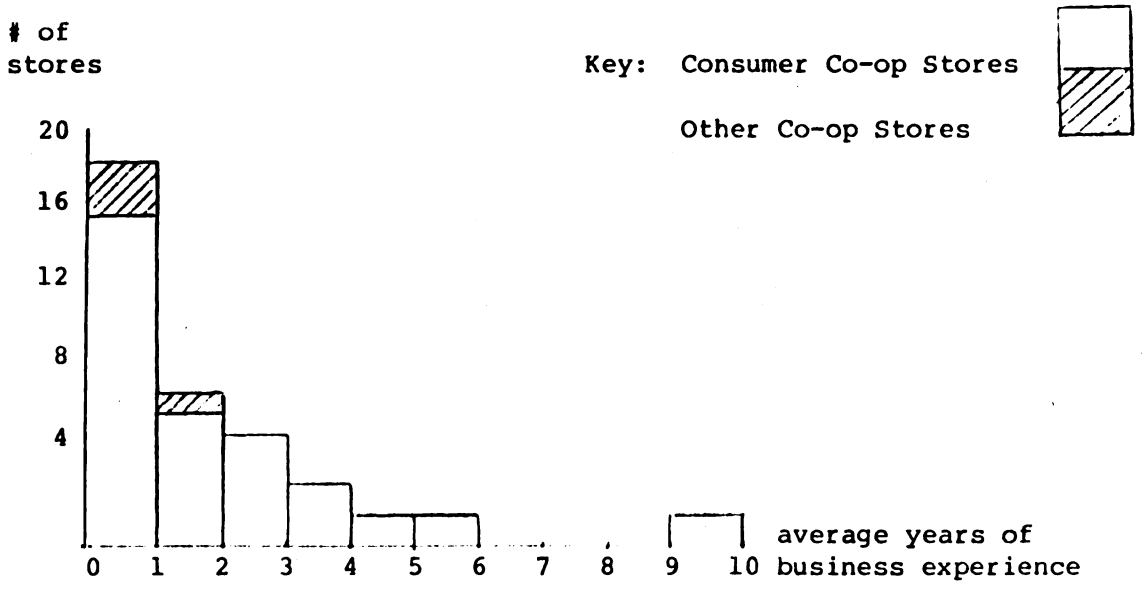
Figure 3.6 Average Years of Formal Education of Boards of Directors in Cooperative Stores



Previous experience in non-cooperative business is also limited. The youth of the board members and the many years of formal educational experience explain, in part, the small amount of business experience among store directors. Still the lack of business experience shown in Figure 3.7 could be a major problem in the choice and development of store operating procedures. Much of the future success of the cooperative

movement depends on the development of leadership groups with a mastering of business skills capable of meeting social as well as economic goals of the cooperative. Even among the stores indicating a high level of business experience in Figure 3.7 business skills are not widespread. Rather these stores have small boards with only one or two members with significant periods of non-cooperative business experience.

Figure 3.7 Average Years of Business Experience of Board Members in Cooperative Stores



A final area of study in the decision making process is the location of policy development and approval for implementation. Survey respondents were asked to indicate at which of five levels policies were developed for fourteen commonly faced issues. The respondents also indicated the level at which the approval of the policies was made. By assigning the value of five to the general membership meeting, four to standing committees, three to board of directors, two to staff and one to manager, adding the values for each of the 14 policies areas and averaging, an index was created for each store. This index ranges from

one to five with larger numbers indicating greater input from members in the decision making process. Separate indices are created for the development of proposals and the decision to implement the proposals.

We hypothesize that the development of policy proposals will be at a less participatory level and final approval at a more participatory level in the decision making structure. Further, we hypothesize that as the size of the store, measured in sales volume, increases the development of proposals and the decision to implement the proposals will shift away from participation by the full membership. Figure 3.8 shows the value of both the policy development and implementation indices for the cooperative stores in relation to store sales volume. Values for the six worker and religiously affiliated cooperatives are not included.[4]

The data presented confirms our first hypothesis. The average value of the development index is 2.65, falling between the staff and the board of directors. The average value of the implementation index is 3.40, indicating that implementation decisions are made, on average, by more decentralized groups. For seven of the stores the development index indicates more participation than the implementation index, but this phenomena is not correlated with store size. The second hypothesis is weakly supported by the development and implementation indices. With the exception of one store having $300,000 in sales, cooperative stores appear to move toward representative decision making structures as they increase their size. The relationship between size and centralized decision making is not statistically significant. The data suggests that larger cooperatives are as open to member influence as the small

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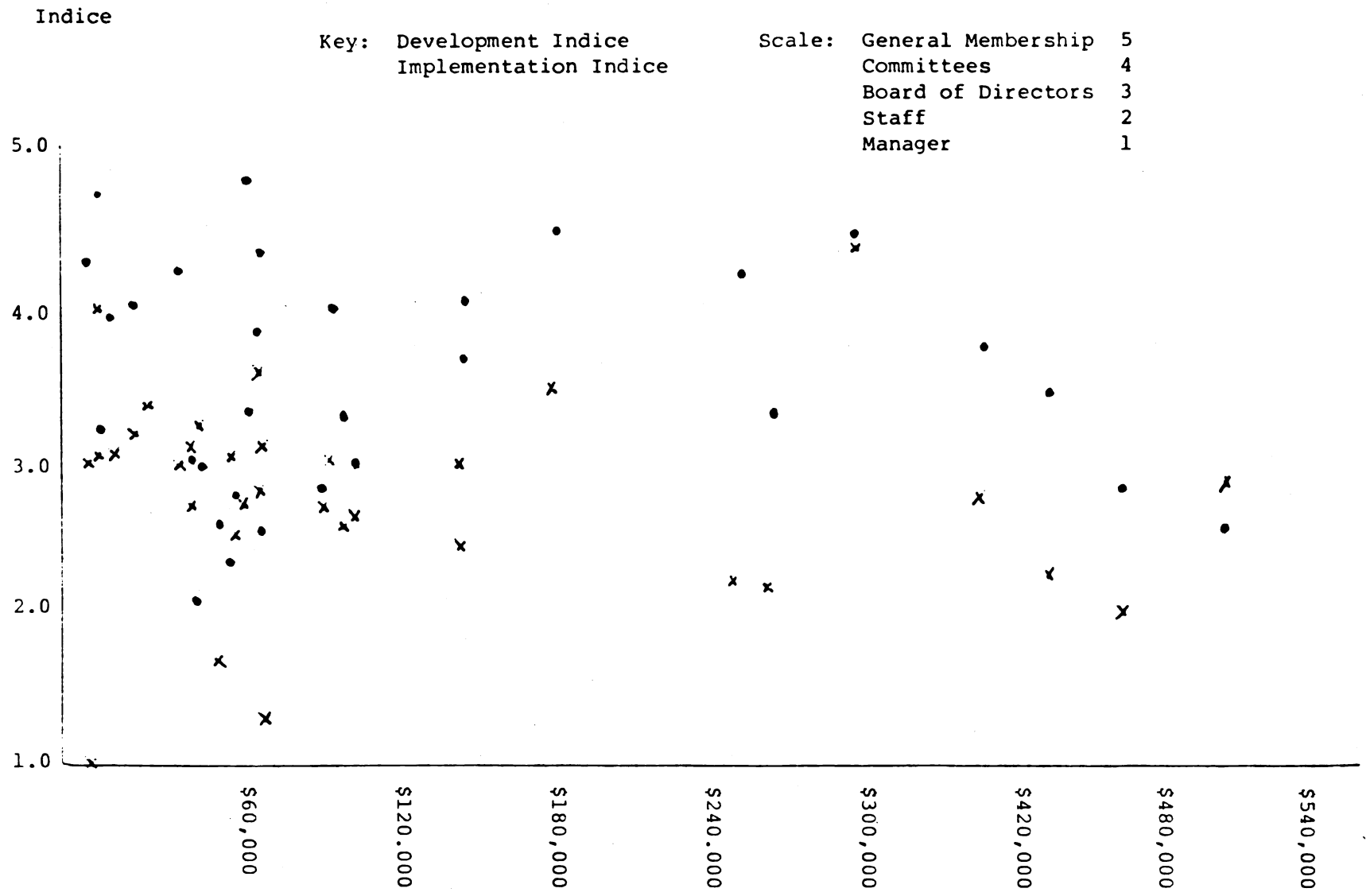
[4]The data used in the construction of Figure 3.8 is presented in Appendix 3.C.

Figure 3.8 Indices of Policy Development and Implementation Decentralization in Consumer Cooperative Stores



stores. Certainly more research with more refined measurement techniques will be necessary to measure the influence of cooperative size on decision making structures and member satisfaction.

Activity Analysis

The focal point for an analysis of the activity in a new wave cooperative store should be the interaction of staff and volunteer workers. The outcome of this interaction must meet the social and economic concerns of all involved. The growth of staff as cooperatives grow and the extent to which they direct or replace member labor are important decisions that emerging cooperatives face. A store may experience a growth path which begins with all volunteer labor followed by the development of volunteer staff, a period with both paid and unpaid staff, the use of a full-time paid staff member to direct member labor, and ultimately may rely only upon paid staff. Stores in each of these configurations are found among the survey respondents.

The survey defined staff as "persons appointed or hired to assume responsibility for the actual running of the co-op. A staff position may be part time, with or without pay. It is a permanent position that does not rotate among members." Of 49 stores, 40 have paid staff, seven have unpaid staff and two have no staff. Five of the paid staff appear to receive only token payment. Several of the stores have both paid and unpaid staff.

The nine stores without staff or with unpaid staff are the smallest stores in the survey with none larger than $45,000 in annual sales. Virtually all shoppers are members of these tightly knit organizations. They rely exclusively on voluntary member participation and resemble preorder cooperatives in many ways although they do not require the

preordering of purchases. Their small size and lack of paid staff suggest youthful operations. All but one, however, are at least three years old.

Five additional stores make only token payment to their staff. They appear to be loosely run and essentially similiar to cooperatives with unpaid staff. Responses to survey questions were too sparse to support meaningful analysis of the operations of these stores. Further study is needed to determine whether they are stable retailing organizations or a transitional phase from preorder cooperatives to co-op stores with permanent staff.

The remaining 35 stores have staff workers who receive wages or salaries from the cooperative on a regular basis. The stores have staffs from one to twelve individuals. In twelve stores only one staff member is employed. These individuals serve as directors and coordinators of member participation in addition to other responsibilities. The use of one staff member is found in stores up to $100,000 in annual sales.

Twenty three stores have more than one staff member. In general cooperative stores have a commitment to non hierarchical organization with decision making shared by the staff members present through a process of concensus formation. Four of the stores make a distinction between manager and staff. Two of these stores have a pay differential as well. Neither of the stores is a consumer cooperative. In the remaining stores the staffs operate collectively, however, two stores use wage differentials based to some extent on length of service.

The survey also asked if cooperative stores employ nonstaff labor. Nonstaff labor was defined as "persons who work regularly for a wage,

but do not make management decisions." Eleven of the stores have non-staff workers. In three stores the workers receive partial payment through government programs. These workers work as little as four hours per week in one store and as many as 85 in another. They do a variety of jobs within the stores as well as some public relations activities. We do not know how active subsidized workers are in decision making processes. The presence of non-staff labor indicates, however, that in some stores differentiation into management and workers has begun.

The demographic characteristics of the staff members can provide perspective on store operations and the interaction of members and staff. As with the profile of the board members, staff in worker and religiously affiliated stores are marked by cross hatched areas in Figures 3.9 to 3.15. Staff members are on average slightly younger than members of the boards of directors and the general membership. Most staff members are from 25 to 35 years old with a significant percentage younger than 25. The average age of staff in cooperative stores is presented in Figure 3.9. While four of the cooperative stores have staff with average age in the mature household category none of the staff members are senior citizens.

Figure 3.10 measures the role of women on cooperative staffs. Women hold over one half of the staff positions in 21 of the 44 stores. Seven of the stores have only women on their staff. Although five of these stores have less than $70,000 in sales, women as a percent of total staff were not found to be negatively correlated to annual sales volume.

Figure 3.9 Average Age of Staff in Cooperative Stores

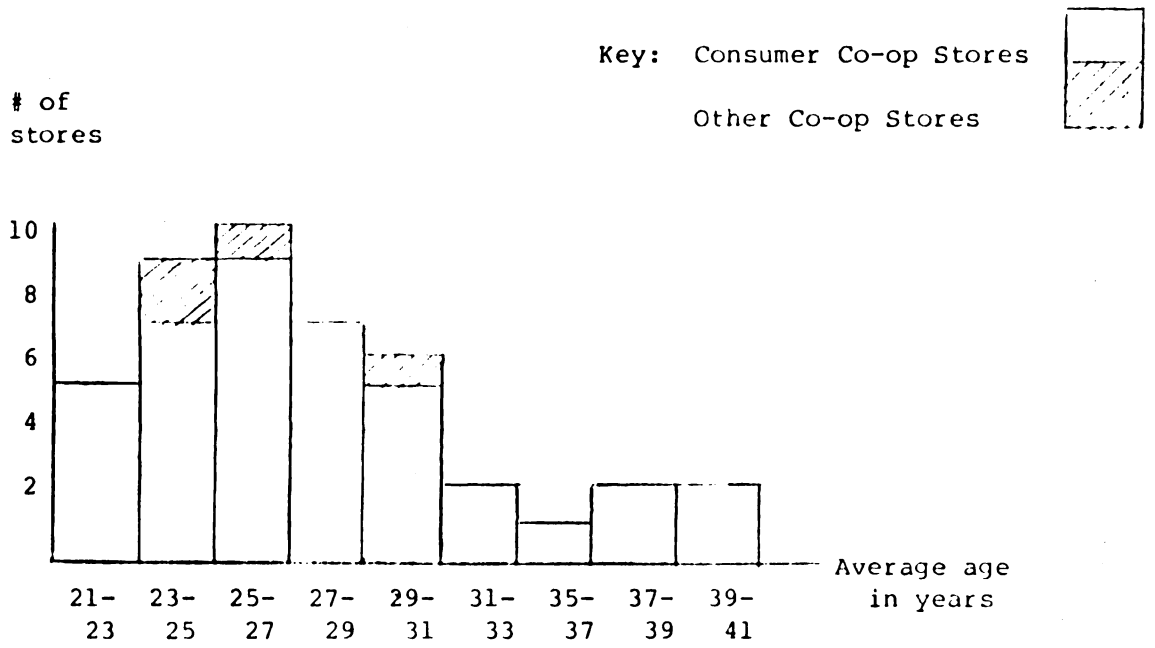
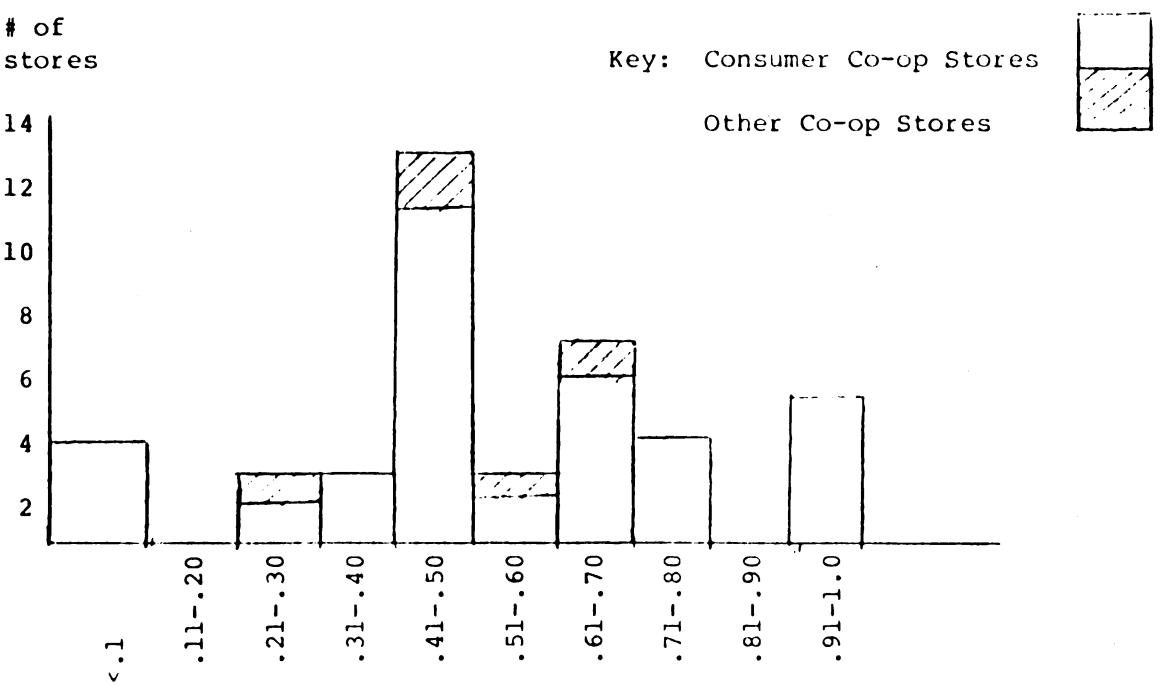
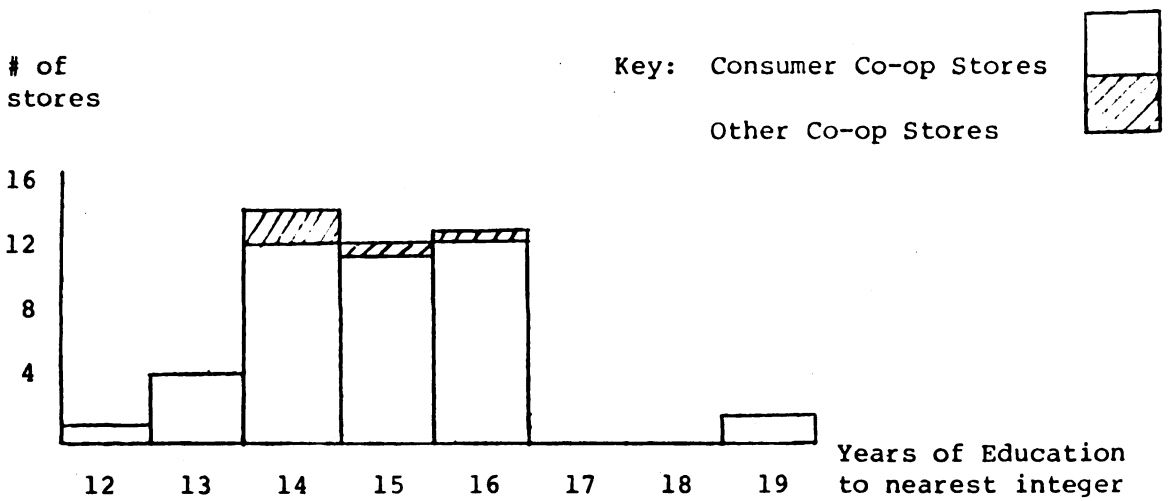


Figure 3.10 Frequency Distribution of the Percent of Staff Positions Held by Women in Cooperative Stores



The educational experience of members of store staffs is not as great as found among board members. There are, however, a large number of cooperative personnel with college degrees. One cooperative store operated by university students has an average educational experience in excess of a Master's degree. The high degree of formal education of staff personnel shown in Figure 3.11 indicated that staff in these stores are capable of offering a high quality service to members and may be capable of integrating the social and economic concerns of the co-op's members into the cooperatives operating procedures.

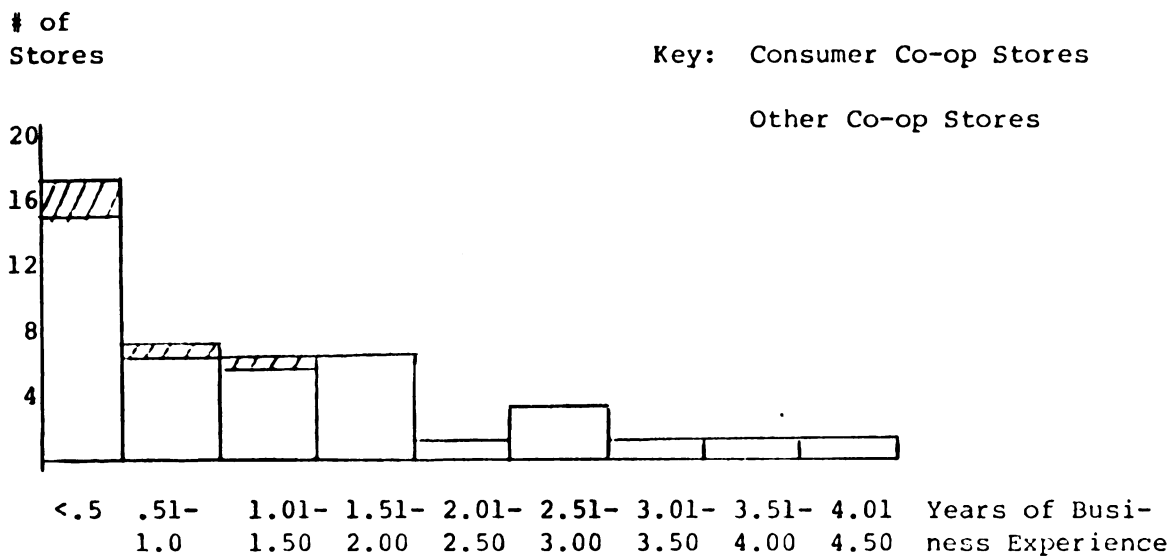
Figure 3.11 Average Educational Experience of Staff in Cooperative Stores



Two other factors in addition to formal education offer a picture of the skills of the cooperatives' staff. They are the previous business experience of staff members in noncooperative settings and the duration of their employment by the co-op. Business skills among staff are crucial: staff members provide the daily direction of the cooperative, are called upon to direct member participation, and must be prepared to make a wide variety of management decisions. Figure 3.12

presents an average business experience of co-op store staff members. Over one half of the stores are operated with staffs having less than one year of business experience on the average. It is not unusual for all staff members to be without noncooperative business experience. Even in stores with a higher average experience small staff size prevents the stores from having an extensive pool of business experience.

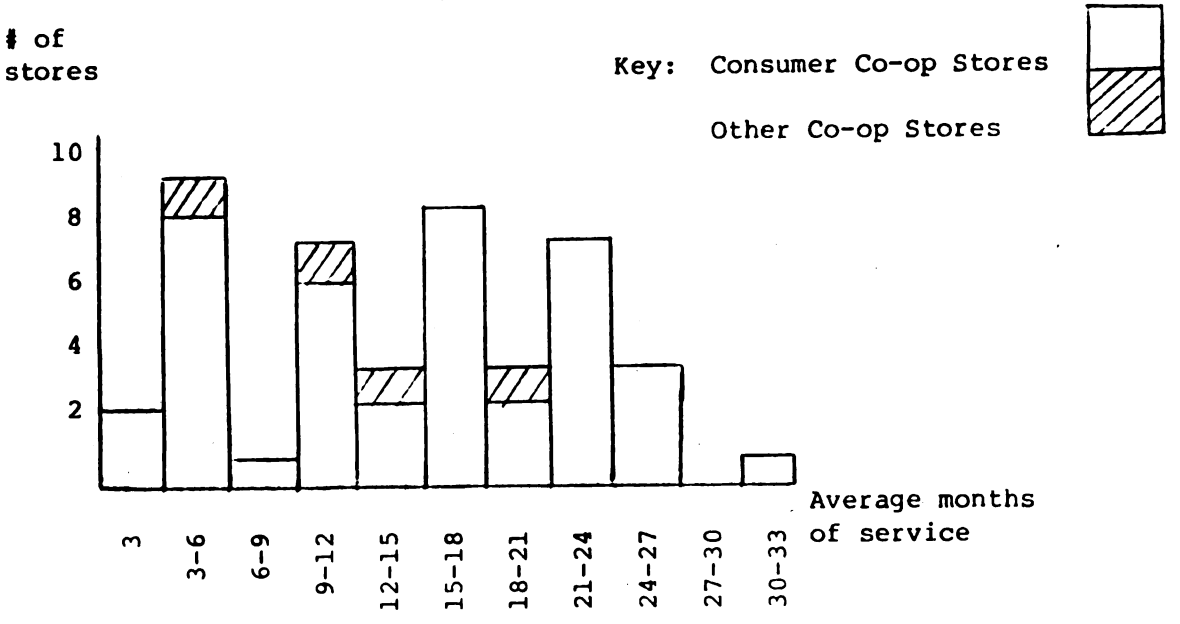
Figure 3.12 Average Years of Non-Cooperative Business Experience Among Store Staff



How long a person has worked in the cooperative is also a very important factor for effective operations. The mix of economic and social goals of the store, supervising volunteer workers, and working as a collective all represent unique management challenges not present in more traditional work settings. The average length of service in the cooperative store is presented in Figure 3.13. In 18 stores a founding member of the staff is still working in the cooperative. In 26 of the 44 stores the staff averages over one year of experience, but only four stores average more than two years of experience. The years of service

is only weakly and negatively correlated with store volume. Hence, staff turnover seems to be equally problematic for co-op stores of all sizes.

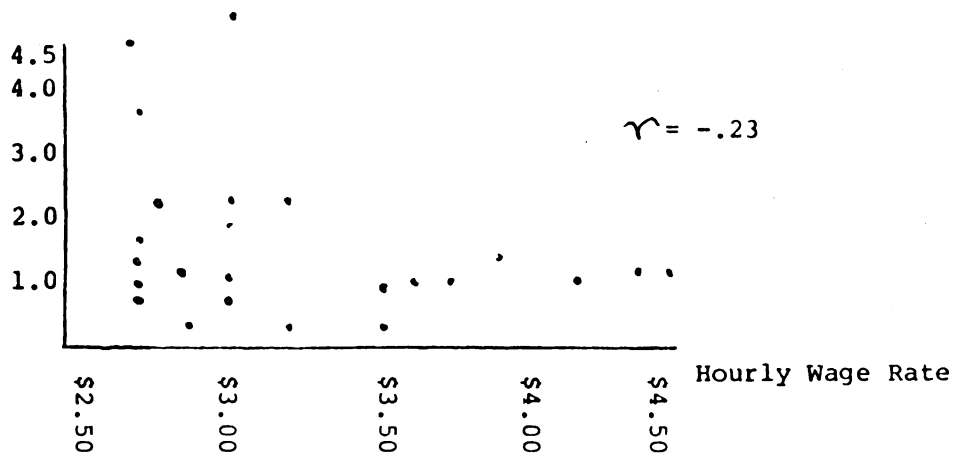
Figure 3.13 Average Length of Service of Staff in Cooperative Stores



Staff members are not likely to be attracted to the cooperative store because of the wage and fringe benefits. Rather the cooperative store provides staff members with the means of directing their talents toward nutritional, social, and political goals they highly value (Kreitner, 1978). Many staff persons exhibit great personal commitment in these areas. Nevertheless, the payment of a living wage is a necessity if the cooperative store is to maintain able staff members. It is not surprising therefore that the staff wage is negatively correlated to the turnover of staff members. The higher the wage rate the lower the turnover. In 24 stores with full time staff presenting information on staff compensation the correlation of wage rate to turnover

is -.23 but is not significant at the 10 percent level.[5]

Figure 3.14 The Relation of Hourly Wage Rate to Turnover of Cooperative Store Staff[6]



Data collected in the survey shows staff members receiving wages from $2.65 to $5.29 per hour. Five stores use a salary rather than an hourly wage. In addition staff members often receive discounts on food purchases. The offering of more traditional fringe benefits is limited. Paid vacations are made available to staff members in some stores including one doing only $44,000 in annual sales. Offering paid sick days and medical insurance appears to require considerably higher sales volumes. Medical insurance was not found in any store with less than $260,000 in sales.[7]

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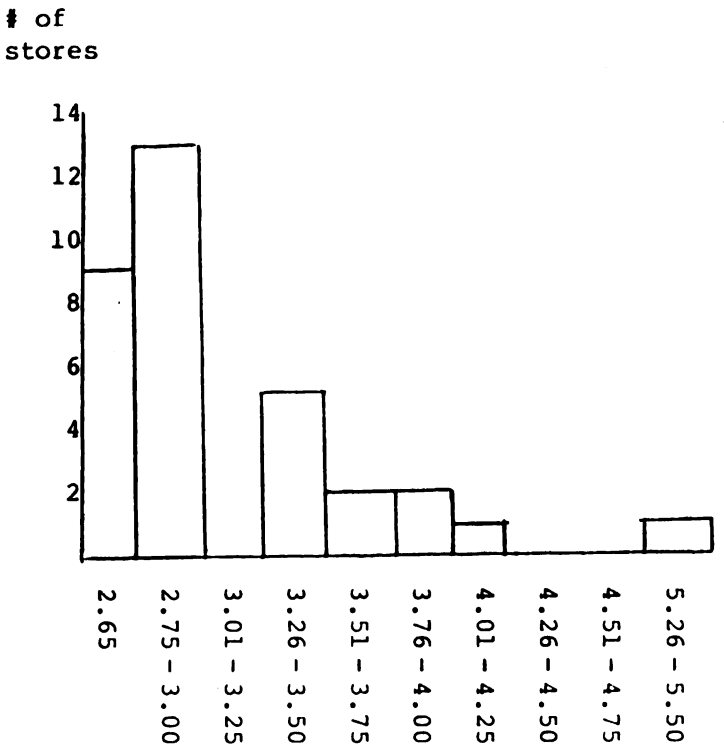
[5]The data upon which Figure 3.14 is based are available in Appendix 3.D.

[6]Staff turnover is measured as staff hired less growth in staff size divided by the average of current staff size and staff size two years previous.

[7]Some caution should be used in interpeting data on staff compensation. Information on wage rates in stores using salaries was computed on a 40-hour week unless other information was available. The value of fringe benefits, particularly medical benefits can vary greatly. No attempt to adjust the value of the wage to reflect these factors was made.

Figure 3.15 Distribution of Hourly Wage Rate for Cooperative Store Staff - Summer 1978[8]



Voluntary Participation

The hallmark of the new wave of consumer cooperatives is their commitment to maintaining consumer participation in every aspect of the cooperatives' activities. This is nowhere more evident than in their programs for direct participation in the physical operation of the store. The purpose of these programs varies among the stores, covering a range of economic, social, and political goals. Direct participation can have many impacts on the cooperative. It can:

- lower food prices by substituting member labor for paid staff labor,
- enhance the cooperative store as a center for community development and communication,

[8]See Appendix 3.C for available information on staff compensation.

- develop a pool of knowledgeable candidates for co-op directorships and staff positions,

- facilitate attaining consensus among members and staff on co-op issues such as working conditions, wages, and food quality.

For these reasons we are very interested in analyzing factors that enhance or detract from direct consumer participation in cooperatives. Consumer participation is not necessarily synonymous with member participation. Membership requirements vary from a simple $1 fee to various combinations of fees and deposits, and sometimes even include the requirement of participation. Thus a given level of member participation can correspond to many different levels of consumer participation. Examining consumer rather than member participation not only avoids the obfuscating influence of definitions on participation rates; it also permits including worker and religiously affiliated cooperatives that do not have memberships, but nevertheless have programs to encourage consumer participation in store operations.

To elicit participation a cooperative's volunteer program must make volunteer work experiences rewarding socially as well as economically. Systematic training programs and task allocation should minimize frustration caused by not knowing what to do or how to do it. One might also expect that more open and democratically run co-ops provide more rewarding social experiences. On the economic side, discounts for volunteers provide a monetary incentive for participation. In order to evaluate statistically the impact of these factors on consumer participation one needs to examine program structures more closely.

Survey respondents were asked to indicate which of the following methods they use to train volunteers.

- on-the-job-training
- delegate to experienced volunteers
- written instructions
- special training sessions

All of the respondents indicated that they use on-the-job training. Twenty-six have written instructions for volunteers. Sixteen hold special training sessions. Many co-ops indicate that they use a combination of these.

Cooperative stores indicate that their volunteers perform some or all of the following tasks: ordering, unloading, packaging, price marking, stocking, sanitation, checkout, promotion, bookkeeping, cooperative education and community service activities. Survey respondents were asked to indicate which of the following methods they use to allocate tasks among volunteers.

- voluntary sign-up for time and task
- staff assigns as needed
- volunteer teams are rotated among tasks
- volunteer teams are assigned to task areas

Basically jobs are allocated among volunteers by sign-up for the time and task in all co-ops offering volunteer opportunities. Seventeen co-ops indicate that, additionally, the staff assigns members to tasks as needed. Three stores place some volunteers on rotating teams and fourteen use permanent task teams in addition to one or more of the above methods. A team approach allows members to become more familiar with their compatriots and the resulting peer group pressure may enhance individual punctuality and performance. Assigning task teams to areas such as packaging or promotion has the added advantage of allowing

volunteers to use or develop specialized skills.

We observed price discounts for voluntary participation in 31 of 45 responding co-ops. Four others sell to workers at the co-ops cost. Volunteers can be expected to evaluate the economic incentive for participation as follows:

$$(\text{discount}) \times (\text{purchase size}) = \begin{array}{l}\text{economic incentive for} \\ \text{voluntary participation}\end{array}$$

There are several ways that cooperative stores can influence the level of economic incentive. They can change the discount rate, the length and variety of time slots offered, permissable purchase sizes, or the length of time the discount is in force. In fact, the discount rates reported vary from 5% to 50%. When standardized as a discount per hour of work required the reported rates vary from 1.0% to 7.5%. Six of the stores use a series of discounts, and members that participate more enjoy higher discounts. Two stores with high discount rates also limit the purchase size to which the discount applies. Although we did not ask respondents how long the discounts were valid, the most common term is a calendar month.

The above discussion of the specific aspects of volunteer program for direct consumer participation leads to a more formal analysis of the relationship between program structure and participation rates. We can now specify a statistical model and use multiple regression analysis to evaluate the relative impact of differently designed programs upon consumer participation (CP) as measured by the percent of shoppers who regularly volunteer services to the co-op. Several structural features are good candidates for inclusion in the model as explanatory variables.

Specialized Teams (ST): This is a binary (zero-one) variable. A value of one indicates that a co-op has specialized teams of volunteers,

and a value of zero indicates that it does not. We hypothesize that co-ops using specialized teams have higher participation rates than those that do not. This is due to the fact that specialized team members have more opportunity to development friendships, peer group pressure encourages punctuality and performance, and members can develop special skills that make for a rewarding and productive volunteer experience.

Rotating Teams (RT): This is a binary (zero-one) variable. A value of one indicates that a co-op has rotating teams and a value of zero indicates that it does not. Although the team structure suggests a more rewarding experience, rotating among tasks may interact with the team structure to produce an experience that is less rewarding than working alone. A volunteer not only has to learn a new task each time, but the team also has to decide who in their group is going to do what, where and when. The group dynamic may consume more satisfaction than it produces, therefore it is difficult to predict the impact of rotating teams on participation.

Written Instructions (WI): This is a binary variable. A value of one indicates that a co-op uses written job instructions; a value of zero that it does not. The hypothesis is that co-ops using instructions have, on average, more consumer participation.

Training Sessions (TS): This is a binary variable. A value of one indicates that a co-op holds volunteers training sessions; a value of zero indicates that it does not. Co-ops with training sessions are expected, on average, to have higher consumer participation rates.

Discounts per hour (DH): This continuous variable is the percent discount per hour work that volunteers receive. Higher discount rates are hypothesized to produce more consumer participation.

Cost of Goods Sold per Patron (CGP): This continuous variable is the annual cost of goods sold divided by the cooperative's estimated number of patrons. Since larger purchases increase the value of a given discount per hour, we expect that CGP will be positively associated with consumer participation.

Implementation Index (II): This variable measures how decentralized policy implementation is in a cooperative; it was discussed in the decision making section of this chapter. Higher values of II indicate more decentralized implementation. II is hypothesized to be positively associated with participation rates. In brief consumer's prefer to contribute to a more open cooperative.

Development Index (DI): This variable measures how decentralized policy development initiatives are in a co-op. It, too, was discussed in the decision-making section, and should be positively associated with consumer participation for the same reason given for II. In fact DI and II are alternative measures of the same factor: decentralized co-op decision making.

The statistical model and the predicted relationship are summarized by the following equation:

$$CP = \alpha_0 + \alpha_1 ST + \alpha_2 RT + \alpha_3 WI + \alpha_4 TS + \alpha_5 DH + \alpha_6 CGP +$$

$$\alpha_1 > 0 \quad \alpha_2 \gtrless 0 \quad \alpha_3 > 0 \quad \alpha_4 > 0 \quad \alpha_5 > 0 \quad \alpha_6 > 0$$

$$\alpha_7 II + \alpha_8 DI + \varepsilon$$

$$\alpha_7 > 0 \quad \alpha_8 > 0$$

Where CP = percent of shoppers participating in the volunteer program

ST = specialized task teams

RI = rotating task teams

WI = written instructions

TS = training sessions

DH = discount per hour

CGP = annual cost of goods sold per patron

II = policy implementation index

DI = policy development index

ε = the remainder or residual

Table 3.5 displays the results of our statistical analysis.[9] Equation 1 evaluates the relationship between four structural features (ST, KT, WI, TS) and consumer participation. Specialized Teams (ST) is, as expected, positively related to CP. The estimated coefficient value of 45.5 means that the cooperatives who have specialized teams also have on average, consumer participation rates that are 45.5 percentage points higher than those co-ops that do not have specialized teams. Consider for example, two co-ops which are identical except that one uses specialized teams and the other does not. Then, if the consumer participation rate of the lesser organized co-op is, say 25 percent, then it would be 70.5 percent in the co-op with specialized teams.

The number in parentheses below an estimated coefficient is that estimates' t-ratio. Larger t-ratios indicate a stronger relationship exists. The reported value of 4.60 for ST in equation 1 is well above the value needed to ensure that this relationship between ST and CP is statistically significant at the 1 percent level. In layman's language this means that the reported positive association between ST and CP has

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[9]The data base for this regression study is available in Appendix 3.C.

less than a one percent chance of not existing. These results strongly indicate that cooperatives desiring to attain high rates of consumer participation should use the specialized team method of organization.

The other explanatory variable in equation 1 have varying degrees of influence on consumer participation. We reasoned that rotating teams could either be positive or negatively associated with CP. The estimated relationship is in fact, negative and statistically significant at the 5 percent level. The consumer participation rate would on average, be 29 percent points lower for a cooperative that is identical with other cooperatives in all aspects except that it uses rotating teams. On the other hand, training methods do not seem to have much influence upon consumer participation. Both written instructions (WI) and Training sessions (TS) are positively associated with CP, however, their t ratios are so low that it is very likely that the estimated relationship are due to chance rather than the content of these training programs.

Overall the combined influence of the four variables in equation 1 explain 48.1 percent of the variation in CP. This is indicated by the R^2 value of .481 in the last column of Table 3.5. By inference the remainder term (t) accounts for 57.9 percent of the variation in CP. The F ratio value indicates the strength of the full model (the combined influence of the four variables). In this case a value of 6.72 is high enough so that equation one is statistically significant at the one percent level.

Equation 2 introduces discount per hour (DH) and Equation 3 alternatively introduces the other economic incentive measure, cost of goods sold per patron (CGP). WI and TS are not included because of their weak influence and the need to limit the size of our model in order to conserve

Table 3.5 Multiple Regression Equations Explaining Consumer Participation in 27 Cooperative Stores' Operations

Equa. No.	Con-stant	Task Teams (ST)	Rotate Teams (RT)	Written Instrns. (WI)	Training Sessions (TS)	Discount /hr. (DH)	COGS/ Patron (CGP)	Imple. Indic (II)	Dev'p. Indic (DI)	F_{R^2} Signifi-cance
1	16.21	45.50 (4.60)	-28.98 (2.21)	.83 (.10)	9.15 (1.08)					6.72 .481 .001
2	11.29	44.69 (4.09)	-27.05 (2.14)			1.34 (.98)				6.72 .447 .002
3	11.87	43.21 (4.00)	-24.39 (1.92)				.0037 (.12)			6.39 .424 .002
4	11.94	44.42 (4.16)	-26.38 (2.09)					2.11 (.91)		6.86 .442 .001
5	11.47	41.68 (4.16)	-21.78 (1.72)						2.97 (1.07)	7.04 .448 .001

degrees of freedom (the statistical strength of the model). Each of the economic incentives variables have the expected positive impact upon participation, however, the size of the estimate coefficients is negligible and neither is statistically significant. The team variables, ST and RT, behave as they did in equation one, and the overall model continues to be significant at the one percent level.

Equations 4 and 5 test the relationship between CP and the alternative measures of decentralized decision making— the policy implementation index (II) and the policy development index (DI). Both II and DI have a weak positive association with CP, however neither is statistically significant. The team factors, ST and RT, perform as in other equations 4 and 5.

To summarize, the results of this statistical inquiry strongly suggest that how the work experience is organized is the most important dimension of volunteer participation program structure. Specialized task teams enhance participation; rotating teams dampen it. Although training in general probably enhances participation, our results suggest that no particular method produces superior results. One type of training method appears to be as good as the others. Economic incentives and organizational incentives, as measured by decentralized decision making seems to have minor impacts on consumer participation. Until present the most common and contended issue surrounding participation in cooperatives has been whether economic or organizational-philosophical factors are more important for consumer participation (Krietner, 1978). This analysis, ironically, suggests that neither is as relevant as practical operational considerations. Yet the small sample size and imperfect measures of the underlying social and economic

forces point to the need for more research before these provisional answers can be regarded as conclusive.

Marketing Analysis

Marketing is perhaps the least understood yet most important ingredient for operating a cooperative food store. Consumer dissatisfaction with the marketing practices of the supermarket chains simply cannot be allowed to degenerate into a blanket prescription against promoting the cooperative and its products in the market place. The question is not should a cooperative engage in marketing but how can a cooperative use marketing concepts to attain its goals. Answering this question in the fullest fashion would require a separate chapter and more data than was provided by this survey. We limit our discussion to some basic marketing concepts and an examination of the marketing strategies employed by the surveyed new wave cooperatives. First the concept of market segmentation will be explored; then several components in the marketing-mix will be explained and evaluated.

Although a given food product is relatively similar from store to store, the concept and format of a food store can be very different. Market segmentation occurs when a market such as retail food market is supplied by more than one type of food store. In most large cities, for example, a consumer can purchase food in one or all of the following types of stores: supermarket, superette, convenience store, or a specialty store such as a retail bakery or health food store. The distinction between market segments is useful because competition tends to be more direct and intense among members of a given segment than among retailers of different segments.

Nearly all of the new wave cooperatives surveyed are in the specialty

store segment; yet only 23 percent of the respondents indicated that health food stores were their primary competitors. Five percent felt more competition from convenience stores, and an overwhelming majority, 72 percent, said normal supermarkets are their primary competitors. Some cooperatives that indicated supermarkets as their major competitor may be the only natural foods oriented store in their market. Thus they compete primarily with supermarkets for the consumer's dollar. If this is the case then these co-ops are probably benefiting from their unique position as the sole purveyor of food products in the natural food segment of the market. On the other hand many of these stores may be actively pursuing a marketing strategy that is limited to safe and health foods but will expand their store's size and product lines to supermarket proportions. These cooperatives may be monitoring supermarkets in order to match or beat their offerings to consumers.

Stores operating in a segment of the retail food market fine tune their marketing efforts by choosing a marketing mix most consistent and contributory to their desired goals. The price level and pricing policy are the most commonly recognized components of the marketing mix. Supermarkets, for example, alternately use price specials and "everyday low prices" to attract customers. Pricing policies in most of the cooperative stores are less sophisticated and less subject to frequent changes than in supermarket chains.

Twenty-seven stores rely primarily upon fixed markup systems, i.e. all products are priced at a fixed percent over cost. This approach to pricing is easy to understand and control. It can, however, run afoul of the traditional markups charged by competitors. The costs that a grocer bears vary widely and depend upon the handling, packaging, storage,

shrinkage and turnover of a product. The corresponding markups vary to a large extent in tandem with the costs of distributing that product. Thirty stores follow a pricing policy that at least partially recognizes the importance of variable markups to cover distribution costs. Thirteen of these co-ops regard variable markups as their primary pricing policy. One store uses a system that reflects the products nutritional value, the degree of processing and/or producer identity. Only five stores indicate that they set prices in response to direct pressure from competitors.

Cooperative stores probably pay less attention to market price levels than they should. Sixty-nine percent of the co-ops surveyed seldom or never check competitors' prices. Only one in five check prices monthly; one in ten check them weekly. Comparative price information can serve two purposes. Assuming that the cooperative can match or beat its competitors distribution of price information builds patron loyalty. This is particularly helpful when starting a co-op and when a co-op has a limited selection. Consumers tend to patronize a limited-line store for products of comparable quality that are available in a supermarket only when smaller stores offer price savings. Only three stores provide price comparisons to patrons on a regular basis.

If a co-op finds that it cannot meet competitors prices then comparative price information serves a more fundamental purpose—getting the co-op's costs in line with those of alternative retail outlets. This must be done, otherwise the long-run survival of the cooperatives is in jeopardy.[10]

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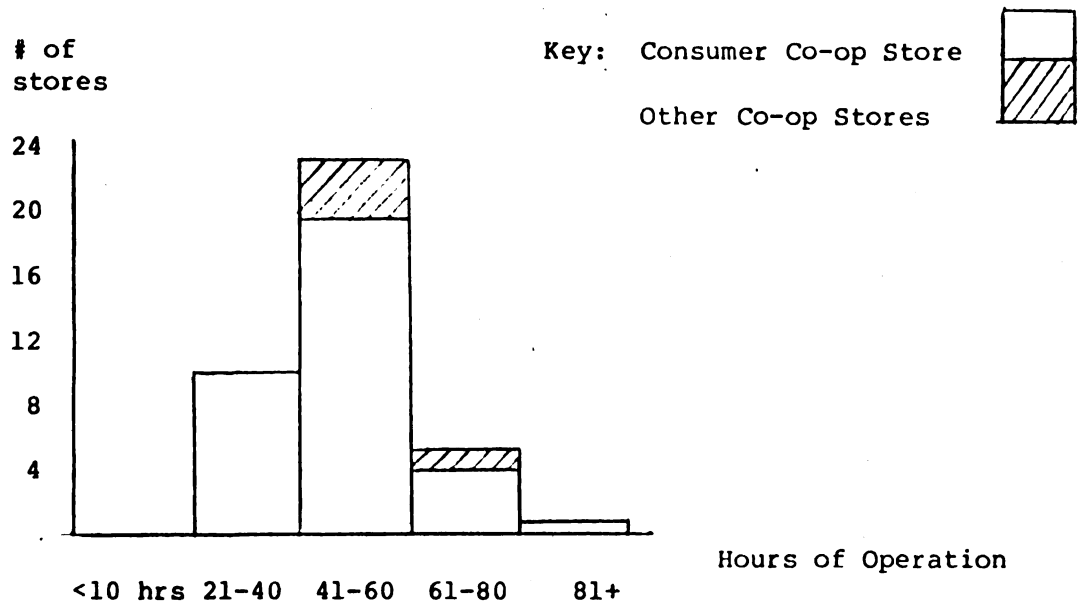
[10]Research has repeatedly shown that cooperatives that are not price competitive fail as businesses. See, for example, Bell (1961).

There are several nonprice dimensions to a food store's marketing mix that command a retailers attention. Grocers can alter the value that is offered to consumers by changing product size or quality, consumer information (advertising), store hours, product lines carried, services, store layout, and shopping atmosphere. Some of the specific nonprice strategies that private retailers rely upon to create "excitement" and enhance the consumers perception of value are trading stamps, coupons, games and advertising on radio and T.V. as well as in newspapers. Few cooperatives use these tactics. Data on store hours indicate that most cooperatives limit their business time to fewer hours than most private outlets.[11] As illustrated in figure 3.16, ten of the stores are open less than 40 hours per week. Only six approach conventional food store hours by operating more than 60 hours per week.

Figure 3.16 Hours of Operation Per Week in Cooperative Stores



[11]The appropriate decision criteria is whether the increased sales cover the additional expenses of being open longer. Part of the sales increase could be due to higher prices that patrons are willing to pay for the added service.

In the service dimension only one in five co-ops surveyed bag patron's groceries. Two-thirds of the stores cash checks for more than the amount of purchase and a surprising 41 percent extend credit. Cooperatives have traditionally looked with disfavor upon credit purchases. Forty-nine stores are certified to accept food stamps and the remaining store is seeking certification. In general cooperative stores tend to encourage self-reliance over convenience, however their relatively small size and local character appears to allow them to offer as many or more financial services than large supermarket chains. Also one should not forget that direct consumer participation in the distribution process in return for nominal discount is a "service" that only new wave cooperatives offer.

Analysis of Operating Performance

The need for sound financial management to insure continued successful operation of cooperative enterprises cannot be overstated. Financial management is an important element in the areas of product procurement, policy development, labor policies, and marketing aspects of cooperative operations. The quality of the data received concerning financial matters suggests that poor financial management is a major element in the poor performance of several responding cooperative stores.

Table 3.6 presents selected operating statistics from 36 cooperative stores. These figures form a basis for analyzing consumer labor in the new wave cooperatives as well as a more general review of their operating procedures.

The annual sales of the cooperative stores range from $632,000 to $9600. This wide range covers cooperatives operating with many differences in store location, product mix, and the mix of staff labor and

Table 3.6 Selected Operating Statistics for 36 Cooperative Stores

Store No.	Annual Sales	Gross Margins	Operating Expenses	Labor Expense	Net Margin	Inventory Turnover	Annual Sales Per Sq.Ft.	Percent Consumers Working
43W	$632200	17.4%	13.3%	7.9%	4.1%	30.0	1050	02
42L	502000	13.3	14.2	8.5	(1.0)	22.3	n.a.	04
44L	400000	17.5	11.3	6.0	6.2	47.3	710	20
45L	375000	22.5	13.1	6.5	9.4	13.8	125	05
37L	350000	12.3	20.8	14.4	(8.6)	23.5	265	02
28L	300000	13.3	12.2	8.0	1.2	n.a.	115	68
11W	279700	29.4	28.1	1.8	1.4	31.1	150	00
16L	268600	22.4	16.7	12.5	4.9	26.9	150	01
10L	260000	12.8	13.7	9.3	(0.9)	51.8	430	09
3L	226000	18.8	12.0	6.3	6.9	54.6	205	30
47W	207000	17.8	11.1	9.3	6.7	21.5	430	01
36L	187200	10.6	7.5	4.5	3.2	41.3	265	98
49L	149100	33.7	42.8	26.8	(9.2)	82.4	250	16
17W	125300	18.9	10.0	3.2	8.9	22.6	250	02
7L	117000	20.6	24.6	13.2	(4.0)	13.3	117	10
12W	112800	20.8	14.4	8.2	6.4	42.8	200	02
18L	106000	21.7	16.2	4.2	5.5	20.8	110	20
1L	104600	26.8	23.1	15.8	3.7	17.3	210	10
41L	103600	11.4	13.5	6.9	(2.1)	n.a.	n.a.	59
19L	100000	22.0	20.0	12.0	2.0	11.1	110	30
21L	74000	14.2	19.1	11.9	(4.9)	35.3	40	54
35L	73500	9.9	7.0	1.6	2.9	32.3	75	75
32L	73100	31.7	20.3	11.1	11.3	8.8	105	18
22S	73000	15.4	n.a.	4.9	n.a.	76.4	50	95
31S	68500	19.1	13.1	0.0	6.0	17.9	n.a.	30
40L	63600	21.3	17.4	8.5	13.7	17.5	80	95
27L	58900	6.8	28.3	6.5	(21.3)	8.5	30	05
33L	53000	17.2	20.4	6.9	(3.2)	n.a.	105	30
13S	50000	23.4	8.0	2.0	15.4	17.0	80	100
15L	47900	17.6	26.6	12.5	(7.0)	13.6	70	28
26S	45800	3.2	4.7	0.7	(1.5)	12.2	100	50
9L	44000	24.0	14.4	7.0	9.6	26.2	80	25
46S	30700	.273	10.0	0.0	17.4	6.6	n.a.	15
5S	25700	32.1	27.0	7.0	5.1	14.1	57	33
29S	14400	41.7	42.1	0.0	(0.4)	n.a.	58	25
6S	9600	20.0	14.6	0.9	5.4	8.2	n.a.	

NOTE: Store numbers followed by a W indicate a worker cooperative; and L a large consumer cooperative; an S a small consumer cooperative as defined in the text.

consumer participation. The variety in sales size and organization is also reflected in gross margins. Gross margins measure the retail distribution costs as a percentage of total product cost. The gross margin, calculated as sales minus cost of goods sold, is itself made up of two components— store operating expenses and net margins. Net margins can be rebated to patrons or retained depending on the operating style of the store.

Gross margins are usually expressed as a percent of total sales. Lower gross margins indicate more efficient distribution; less of the total cost is related to the distribution process. The gross margins of cooperative stores vary from 3.2% to 41.7%. This incredibly large range of gross margins reflects three factors: (1) the low values reflect extensive consumer participation in the operation of the cooperative store; (2) the high values reflect a lack of business skills among some cooperative store leaders; (3) some stores experience a high degree of insulation from competitive forces due to location or operation in the health food sub market. It should be noted that as attention is shifted to the larger cooperatives in the sample the variation in gross margins diminish. Among the stores with sales over $100,000 gross margins range from 10.6% to 33.7%.

Operating expenses account for the great bulk of the gross margin. The single largest cost area in retailing is labor. A generally accepted rule of thumb for food retailing is that labor costs account for approximately 50% of operating costs. It is here that the new wave cooperative stores enjoy a substantial advantage over conventional stores. Cooperative stores labor savings are due primarily to consumer participation programs and the fact that staff wage rates are below industry

averages. Eleven stores have labor expenses totaling less than 5% of sales or roughly half the labor expenses of private retail supermarkets.

The use of consumer labor can play an important role in small and emerging cooperative stores. Lower operating margins allow stores to compete more effectively with other retail outlets. Consumer participation programs also effectively allow emerging cooperative stores to substitute freely available time from members for working capital during the critical period of formation. Low cost labor allows beginning stores to accept more deliveries, carry smaller inventories, restock shelves more often and avoid immediate capital investment in equipment. This suggests the new wave of consumer cooperative as a likely choice for community development activities in rural and depressed areas.

The cooperative stores show a wide range of net margins. Several aspects of the operation of cooperative stores should be kept in mind when evaluating these figures. First only one of the stores makes patronage refunds. The net gains are distributed among the patrons in proportion to their patronage during the year. All the remaining consumer cooperatives seek to operate with little or no net gain from operations, offering the lowest possible prices at the time of sale. Thirteen of the stores attempt to cover only direct operating expenses. Surpluses are signals that the store can operate with a smaller markup and the prices are dropped accordingly. Operation on such a basis requires the cooperative store to follow closely accrual methods of cost accounting to avoid costing purchases of long term services in single accounting periods. Careful consideration must also be given to seasonal variations in store operations.

The cooperative stores show net margins ranging from 17.4% to

(21.3%). The variation is much larger than found in established retailers. The wide variation may signal that cooperative leaders have not yet mastered the financial management skills necessary to meet the cooperatives' goals for lowest possible price.

Two other standard operating statistics that reflect the stores control over operating procedures are sales per square foot and the inventory turnover ratio. These two statistics measure the stores success in reaching an efficient combination of selling space, storage space, and inventory size. The inventory turnover figures in Table 3.6 are calculated from data on cost of goods sold and beginning and ending inventory size. High inventory turnover values indicate the ability to handle a greater flow of goods with smaller areas devoted to shelf space and storage. The highest inventory turnover rate found is 76.4 times per year; this store carries so small an inventory that its operations approach those of a preorder cooperative. Preorders usually carry no inventory, thus they have an infinite turnover ratio. Five stores report turnover rates of less than 12. These low inventory turnover rates imply that the average product sits on the shelf one month before sale.

The sales per square foot figures vary from $30 to $1050 per year. This wide range of sales per square foot values does not necessarily imply that cooperative store leaders are unaware of the importance of throughput considerations. The wide range is produced by factors of rural versus urban location and difficulty in identifying buildings suited to small scale operation. A more telling statistic is rent as a percent of sales. It is a minor expense in all the responding stores with all reporting rents below 1.5% of sales.

The central role of labor expenses in retailing operations suggests

several hypotheses concerning the role of consumer participation in new wave cooperatives. First, we hypothesize that as the wage rate of staff members increases the gross margin of the store will increase. Higher wage rates will produce large labor expenses. Since retail food operations are labor intensive increasing wage rates can be expected to produce higher operating expenses and cooperative stores can be expected to increase gross margins to cover the increased labor expense.

Second, we hypothesize that increasing consumer participation in the cooperative stores will decrease labor expense. Cooperative stores pursuing active consumer participation programs are expected to direct the available consumer labor towards tasks that would otherwise be completed by paid staff. This substitution of volunteer labor for paid labor can therefore be expected to lower labor expense.

Third, we hypothesize that higher levels of consumer participation will result in lower gross margins. Tasks completed by consumer participants will limit the hours of paid staff required to operate the store, release the paid staff from less productive jobs and allow them to focus on coordination and management issues facing the cooperative. Some observers have suggested that the use of consumer labor could not significantly reduce gross margins due to a lack of training of participants for tasks requiring special skills. A comparison of the efficiency of paid versus volunteer labor is beyond the scope of the data base collected in this survey. A negative correlation between consumer participation and gross margin will, however, do much to validate the expectation of new wave cooperatives that consumer participation programs are a viable means of reducing the out-of-pocket costs of food distribution.

In order to test these hypotheses, a homogeneous subset of our

survey was selected. Our analysis is based on 23 consumer cooperatives which have grown to a size sufficiently large to support full time staff. Classification as one of these large cooperatives is based on a substantial shift toward professional staff as indicated by hourly wage, staff members dependent on the cooperative as a source of livelihood and the offering of fringe benefits (in the marginal case paid vacations). The smallest store included has sales of $44,000. Worker cooperatives and religiously affiliated cooperatives are not included so as to allow a clearer picture of the competing costs and benefits of member participation in the new wave cooperatives.[11] The correlation table presented below demonstrates the observed correlations and their significance levels for the four variables.

Table 3.7 Correlation Matrix of Four Variables in the Operation of Consumer Cooperative Stores

	% of Consumers Working	Wage Rate	Gross Margin
Staff Wage Rate	.127		
Gross Margin	-.306 (+)	.244	
Labor Expense	-.242	.146	.673 (**)

(+) significant at 10% level
(**) significant at the 1% level

The correlation between staff wage and gross margin is .244. This indicates that higher gross margins are positively associated with higher wage rates as hypothesized. This correlation is not significant

[12] A comparable study for small and emerging cooperatives was also done. The results, not substantially different from those reported in the text, are presented in Appendix 3.E.

statistically. The low correlation between wage rate and gross margin is reflected in the low correlation between wage rate and labor expense. This low correlation may reflect variation in the fringe benefits offered by the stores, or a tendency for the cooperative stores to utilize relatively large staffs of low paid workers rather than developing systems producing greater productivity allowing fewer staff members to earn higher wages.

The second hypothesis states that the use of member labor will decrease the labor expenses of the cooperative store. The correlation between percent of consumers working and labor expense as a percent of sales is -.242; however, it is not statistically significant. Nonetheless it does suggest that stores with greater participation levels do experience lower labor expenses.

The third hypothesis states that increasing consumer participation will decrease the operating margins of the stores. The observed correlation between the percent of consumers participating and the gross margin in our sample is -.306, and is significant at the ten percent level. This finding supports our third hypothesis. The association of consumer participation with lower gross margins suggests that the cooperative stores can replace part of their paid staff with consumer labor while maintaining or lowering gross margins and continue to pursue the various other goals served by member participation.

Further we observe a positive correlation between the percent of consumers participating and the staff wage rate. When taken together with the observed correlation between consumer participation and labor expense (-.242), and the correlation between consumer participation and gross margins (-.306), it appears that the use of consumer

participation could serve as a means of equalizing the financial burdens often borne by paid staff among all the cooperative members and still maintain low gross margins.

The preceeding analysis suggests that consumer participation is capable of reducing gross margins. One important factor remains to be considered before consumer participation in the new wave co-op stores can be considered as a viable alternative to existing retail distribution systems. To what extent is consumer participation compatible with economies associated with large scale operations?

Cooperatives seeking to control gross margins by resorting to direct participation must consider that large scale operations may be less conducive to member participation. In our sample the percent of members participating is negatively related to store size, as measured in terms of cost of goods sold.[13]

$$P = .7137 - \underset{(3.23)}{(1.41 \times 10^{-6})}\ (COGS) \quad R^2 = .312$$

Where: P = percent of membership working
COGS = Cost of Goods Sold

This relationship suggests that growth to capture economies of size may have a negative influence on the member participation rate. Some cooperatives may value member participation so highly that they chose to limit size. This would be economical only if the benefits of participation

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[13]It should be noted that this equation uses the more restrictive percent of membership rather than the percent of all consumers used previously. Since the decision of scale and participation programs is made by the membership, and since all participants come from the membership in the consumer cooperatives which serve as the base for the preceding analysis, the more restrictive member participation rate is used. This calculation may be biased toward under estimation of the influence of increasing size if membership represents a smaller percentage of all consumers as store size increases.

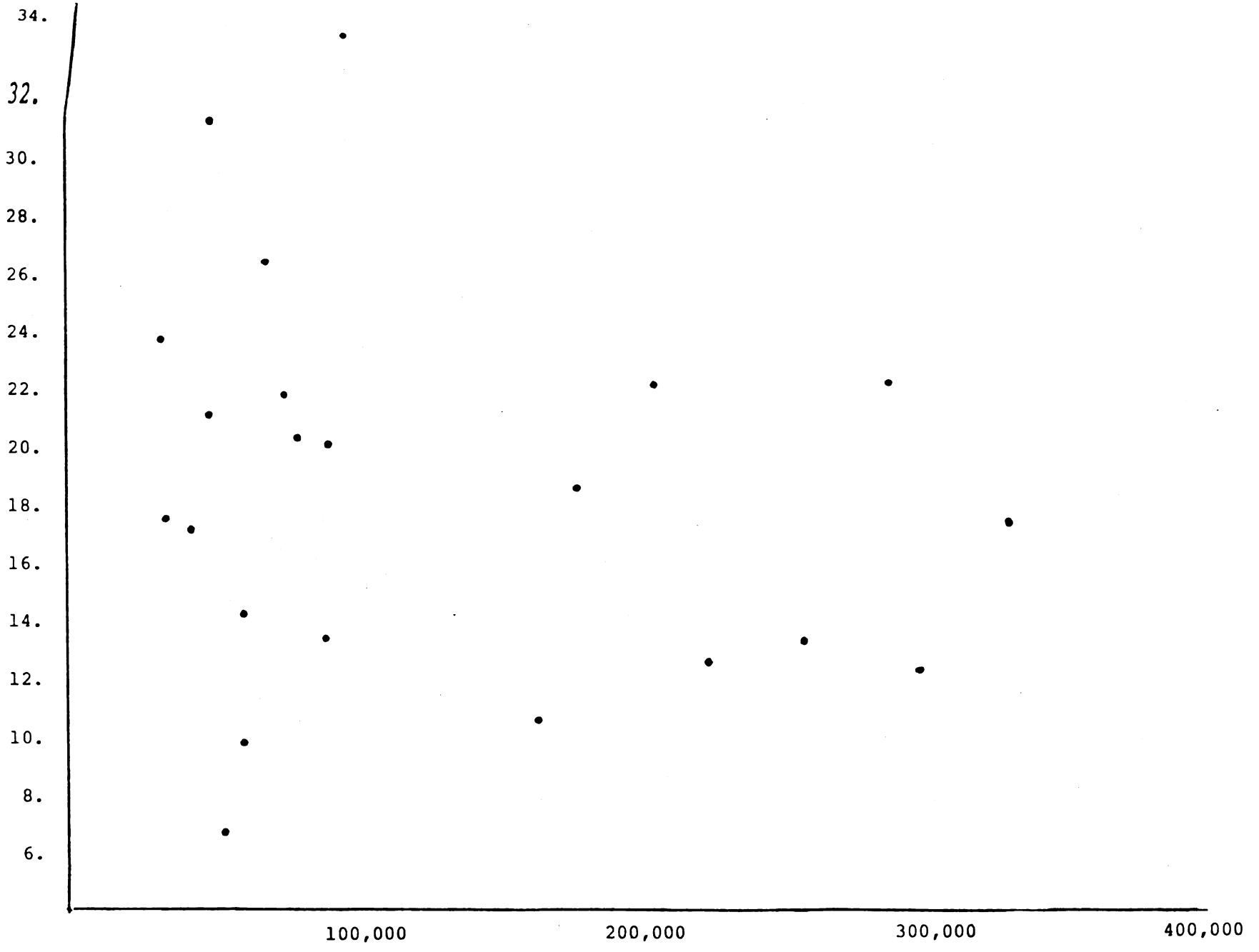
outweigh the benefits available from a larger scale of operation.

In an attempt to measure the net influence of participation and size economies on gross margin we estimated the relationship between size and gross margin. No significant relationship was found. Figure 3.17 displays the data. Stores with smaller sales volumes show much greater variation in gross operating margins than do larger stores. The larger stores appear to experience some lowering of gross margins but the results are not statistically significant. Many factors can be suggested to explain this phenomena. Small stores are generally younger and more experimental; some emphasize participation but others do not. The staff of smaller cooperatives may be more variable in terms of business skills thus producing the erratic outcomes observed. Indeed, three of the observed outliers are clearly misleading. Two stores had significant net losses from operations thus showing gross margins significantly lower than is necessary for successful operation at the observed scale. One other store exhibiting low gross margin appears to receive a substantial staff wage subsidy not included in the operating expenses reported.

In summary it appears that economies of size slightly outweigh losses in consumer participation in larger stores. However, further research with more accurate data is needed to verify this finding.

The previous analysis of operating performance centered upon relationships between operating statistics. Although average values for different data series are less revealing they do give profile of cooperative performance. Table 3.8 presents average values based on the 23 large consumer cooperative stores using a significant amount of paid labor. The seven standard operating figures presented form a basis for comparing operations among cooperatives as well as against established

Figure 3.17 A Data Plot of Gross Margin and Volume in Cooperative Stores



retail firms.

The average gross margin for the cooperative stores is 18.4%. This average gross margin places the cooperative stores at the low end of the range for gross margins found in the food retail industry. Limited assortment stores and warehouse stores may achieve lower gross margins, however supermarket, convenience and specialty store margins are higher. Supermarkets operate with gross margins around or above 19% while convenience stores may have gross margins as high as 29%. Gross margins are affected by many factors; scale of operation, product mix, services offered, hours, as well as various degrees of integration of retailing, distributing, and wholesaling. Direct comparison of cooperative stores to one of these store types would be misleading. We can say, however, that the large cooperative stores, with their unique blend of member participation and size economies, are capable of controlling distribution costs as well as most private retailers. Their ability to compete effectively with existing retailers on the basis of shelf price depends not only on the gross operating margins of the store, but also on the strength of the procurement systems available to the cooperative stores. We have no comparative price data to answer this question, however the continued growth of cooperatives does suggest that they are price competitive.

These average operating figures also serve as a basis of comparison among the cooperative stores. For instance, the average labor expense of 9.6% can be used to identify nine stores that experience labor costs in excess of the average. These stores are the most likely candidates for lowering gross margin by more careful control of labor expenses.

Table 3.8 Average Operating Statistics of 23 Consumer Cooperative Stores

Annual Sales		$175526
Gross Margin	18.4%	
Operating Expense as a % of Sales	17.2%	
Labor Expense as a % of Sales	9.6%	
Pre-tax Gain from Operations	1.2%	
Annual Sales per Sq.Ft.		$174
Annual Inventory Turnover	27.6	

Table 3.9 presents selected financial figures for the same 36 stores which offered operating figures. Total assets of these cooperative stores vary from $3150 to $86,000 with an average of $18,820. Complete financial data was not collected from the stores. One striking aspect of the asset structure of the stores discernible from the available data is the large percentage of store assets tied up in deposits with suppliers. Although seven stores indicate that they have no buying deposits with suppliers, each is required to maintain deposits with their respective federation warehouses. These stores either do not include these assets in their records or do not maintain careful records of the amounts held by suppliers. Among the stores indicating deposits with suppliers these deposits range from less than two percent of total assets to nearly 80%. Smaller stores in particular often have a substantial portion of their assets invested in buying deposits.

Three methods of capitalization are currently available to the stores. The stores can 1) issue stock, certificates or accept loans from members, 2) generate capital through the use of higher markups creating

Table 3.9 Selected Financial Figures for 36 Cooperative Stores

Case No.	Sales	Total Assets	Buying Deposits	Capital F'mation Policy	Ret'ned Earnings	Ave. Annual R.E.
01	$632200	$86900	$1267	D.O.E.	$39162	$9790
02	502000	47800	3895	D.O.E.	36030	6005
03	400000	25000	3000	C.A.	15000	3750
04	375000	19780	250	D.O.E.	50298	12575
05	350000	35000	2362	D.O.E.	(3000)	(1500)
06	300000	27000	10000	C.A.	n.a.	n.a.
07	279700	25000	0	C.A.	17400	3480
08	268600	35370	1 88	C.A.	3138	785
09	260000	16915	10585	D.O.E.	1500	214
10	226000	24360	6162	C.A.	8091	1156
11	207000	53100	1645	C.A.	7360	1840
12	187200	17640	3238	C.A.	9242	1320
13	149100	15200	3024	C.A.	4070	1018
14	125300	8690	924	C.A.	3685	1228
15	117000	15000	2500	C.A.	0	0
16	112800	3150	2500	C.A.	0	0
17	106000	12000	1300	C.A.	0	0
18	104600	8268	1912	D.O.E.	(2627)	(1314)
19	103600	8422	2015	C.A.	(1845)	(461)
20	100000	10000	2400	D.O.E.	(200)	(40)
21	74000	9900	2400	D.O.E.	0	0
22	73500	6150	3887	C.A.	5007	715
23	73100	5350	0	C.A.	n.a.	n.a.
24	73000	3200	n.a.	D.O.E.	n.a.	n.a.
25	68500	5000	0	C.A.	3600	600
26	63600	5950	0	D.O.E.	75	12
27	58900	69700*	0	D.O.E.	6547	1637
28	53000	3820	n.a.	C.A.	n.a.	n.a.
29	50000	20000*	2008	D.O.E.	11000	1833
30	47900	7300	1047	C.A.	n.a.	n.a.
31	45800	n.a.	2626	C.A.	2387	341
32	44000	6200	2600	C.A.	1700	340
33	30700	8200	0	C.A.	3876	1292
34	25700	3800	1122	C.A.	719	240
35	14400	3500	n.a.	D.O.E.	n.a.	n.a.
36	9600	6000	0	C.A.	1383	461

*The reason for the unusually large asset values in these cooperatives was not discernable from information collected in the survey.

larger gross margins, or 3) apply for loans from outside sources. Ultimately, of course, the source must be one of the first two methods. Stores that choose to cover only direct operating expenses with revenues and raise capital by other means, are marked D.O.E. (direct operating expenses) in Table 3.9. Stores which also seek to develop a surplus for necessary capital formation, such as larger inventories, improved equipment or purchase of a building are marked C.A. (capital accumulation). Caution should be observed in comparing the pricing policy of the stores with their performance in terms of retained earnings or the average of the retained earnings since inception. Policy changes, product mix, and operating philosophy all influence the retained earnings of the cooperative stores. Several responses to the survey also indicated that cooperatives have a very inadequate grasp of accounting and financial management skills. It also may be possible that they simply refused to furnish bottom line figures to us. Six of the stores did not report retained earnings. Four stores indicated the improbable figure of zero.

In addition to the capital accumulation problems in these stores four other stores indicate negative retained stores. This group of 14 stores are effectively limited to generation of capital from operations and member loans. Outside sources, even sympathetic sources such as federation development funds and the Bank for Consumer Cooperatives, must look to retained earnings as assurance that the cooperative has the organizational and record keeping skills necessary to generate the revenue to repay loans and will differentiate between income and capital accounts to insure continued good use of available capital.

Twenty two co-ops have sustained positive net earnings in their stores. The retained earnings range from $75 to $50,000. The pattern

of retained earnings appears to follow more closely the expansion of the store operations than the pricing policy or decision making structure of the cooperative, i.e. worker versus consumer co-op. A narrow range of stores with annual sales volume between $75,000 and $125,000 seems associated with low retained earnings. This group is marked by a movement into the fourth stage of product development, particularly frozen foods. This grouping may mark a stage of evolution where cooperative stores experience pricing and cost control difficulties associated with expansion of product lines. A more definitive explanation of this observed clustering of stores with capital shortage problems must await further research.

Impediments to Growth

The perception of cooperative store leaders as to the impediments to future growth of their stores serve as a complement to the analyses of the various aspects of cooperative stores presented in this paper. Existing stores must continue to grow if they are to meet the goals of the cooperative movement. The identification of specific problems in the growth of cooperative stores allows established stores to aid and foster the growth of new cooperative stores. The problems of growth perceived by leaders of cooperatives fall into three categories.

The most commonly mentioned problem is a lack of community awareness of such factors as nutritional deficiencies in many food products, poor food quality, and the existence of cooperatives as a means to correct these deficiencies. Matters of personal taste, particularly large segments of consumers who place predominate emphasis on convenience in food preparation and prefer foods which have low nutritional value, are important deterents to future growth. Many stores are reluctant to expand

product lines to include foods that are not safe and healthy. These stores prefer to direct efforts to educate members and the general public to the need for consumer control of the food distribution system as a means of altering the current mix of heavily advertised products directed by profit motives rather than concerns for health and safety.

The second source of impediments to future growth is the lack of capital. The uses to which capital would be put, if available, are mainly additional space, improvement of store appearance, and inventory. Cooperative stores in several communities are not having difficulty in attracting new members, but have considerable difficulty in obtaining the added space and equipment necessary to accommodate continued growth. Finding a new store site, purchasing present sites, and renovating store space are high priorities in twelve stores.

The final area of need perceived by the cooperative leaders is the need for improved organizational skills and improved member participation programs. Eight stores mentioned these difficulties as the major impediment to continued growth.

The cooperative movement could meet many of these needs if their regional federations were strengthened. Exchange of existing information on improving community relations, expansion of programs of nutritional and political education, and development of planning and organizational skills could economically be provided by federation staff. All the federations surveyed publish newsletters regularly. The exchange of experiences of member stores can greatly aid the proliferation of successful approaches to common problems. Workshops organized at the federation or local levels can also foster the expansion of the fund of organizational and recordkeeping skills among cooperative leaders.

It is the formation of capital and the direction of the capital to cooperatives in the greatest need that presents the greatest challenge to continued cooperative growth. Many of the smaller stores would be best served through programs designed to aid in the generation of capital through their operations. Such programs would necessarily have to be done through existing federations or their regional division. Programs which develop record keeping capacities for the identification of costs and the efficient use of member participation are particularly important.

Federations are also a logical means of developing and administering a fund for cooperative development. The federations operate from a larger asset base than individual stores allowing them easier access to capital funds. In addition their intimate knowledge of the growth patterns of cooperative stores allows them to insure the direction of capital funds to productive applications. The formation of the Bank for Consumer Cooperatives provides a source of capital to individual stores which many will find difficult to use. Collateral requirements or knowledge of application procedures may limit access. The federations can serve as an intermediary by securing loans from the bank and reloaning the funds to member stores.

Goals

Cooperative stores result from the efforts of people to correct several preceived performance shortfalls of the current food distribution system. The motivation of the movement comes from a desire to bring a cohesiveness to the action of members of the community, a union of theoretical and practical concerns, centered around the procurement of food. Groups attracted to cooperation seek more than one of the following: improved food quality, lower prices, alternative environments for workers

and shoppers, and control of the political, social, and economic conditions surrounding them. Efforts to build the many member concerns into the operations of the cooperative stores reflects the traditional wholistic approach of cooperation. Cooperatives tend to seek common elements in problems, unified solutions to what many people see as conflicting goals. Cooperatives tend to see matters of food quality, price, environmental protection and community development as intimately involved in the need for increased consumer control of the food systems. The influence of these perceptions on product selection, decision making, and use of member and staff labor separates the cooperative stores from other food outlets. The difference in outcomes is extensive, but difficult to quantify. Studies which attempt to compare cooperative stores to other retail operations in terms of efficiency of distribution run the risk of missing many of the services and benefits generated by cooperative stores. Much of this benefit is to be seen in the efforts of the cooperative stores to develop active, informed consumers.

All the cooperative stores responding show interest in nutritional information on products provided through the store as well as general nutritional information. The commitment of the cooperative stores to good nutrition may be the strongest and most widely held of the stores' concerns. Thirty-three of the stores provide information on the products sold. Thirty-two provide general nutritional information. Those that do not offer information expressed an interest in doing so. Few of the stores offer a substantial inventory of processed foods and many stores offer a wide range of "organic" and "natural" foods.

Information on the nutritional value of foods in the current food distribution system often leads the stores to offer information on

several aspects of existing food distribution systems. All 44 consumer cooperative stores responding indicate an interest in providing information on the existing food distribution system, but only 24 currently do so.

The goal of the cooperative stores to correct shortfalls on the distribution system through increased consumer awareness and action suggests that they would have active programs of education on the benefits of cooperative action. All of the stores responding indicate an interest in offering information on cooperative action, but 18 currently do not do so. The shortfall of information on the current distribution system and cooperative education has important implications for the development of member control, expansion of the cooperative movement, and allocation of resources within the movement. The possibilities of further aid to stores from federation levels and the use of work credit to members who organize available information for the membership appear to be the easiest means of improving the availability of this information.

Cooperative stores are a means of consumer action, concerned not only with the theoretical but also with the practical. Fifty percent of the stores see themselves as a means of consumer action on food prices. One of the means of fostering lower food prices is the development and maintenance of local producers. Through the development of local distribution networks the cooperatives hope to limit the market power of large food distribution systems, reduce transportation costs, and limit increasing costs caused by environmental degradation.

In addition to influencing the environment the cooperatives are interested in the returns to individual cooperators. Our sample confirms the findings of Curhan and Wertheim that participation is an important

element in the satisfaction of members. Among the consumer cooperatives, all responding stores seek a system of operation that emphasizes individual awareness, action, and control. Thirteen stores do not feel that current operations have reached this goal. This concern can also be seen in the efforts of cooperative stores to maintain community space such as reading corners, and organize social events for cooperative and community members. Sixteen stores provide community space. In light of the small size and lack of capital among cooperative stores this represents a substantial commitment to generating an informed and coherent community. In addition, all but four of the stores see social events such as dinners and dances as a desirable activity for the cooperatives.

We find, then, in the cooperative stores organizations centered around the distribution of food, but seeking to use the combined leverage of its members to influence a wide range of political, social, and economic concerns through the creation of an alternative set of institutions for the satisfaction of a wide range of material and personal needs.

CHAPTER IV

The study of consumer cooperatives is a study of consumer organizing at the point of final distribution in an effort to influence the market environment. In the food sector consumer cooperatives choose to operate either as a preorder cooperative or as a cooperative store.

The results from our survey of three midwest federations indicates that preorder cooperatives are small, relatively simple organizations. Preorder cooperatives can be formed with little capital, at a small scale, with limited organizational skills. The ability of the co-ops to function at very small sizes allows the formation of groups with a high degree of common interests. Thus preorder cooperatives serve as a barometer, measuring the pressures for specific changes in the existing food distribution system.

Demographic data collected with our survey offers examples of many types of groups attracted to preorder activity. They range from political activists to senior citizens, from parents organizing to meet special dietary needs of their children to church groups. The two major demographic factors appearing throughout our survey are the dominance of women as participants and leaders in preorder co-ops and the growth of preorder co-ops in rural areas. The predominance of women goes beyond the traditional identification of women with food procurement and preparation. The preorder co-ops offer young women an opportunity to accept insuring safe and healthy food, with flexible work hours, and real savings on food costs. Responses from rural cooperatives represented an unexpectedly high percent of our survey sample. Given the urban roots of the preorder cooperative movement and the additional organizational

problems in rural areas with low population density the importance of rural cooperatives within existing federations is surprising.

Although these demographic findings are of interest to the study of preorder cooperatives they do not cast light in the central enigma of preorder cooperatives: what in the nature of preorder cooperative growth causes the instability associated with preorder activity? The findings of the survey suggest several factors and point to areas for further research.

First it must be recognized that preorder cooperatives are not stagnant organizations. The positive correlation between the number of member households and age of the preorder cooperative suggests that preorder co-ops grow through time with only those which intentionally restrict growth remaining small. The preorders by and large welcome the many new members attracted to cooperative activity. The willingness of preorder co-ops to accept new members reflects cooperative principles and perhaps sound economic sense.

The growth of preorder cooperatives from groups as small as seven households to as large as 300 households requires that the cooperatives develop systems which efficiently meet the co-op's needs. These operational systems must meet the tastes and preferences of the membership in matters of organizational environment, food quality, and price. Factors which may influence the size and style of the cooperative's operation include local supply possibilities, member resources available for product procurement, the value attached to meaningful participation in decision making, maintenance of member commitment to fair and equitable methods of operation, available distribution sites, adequate organizational and record keeping skills, and the size of savings from cooperative activity.

The growth rate of the preorder cooperative may also be an important factor in the strain placed on existing elements of the co-ops distribution process. None of these factors are likely to be the critical factor across the entire size range found in our sample. Yet each may be a constraining factor at some size.

Procurement is likely the strongest factor favoring growth in the early stages of cooperative development. Larger preorder cooperatives can offer a wider product selection. They have greater resources for identifying and maintaining sources of supply, thus providing a greater variety of products to the membership. They can spread equipment costs associated with perishable goods over a larger volume. Finally large cooperatives are able to meet minimum order sizes of suppliers.

Both the product development stages and the correlation of product categories with age of cooperative illustrate the importance of product expansion to preorder co-ops. It should be noted that the stages developed in the survey analysis are indicative of the expansion of the co-ops capacity to handle a variety of products, not the specific product expansion path of preorder cooperatives. Areas with ready access to year around supplies of fresh produce or to seafood may experience entirely different growth patterns. It is likely that whatever the base preorder co-ops will expand product selection towards meeting the entire shopping requirements of the membership.

Preorder cooperatives have two organizational aids in procurement activity which allow the co-ops to achieve a wide product selection at relatively small sizes. Products available from warehouses operated by federations of consumer cooperatives provide a base upon which preorder co-ops begin operation. The warehouses provide a wider product selection

to many rural cooperatives and provide a means of consolidating orders to achieve price discounts. Organization of branching cooperatives at local levels allows individual cooperatives to share equipment costs and offer neighborhood service. With the aid of the federation warehouse and the formation of branching distribution systems a product selection including fresh meat and frozen foods can be achieved as surprisingly small sizes. One cooperative with only 25 member families includes fresh meat and frozen foods in its product selection. It is likely that this co-op reflects unique local supply conditions. Returns to growth in terms of frequency of distribution and product selection, particularly brand name availability extend far beyond this small scale. Preorder cooperatives carrying only a very limited product selection may experience average purchase size so small that the savings realized do not justify continued active member participation. For this reason there is a strong economic incentive for preorder cooperative growth.

The mechanics of decision making may have considerable effect on the outcomes of preorder activity. Curhan and Wertheim's study of Boston area preorder co-ops found that participation in the decision making process was highly valued with many co-ops choosing to limit membership in the range of thirty to fifty households. Several survey findings point to limitation of membership in this range. Smaller cooperatives appear to function through informal meetings at each distribution while larger cooperatives rely on semi-annual or annual meetings. Smaller cooperatives indicate that the development and decision to implement changes in operations are made in the general membership meetings. Larger cooperatives appear to use a representative means of decision making. Limitations to growth based on decision making considerations will vary among

cooperatives. Relevant factors may include members' experience in group decision making, the degree of common interests shared, and the strength of social bonds among co-op members outside the cooperative. The effectiveness of volunteer labor programs depends on a sense of responsibility which may develop from participation in the decision process. Some larger preorder cooperatives have experienced instances of members taking advantage of the member packaging and pricing aspects of the preorder process. One possible source of instability in preorder cooperatives may be a rapid growth directed to wider product availability that outstrips the decision making skills of the members.

Distribution sites may also limit the size of preorder cooperatives. The presence of a large number of churches, community buildings and schools in urban and suburban areas offer many opportunities for distribution sites. In rural areas, however, members may be widely scattered with few community buildings available. Distribution sites may limit both the number of member households and product selection. Co-ops using members' homes as distribution sites appear to be limited to nonperishable products. Small average purchase sizes may discourage leaders to invest the effort necessary to adapt the cooperative to large membership or product selection.

The most pervasive limit to preorder cooperative growth may be the level of recordkeeping and organizational skills of co-op members. Growth may place stress on the information processing systems. The correlation between the percent of members working three more times than the average member and the number of member households suggest that coordination requirements increase disproportionately as size increases. An inability to identify new methods capable of effectively handling larger memberships

appears to be a closely related phenomena. This possibility is supported by our finding of differences in relative time inputs for collating orders, pricing, and bookkeeping among cooperatives grouped by growth strategies. Cooperatives open to growth spend relatively less time on bookkeeping and collating orders, suggesting that they have identified more efficient methods in these areas. This finding is based on estimates made by cooperative leaders, not on measurements, which points to another important problem. Volunteer labor represents the largest input on the preorder process yet it is not explicitly counted in any of the co-ops' cost records.

The increasing coordination demands generated by growth, the failure of many cooperatives to identify distribution processes best suited to their scale of operation, and the lack of recordkeeping systems designed to measure volunteer inputs offers a tentative explanation of our findings on the relationship between member participation efficiency and co-op size. Programs designed to correct these shortcomings, either through existing federation staff personnel or under the auspice of university extension programs, may be expected to change the empirical relationship between size and the efficiency of member labor.

Cooperative stores are usually much larger organizations than preorder cooperatives. A larger scale of operation allows co-op stores to make more efficient use of equipment, offer a wider product selection, and serve a broader segment of the community. Cooperative stores are predominately found in areas not well served by chainstore supermarkets, rural and urban areas, often operating in a health food sub-market. A variety of organizations distribute food while operating under the general classification of cooperative stores. The new wave consumer cooperative

stores are at the center of our study. These stores encourage member participation as a means to four ends: lower food prices, higher wages to paid staff, building consumer loyalty and developing cooperative leadership.

Continued growth of cooperative stores requires an effective decision making process and skilled staff and board members to implement decisions. The decision making process in many co-op stores is ornate. Decisions to implement policy changes usually take place at the general membership meeting or at a board of directors meeting. Smaller cooperatives exhibit tremendous variation in decision making indicating that considerable experimentation probably takes place in young stores. Workers in several stores are represented on boards of directors, indicating either experimentation with inputs to the decision making process or a lack of clear differentiation of roles in the co-op.

Regardless of how decisions are made, they must be made. The cooperative information and decision making systems must identify products desired by the membership, locate sources of supply, find convenient and functional store locations, foster the development of competent staff, encourage and facilitate member participation in store operations, and identify and implement efficient prices, quality, and service in the marketplace.

The ability of cooperative stores to offer price savings and higher product quality requires a careful inspection of the market and large scale procurement. Current procurement practices suggest that many small stores spend an inordinate amount of time dealing with a large number of suppliers. The operation of federation warehouses allows the cooperative stores to avoid much of this expense. The warehouse operations, however,

are not yet capable of meeting all of the demands of member stores. Large, well established stores may well be able to support the costs of maintaining a large number of suppliers. Indeed, their use of nonfederation warehouse sources of supply may be an important element in the expansion of the federation warehouse's product lines. By establishing aspects of a marketing channel, support equipment, and handling skills, the cooperative stores may create the demand necessary to allow federation warehouses to distribute these goods at competitive prices.

Cooperative stores evolve more quickly into perishable goods, frozen foods, and fresh meat than do preorder cooperatives. Rapid expansion of product selection may be a source of organizational stress in the cooperative stores. Expansion in frozen foods and fresh meat require a period of investment in equipment as well as a substantial change in the co-ops position in the market environment. Co-op stores formed from member interest in good nutrition and safe and healthy food may experience some resistance to widening the product selection. Information from financial data suggest that stores in the sales volume range associated with expansion of product selection to include frozen foods and fresh meat experience a large drain on retained earnings. The importance of product expansion for the long-run stability of cooperatives and for expending membership is an area deserving more detailed study.

Staff members occupy a central place in the cooperative store's operation. They are a logical place to focus instruction in business and organizational skills necessary for efficient co-op operation. Staff members maintain the necessary record keeping systems and direct member participation programs. For these reasons co-ops must attract competent, dedicated staff members. Yet many cooperatives have been unable to do

so. Simple, basic financial records provide a striking example. Twenty-eight percent of the responding cooperatives did not provide adequate financial data with several suggesting that financial data simply did not exist. The turnover rate of cooperative store staff members was found to be negatively correlated with wage rate. This suggests that cooperative stores hoping to attract and maintain competent staff must find a means of providing adequate staff compensation. The most available method at a given store size is to encourage member participation and limit the number of paid staff members. Analysis of survey results indicates that member participation may lower labor expenses, allow higher staff wage, while producing a lower gross margin than most existing commerical food outlets.

Successful member participation programs are crucial in reaching members' social goals while maintaining the cooperative's economic viability. The enjoyment of participation in cooperative activity without regard to immediate economic returns has to a large extent made the growth of the food cooperative movement possible. Our study of the member participation programs found that programs which assign members to small groups or teams responsible for specific tasks produces significantly higher participation. These programs allow the individual co-op member to have personally rewarding participation by facilitating the development of appropriate skills, while allowing participants to identify their contribution in a manner that encourages self reward and direction. The survey results indicate that these concerns are of more importance to the development of participation programs than the use of discount rates, purchase limits or mandatory work requirements. These other programs may be useful in fine tuning the offerings of member labor or to reach

criteria of equity among participants and non-participants. They are not, however, sufficient to overcome unrewarding work experiences.

Financial data from the cooperative stores indicates that in general the stores are viable operations capable of distributing food products at cost margins equal to or lower than commercial outlets. Consumer participation programs appear to help stores reduce their gross margins, however economies of size may be more important. Even if size economies result in cooperatives expanding until consumer participation is no longer practicable, participation appears to be a very important factor in cooperative development. Without it small cooperatives would have to charge higher gross margins, possibly losing their competitive position in the market. Consumer participation also helps to build the loyalty and leadership in the organization.

Three areas in need of further study emerge from analysis of the survey returns. The first area is the need to understand the nature of product expansion, particularly the relationship among larger cooperative stores, the federation warehouses, and smaller cooperatives. Identification of the necessary scale of operation in warehousing to allow the federation to act as a full line wholesaler is important. A full line wholesale operation would free staff resources at the retail level. Small, emerging, or geographically isolated cooperatives would also benefit from a full line warehouse. The second area in need of further research is the design of effective member participation programs, particularly the possibilities of extending programs to stores with larger volumes. The design of training programs directed toward the handling requirements associated with continued product expansion may also require further study. The third area of study is the design of record keeping

systems designed to meet the scale and operational style of cooperative stores. Such a system should include cost control measures for use of staff and consumer labor and an inventory system directed toward better use of limited space and more efficient capitalization of the cooperative stores.

Appendix

Appendix 1A: Preorder Cooperative Respondents Grouped by Federation

MFOFC

Adrian Food Co-op, Adrian, MI
Archbold Food Co-op, Archbold, Ohio
Battle Creek Food Co-op, Battle Creek, MI
Blue Water, Bad Axe, MI
Calico Kitchen, Farmington Hills, MI
Camden Food Co-op, Hoe, Ind.
Celebration Foods, Midland, MI
Centerline Food, Centerline, MI
Cheese, Etc. Troy, MI
Down to Earch, Quincy, MI
Edmore Food Co-op, Edmore, MI
Food Cellar, Ann Arbor, MI
Food for Thought, South Bend, Ind.
4 Quarters, Wyandotte, MI
Full Moon Food Co-op, Flint, MI
The Grainery, Sterling Heights, MI
Grand Blanc Co-op, Grand Blanc, MI
Happy and Healthy Homes, Merrill, MI
HIS Food Co-op, Utica, MI
Holly Harvesters Co-op, Holly, MI
Karma Co-op, Midland, MI
Mother's Cupboard, Alvadton, Ohio
Northside Food Co-op, Jackson, MI
The Pantry, Ann Arbor, MI
Pleasant Lake, Pleasant Lake, MI
Rochester Food Co-op, Rochester, MI
Senior Food Co-op, Kalamazoo, MI
Southfield Food Co-op, Southfield, MI
Warm Hearth, Flint, MI
Washington Natural Foods, Washington, MI
Whammo, Plymouth, MI
WOW Food Co-op, Owosso, MI

FORC

Bradfordsville Knowbs, Bradfordsville, KY
Cedar Creek Co-op, Owenton, KY
Common Ground Buying Club, Jackson County, WV
Sumberland Food, Monticello, KY
Delaware Food Co-op, Delaware Ohio
Honey Creek, New Carlisle, Ohio
Jubilee Food Co-op, Columbus, Ohio
Know County Co-op, Mt. Vernon, Ohio
White Oak Buying Club, Chloe, WV

Appendix 1A, Continued

ICC

Bay de Noc Buyers, Rapid River, MI
Beggar's Banquet, Reedsburg, WI
Big Dipper Food Co-op, Wausau, Wisc.
Bloom Community Co-op, Bloom City, Wisc.
Chicken Coop, Marengo, Ill.
Cheap Grits, Tomah, Wisc.
Freeport Food Co-op, Freeport, Ill.
Gladstone Buying Club, Gladstone, Wisc.
Lakeshore Whole Foods, Maribel, Wisc.

Appendix 1B. Cooperative Stores Grouped by Federation

Michigan Federation of Food Cooperatives

East Lansing Food Co-op, East Lansing, MI
Cass Corridor, Detroit, MI
Eart Food Co-op, Toledo, MI
Millbrook Co-op, Millbrook, MI
Northeast Community Co-op, Grand Rapids, MI
Grain Train, Petosky, MI
Good-N-Plenty, Warren, MI
Oryana, Traverse City, MI
People's Food Co-op, Ann Arbor, MI
People's Food Co-op, Kalamazoo, MI
Rainbow Natural Grocery, South Bend, IND.
Stone Soup, Royal Oak, MI
3 For 3 Food Co-op, Highland Park, MI
Thunder Bay Natural Foods, Alpena, MI
Eastown Food Co-op, Grand Rapids, MI
Wolf Moon Food Co-op, Lansing, MI

Federation of Ohio River Cooperatives

Mud River Pantry, Hamlin, W. Va.
Loveland County Co-op, Loveland, Ohio
Athen's Food Co-op, Athens, Ohio
Sixteenth Avenue Food Co-op, Columbus, Ohio
Cincinnati Food Co-op, Cincinnati, Ohio
Nature's Way Food Co-op
Earlham Food Co-op, Richmond, Ind.

Greater Illinois Peoples' Cooperative

Uptown Neighborhood Co-op, Chicago, Ill.
Rainbow Grocery, Chicago, Ill.

Intra Community Cooperative

Williamson St. Grocery Co-op, Madison, Wisc.
Eagle Heights Co-op, Madison, Wisc.
Langdon Area Grocery Collective, Madison, Wisc.
Greenleaf Grocery, Madison, Wisc.
Bits & Pieces, Waukesha, Wisc.
Straddle Creek, Savanna, ILL.
Milwaukee Cooperative Foods, Milwaukee, Wisc.
N.E.W. Whole Food Co-op, Green Bay, Wisc.
Outpost Natural Foods, Milwaukee, Wisc.
Gordon Park, Milwaukee, Wisc.
Duck Soup Coop, Dekalb, Ill.

Distributive Alliance of the North Country

North East Whole Foods Co-op, Minneapolis, Minn.
Community Foods Co-op, Mankato, Minn.
Suryata, Eau Claire, Wisc.
Rochester Food Co-op, Rochester, Minn.
Southeast Co-op, Minneapolis, Minn.
Famine Foods, Winona, Minn.
Family Food Co-op, Marshall, Minn.
Munising Food Co-op, Munising, MI.
Peoples' Food Co-op, St. Cloud, MI.
Merri-Grove Community Foods, St. Paul, Minn.
Heartland Cooperative Inc., Little Falls, Minn.

Common Health

Keweenaw Co-op, Hancock, MI.
Cook County Whole Foods, Grand Marais, Minn.

Appendix 1C

Survey Cover Letter
Preorder Cooperative Survey
Cooperative Store Survey

Food Co-op Survey Collective
Room 8, Agriculture Hall
Michigan State University
East Lansing, Michigan 48823

Dear Cooperator:

Enclosed please find two copies of a survey of food cooperatives. One copy should be completed and returned to the above address; the other is for your records. The usefulness of this survey to you and us depends upon your participation, therefore, let us explain what we are doing and how it will benefit your co-op.

Surveys have been sent to over 250 co-ops in Wisconsin, Michigan, Ohio, Kentucky, Indiana, and Illinois. To reach this many cooperatives we have contacted and received the cooperation of staff persons on regional cooperative councils and federations. In general, these persons felt the information generated by this survey will help cooperatives. The survey results will be published by the department of Agricultural Economics at Michigan State University.

Cooperatives that participate will receive three copies of the survey results. If more than 10 co-ops respond from one federation or council, the information will be split out and summarized for that regional group. Individual co-op surveys will be kept confidential, but you will be able to compare your co-op with group average results presented in our report. This may suggest ways to strengthen your co-op.

This survey will also help midwestern cooperatives by providing feedback to the proposed national consumers cooperative bank. At present, little information exists to insure that the preferences, needs and accomplishments of food cooperatives are considered in bank organization and operation. A bank loan policy, for example, that helps co-ops move into a 25,000 square foot supermarket may not be what you want. Filling this information gap may in the long run be the most important contribution of this survey.

We realize that this survey will take some time and effort. But we are united in our desire to strengthen the cooperative movement. The quicker you return the survey, the quicker you will receive the results, and the more we can do for co-ops.

Sincerely,

Dottie Sandburg
Communications Coordinator
ICC Cooperative Council

Paul Brown
Secretary Michigan Federation of
Food Cooperatives

Janice Randolph
Communications Person
Federation of Ohio River Co-ops (FORC)

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Pre-Order
1978

Food Co-op Survey Collective
Room 8, Agriculture Hall
Michigan State University
East Lansing, Michigan 48823

SURVEY OF FOOD COOPERATIVES

Instructions

Please answer the following questions. This survey is shorter than it appears to be because you will skip several questions that are not relevant to your particular form of organization. You skip irrelevant questions by following the "GO TO" commands attached to specific answers of key questions. To save time and avoid confusion, start on page 1 and proceed straight through the survey's questions.

In this survey, we ask for information on your co-op's board of directors, staff, clerks and manager. Of course, if you do not have one or more of these you will indicate this fact, however, do not interpret these terms narrowly. Each is defined below to help you classify your personnel properly:

board of directors - co-op patrons elected by the membership to serve a set term and oversee co-op operations.

staff - persons appointed or hired to assume responsibility for the actual running of the co-op. A staff position may be part time, with or without pay. It is a permanent position that does not rotate among members.

non-staff labor (clerks) - persons who work regularly for a wage but do not make management decisions.

manager - a staff member who has more authority and responsibility than other staff members.

Your steering committee, for example, may be what we call the "board of directors", your collective may be the "staff" for the purposes of this survey.

I. General Information

Name of Cooperative_____ Telephone_____

Address_____

Person(s) Answering Survey_____

1. How many persons buy food at your co-op? _____

2. What percent of these food purchasers are members of your food co-op? _____

3. Do you maintain a membership list? _____ Yes
_____ No

4. What percent of co-op members are in the following age groups?

_____ Under 25
_____ 26 - 35
_____ 36 - 59
_____ Over 60

5. What percent of members arrive by:

_____ foot or bicycle
_____ car
_____ bus

6. If your co-op has lines of business in addition to retail food sales, please describe and indicate the annual sales of each other line of business.

Please answer the remaining questions for only your retail food operations.

II. Supply and Product Mix

1. How many suppliers do you have? _____

2. How many deliver to your co-op? _____

3. How many deliveries do you receive per month? _____

4. How many pick-ups from suppliers do you make per month? _____

5. Two codes listed below are to be applied to the following list of commodities. The first code shows interest. The second code refers to suppliers.

Interest Code

1) carried by our co-op.
2) interested in carrying but no supplier.
3) interested in carrying but limitations other than lack of supply.
4) not interested in carrying.

Supply Code

a) obtained from People's Warehouse.
b) obtained from other consumer cooperatives.
c) obtained direct from local producers/producer co-ops.
d) obtained from a commercial wholesaler.
e) do not carry.
f) other source.

_____ dairy products
_____ eggs
_____ pre-baked goods
_____ flours, grains, beans, noodles
_____ dried fruits and nuts
_____ canned and other processed goods
_____ fresh produce
_____ fresh meat
_____ frozen goods
_____ carbonated beverages
_____ fruit juices
_____ alcoholic beverages
_____ tobacco
_____ health and personal hygiene goods
_____ household goods (detergents, cleaning aids, paper and wrap produ
_____ books and pamphlets
_____ pet supplies

6. Do you supply other consumer co-ops with food products? _____ Yes _____ No

7. Has a commercial wholesaler refused to supply you? _____ Yes _____ No (GO TO QUESTION

a. What reasons were given?

_____ Your volume is too small
_____ Your ability to pay seemed questionable
_____ Doesn't sell to co-ops.
_____ Other (please specify)

8. Please estimate the percent of the co-op's products (total dollar volume) that are repackaged into smaller proportions by co-op workers. _____%

III. Decision-Making Analysis

1. Is your co-op incorporated? _____ Yes
_____ No

2. How many general membership meetings were held during the past 12 months? _____

3. Does the co-op have a board of directors, steering committee, etc.? _____ Yes
_____ No (GO TO QUESTION 4)

   a. How many members does the board have? _____

   b. What is the length of their term of office? _____

   c. How many board members have resigned during the past 2 years? _____

   d. Do board members have functional (finance, labor policies, etc.) assignments? _____ Yes
_____ No

   e. Are board members <u>required</u> to perform other work in the co-op? _____ Yes
_____ No

   f. How many board meetings were held during the past 12 months? _____

   g. Please complete one row of the following table for each member of the board of directors. (If more than 5 please list others on an extra sheet of paper and attach.

	Age	Sex	Years of formal education	Years of management experience in other businesses	Occupation	Months on board of directors
1.						
2.						

4. Does your co-op have staff persons (coordinators, co-managers, workers in a collective)? (A staff person has day-to-day responsibility for ordering, pricing, and so on. A paid checkout clerk, for example, is not a staff person for the purposes of this survey.)

_____ Yes
_____ No (GO TO QUESTION 5)

a. How many staff persons does your co-op have? _____

b. How many staff persons did your co-op have 2 years ago? _____

c. How many staff persons has your co-op hired during the past 2 years? (Include staff hired to replace departing staff as well as those who filled new positions.) _____

d. How many staff have been with the co-op since its formation? _____

e. Is one of the staff designated as the co-op's manager?

_____ Yes
_____ No

f. Please complete one row of the following table for each staff member.

	Age	Sex	Years of formal education excluding Kindergarten	Years of management experience in other businesses	Months of service at Co-op	Wage Rate
1.						
2.						
3.						
4.						
5.						

5. A list of decisions that co-ops commonly face is provided below. Please mark the appropriate column with the following symbols.

   x = group which normally develops the proposal.
   o = group which normally decides to implement the proposal.

Decisions	Manager	Staff	Board of Directors	Standing Committee	General Membership Meeting
a. To change general pricing strategy. (For example, establishing a discount for senior citizens, or a direct charge co-op.)					
b. To change the level of mark-up (increase or decrease in prices).					
c. To change member work requirements.					
d. To hire or appoint a staff member.					
e. To change the level of compensation.					
f. To move to a new location.					
g. To limit expansion of co-op.					
h. To initiate a campaign to increase membership.					
i. To handle a new product.					
j. To boycott a product in support of a social or political cause.					
k. To discontinue handling a product for any reason other than boycott.					
l. To purchase new equipment that costs more than $50 for co-op, from co-op surplus.					
m. To borrow money for less than 1 year.					
n. To borrow money for more than 1 year.					

6. Are all co-op decisions based upon the one wo/man one vote principle?

   _____ Yes
   _____ No

IV. Activity Analysis

1. What percent of members work in the co-op? _____

2. What percent of workers are women? _____

3. Estimate the average number of hours per month that a member works for the co-op. _____

   a. How many members work three times more than average? _____

   b. If your member-work policy changed during your most recently completed fiscal year, please give the dates and nature of changes.

4. Estimate the percent of time spent:

   collating member orders _____

   placing orders with suppliers _____

   assembling and unloading food at distribution point _____

   packaging and pricing _____

   bookkeeping _____

   other (please describe) _____

5. How are jobs allocated to members?

   _____ members sign up for task/time slot
   _____ assinged to individuals as needed
   _____ assinged to individuals and rotated on a set schedule
   _____ members join work teams and teams rotate

6. How are new members trained?

   _____ experienced members show them how on the job
   _____ written instruction
   _____ special training sessions
   _____ other (please describe)

V. Marketing Analysis

1. How long has the co-op been in business? _____

2. How many times per month do you distribute food? _____

3. How many months per year does the co-op operate? _____

4. Does your distribution system branch out from a center to several neighborhood pick-up points? _____ Yes _____ No

5. Does the location of the co-op's distribution point (or points) vary from month to month? _____ Yes _____ No

   a. If yes, what determines location?

   b. If no, please indicate the square feet of space devoted to: (If possible measure to obtain an accurate figure.)

      1) selling _____

      2) storage _____

6. Rank these pricing strategies in order of their importance for your co-op. (If a strategy is not considered at all, leave blank.)

   a percent: constant for all products _____

   a percent: variable according to a product's size, perishability or turnover _____

   a percent: variable by size of purchase _____

   a percent: variable according to nutritional value, degree of processing or producer identity _____

   priced to meet competition _____

   priced to sell below competition _____

   use a direct charge that is paid periodically by members (for example, monthly dues) _____

7. Do you offer special discounts for senior citizens or other groups such as members who work or pay buying deposits? _____ Yes _____ No

   a. If so identify groups and the size of the discount.

   b. What percent of your total membership takes advantage of each discount?

   c. If this policy changed during your most recent completed fiscal year, give the dates and nature of the changes.

8. Which of the following best describes the pricing strategy of your co-op?

   cover co-op's costs _____

   cover co-op's costs plus a surplus for working capital and expansion _____

   generates as much surplus as possible and rebated any excess to consumers _____

9. If your co-op developed a surplus and returned it to patrons, did it:

   pay each member a rebate proportional to his patronage during the past year _____ Yes _____ No

   divide it equally among members _____ Yes _____ No

   lower prices until the surplus was gone _____ Yes _____ No

10. Do you have any special projects to generate revenue? _____ Yes _____ No

    a. If yes, how much was generated during the last fiscal year? _____

11. How many days lapse between a member's ordering of food and picking up the food? _____

12. Must a member order groceries by the case?
_____ Yes
_____ No

13. Must a member:

pay when ordering groceries?
_____ Yes
_____ No

pay when picking-up groceries?
_____ Yes
_____ No

14. If your pre-order co-op continues to attract new members, you may be forced to chose between the following alternatives. Please rank them in order of your preference.

_____ simple get larger.
_____ limit number of members and set up a waiting list.
_____ restructure the co-op to handle more members (such as establishing a federation of smaller buying clubs [brank co-ops] within your co-op).
_____ limit membership and help applicants set up their own pre-order co-op.
_____ become a storefront co-op.

VI. Financial Analysis

These questions can be easily answered by referring to the income (surplus/loss) statement for your most recent fiscal year and the year's ending balance sheet.

1. What were gross retail sales during the co-op's most recent fiscal year? _____

2. What was the gross margin (percent) during the co-op's most recent fiscal year? _____

3. What was the value of inventory at the beginning and end of the fiscal year?

_____ beginning
_____ ending

4. What was the cost of goods purchased during the last fiscal year? (This is the dollar sum paid to suppliers for goods and transportation charges. It should not include refundable buying deposits paid to suppliers.) _____

5. What were the co-op's operating expenses during the last fiscal year? _____

6. What were total labor expenses, including social security, FICA, and fringe benefits during the last fiscal year? _____

7. What were total rent or mortgage expenses during the last fiscal year? _____

8. What were your total assets at the end of the fiscal year? _____

9. Give the dollar value of the following at the end of the fiscal year:

buying deposits with suppliers _____
accounts payable _____
loans from members _____
loans from external sources _____
retained earnings _____
refundable member buying deposits _____
non-refundable member buying deposits _____
donations _____
equity issues (stock in your cooperative) _____

10. Circle the number of fiscal years for which you have financial records (income and expense statements, balance sheets).

1 year
2 years
3 years
4 years
5 or more years

11. On what date does your fiscal year begin? _____

VII. History and Goals

1. Was your co-op formed by members of a previous co-op?
_____ Yes
_____ No (GO TO QUESTION

2. Is that co-op still in existence?
_____ Yes
_____ No

3. Was that co-op a:

_____ pre-order
_____ storefront

Please Return to:

Storefront
1978

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Address_____

Person(s) Answering Survey_____

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2. What percent of these food purchasers are members of your food co-op? _____

3. Do you maintain a membership list? _____ Yes
_____ No

4. What percent of co-op members are in the following age groups?

_____ Under 25
_____ 26 - 35
_____ 36 - 59
_____ Over 60

5. What percent of members arrive by:

_____ foot or bicycle
_____ car
_____ bus

6. If your co-op has lines of business in addition to retail food sales, please describe and indicate the annual sales of each other line of business.

Please answer the remaining questions for only your retail food operations.

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1. How many suppliers do you have? _____

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3. How many deliveries do you receive per month? _____

4. How many pick-ups from suppliers do you make per month? _____

5. Two codes listed below are to be applied to the following list of commodities. The first code shows interest. The second code refers to suppliers.

Interest Code

1) carried by our co-op.
2) interested in carrying but no supplier.
3) interested in carrying but limitations other than lack of supply.
4) not interested in carrying.

Supply Code

a) obtained from People's Warehouse.
b) obtained from other consumer cooperatives.
c) obtained direct from local producers/producer co-ops.
d) obtained from a commercial wholesaler.
e) do not carry.
f) other source.

_____ dairy products
_____ eggs
_____ pre-baked goods
_____ flours, grains, beans, noodles
_____ dried fruits and nuts
_____ canned and other processed goods
_____ fresh produce
_____ fresh meat
_____ frozen goods
_____ carbonated beverages
_____ fruit juices
_____ alcoholic beverages
_____ tobacco
_____ health and personal hygiene goods
_____ household goods (detergents, cleaning aids, paper and wrap produ
_____ books and pamphlets
_____ pet supplies

6. Do you supply other consumer co-ops with food products? _____ Yes
_____ No

7. Has a commercial wholesaler refused to supply you? _____ Yes
_____ No (GO T
QUESTION

a. What reasons were given?

_____ Your volume is too small
_____ Your ability to pay seemed questionable
_____ Doesn't sell to co-ops.
_____ Other (please specify)

8. Please estimate the percent of the co-op's products (total dollar volume) that are repackaged into smaller proportions by co-op workers. _____%

III. Decision-Making Analysis

1. Is your co-op incorporated? _____ Yes
_____ No

2. How many general membership meetings were held during the past 12 months? _____

3. Does the co-op have a board of directors, steering committee, etc.? _____ Yes
_____ No (GO TO QUESTION

a. How many members does the board have? _____

b. What is the length of their term of office? _____

c. How many board members have resigned during the past 2 years? _____

d. Do board members have functional (finance, labor policies, etc.) assignments? _____ Yes
_____ No

e. Are board members <u>required</u> to perform other work in the co-op? _____ Yes
_____ No

f. How many board meetings were held during the past 12 months? _____

g. Please complete one row of the following table for each member of the board of directors. (If more than 5 please list others on an extra sheet of paper and attach.

	Age	Sex	Years of formal education excluding Kindergarten	Years of management experience in other businesses	Occupation	Months on board of directors
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2.						
3.						
4.						
5.						

4. Does your co-op have staff persons (coordinators, co-managers, workers in a collective)? (A staff person has day-to-day responsibility for ordering, pricing, and so on. A paid checkout clerk, for example, is not a staff person for the purposes of this survey.)

_____ Yes
_____ No (GO T
QUESTIO

a. How many staff persons does your co-op have? _____

b. How many staff persons did your co-op have 2 years ago? _____

c. How many staff persons has your co-op hired during the past 2 years? (Include staff hired to replace departing staff as well as those who filled new positions.) _____

d. How many staff have been with the co-op since its formation? _____

e. Is one of the staff designated as the co-op's manager?

_____ Yes
_____ No

f. Please complete one row of the following table for each staff member.

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2.						
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Decisions	Manager	Staff	Board of Directors	Standing Committee	General Members' Meeting
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c. To change member work requirements.					
d. To hire or appoint a staff member.					
e. To change the level of compensation.					
f. To move to a new location.					
g. To limit expansion of co-op.					
h. To initiate a campaign to increase membership.					
i. To handle a new product.					
j. To boycott a product in support of a social or political cause.					
k. To discontinue handling a product for any reason other than boycott.					
l. To purchase new equipment that costs more than $50 for co-op, from co-op surplus.					
m. To borrow money for less than 1 year.					
n. To borrow money for more than 1 year.					

6. Are all co-op decisions based upon the one wo/man one vote principle?

   _____ Yes
   _____ No

IV. Activity Analysis

1. In addition to staff, does your co-op have paid workers (such as checkout clerks)?

_____ Yes
_____ No (GO T
QUESTIO..

2. How many hours per week total do these non-staff persons work? _____

3. If any of the co-op's wages were subsidized by public funds such as C.E.T.A. please indicate:

   a. The number of hours in the last year. _____

   b. The government subsidy per hour. _____

4. Estimate the percent of staff labor, paid non-staff labor, and member labor spent on each of the following:

Functions	Staff	Paid Non-Staff	Members
a. ordering			
b. unloading			
c. packaging, pricing, and stocking			
d. sanitation			
e. checkout			
f. promotion			
g. bookkeeping			
h. other (please describe			
TOTAL	100 Percent	100 Percent	100 Percent

5. Do members work in the co-op?

_____ Yes
_____ No (GO T
SECTION
MARKETING ANALY

V. Marketing Analysis

1. How long has the co-op been in business? _____

2. How many times per month do you distribute food? _____

3. How many months per year does the co-op operate? _____

4. Does your distribution system branch out from a center to several neighborhood pick-up points? _____ Yes _____ No

5. Does the location of the co-op's distribution point (or points) vary from month to month? _____ Yes _____ No

   a. If yes, what determines location?

   b. If no, please indicate the square feet of space devoted to: (If possible measure to obtain an accurate figure.)

      1) selling _____

      2) storage _____

6. Rank these pricing strategies in order of their importance for your co-op. (If a strategy is not considered at all, leave blank.)

   a percent: constant for all products _____

   a percent: variable according to a product's size, perishability or turnover _____

   a percent: variable by size of purchase _____

   a percent: variable according to nutritional value, degree of processing or producer identity _____

   priced to meet competition _____

   priced to sell below competition _____

   use a direct charge that is paid periodically by members (for example, monthly dues) _____

5. Please indicate total square feet allocated to:
(If possible, measure to obtain an accurate figure)

   a. selling space _____

   b. storage space _____

6. Name, in order of their importance, your three strongest competitors. Also please indicate whether each is a 1) supermarket, 2) convenience store (such as 7-11), or 3) health food store.

   a. _____

   b. _____

   c. _____

7. How far is your co-op from your strongest competition? _____

8. Indicate how often you check your competitors' prices:

   _____ very seldom
   _____ monthly
   _____ weekly

9. Indicate how often you provide current price comparison data to your members.

   _____ very seldom
   _____ monthly
   _____ weekly

10. Compare and rank these pricing strategies in order of their importance for your co-op. (If a strategy is not considered at all, leave blank.)

   a percent: constant for all products. _____

   a percent: variable according to a product's size, perishability, or turnover. _____

   a percent: variable by size of purchase. _____

   a percent: variable according to nutritional value, degree of processing or producer identity. _____

   price to meet competition. _____

   price to sell below competition. _____

   a direct charge that is paid periodically by members (for example, monthly dues). _____

11. How many days lapse between a member's ordering of food and picking up the food? _____

12. Must a member order groceries by the case? _____ Yes _____ No

13. Must a member:

pay when ordering groceries? _____ Yes _____ No

pay when picking-up groceries? _____ Yes _____ No

14. If your pre-order co-op continues to attract new members, you may be forced to chose between the following alternatives. Please rank them in order of your preference.

_____ simple get larger.
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_____ limit membership and help applicants set up their own pre-order co-op.
_____ become a storefront co-op.

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3. What was the value of inventory at the beginning and end of the fiscal year?

_____ beginning
_____ ending

4. What was the cost of goods purchased during the last fiscal year? (This is the dollar sum paid to suppliers for goods and transportation charges. It should not include refundable buying deposits paid to suppliers.) _____

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3. What was the value of inventory at the beginning and end of the fiscal year?

   _____ beginning
   _____ ending

4. What was the cost of goods purchased during the last fiscal year? (This is the dollar sum paid to suppliers for goods and transportation charges. It should not include refundable buying deposits paid to suppliers.) _____

5. What were the co-op's operating expenses during the last fiscal year? _____

6. What were total labor expenses, including social security, FICA, and fringe benefits during the last fiscal year? _____

7. What were total rent or mortgage expenses during the last fiscal year? _____

8. What were your total assets at the end of the fiscal year? _____

9. Give the dollar value of the following at the end of the fiscal year:

   buying deposits with suppliers _____
   accounts payable _____
   loans from members _____
   loans from external sources _____
   retained earnings _____
   refundable member buying deposits _____
   non-refundable member buying deposits _____
   donations _____
   equity issues (stock in your cooperative) _____

4. Would you like co-op membership to:

_____ increase
_____ remain the same
_____ decrease

5. Would you like sales volume to:

_____ increase
_____ remain the same
_____ decrease

6. What is the major impediment to attaining your desired sales volume?

7. If additional capital were available to your co-op how would it be used?

8. Rank the following reasons in order of importance in the formulation of your co-op.

_____ improved produce selection
_____ improved food quality
_____ community development/group autonomy
_____ social/political reasons
_____ improved personal service
_____ other (please specify)

9. Your co-op offers a mix of services to it patrons. You may be striving to offer "good" services and to avoid "unneeded frills". For the following list fill in the symbol that is most consistent with your co-op's actions and goals.

✓ = offered by co-op

\+ = not offered but would like to offer

o = not offered and not desirable

_____ provide all products desired by members.
_____ provide more than one brand of a product.
_____ provide only healthy and safe products.
_____ provide containers for bulk purchases.
_____ bag shoppers' groceries for them.
_____ cash personal checks for more than amount of purchase.
_____ extend credit.
_____ provide nutrition information on products.
_____ provide general nutrition information.
_____ provide education on cooperatives.
_____ provide education on conventional and alternative food systems.
_____ provide a cutting edge for consumer action on food costs.
_____ provide a cutting edge for social/economic/political action.
_____ provide a distribution system consistent with religious beliefs.
_____ provide a distribution system emphasizing individual awareness, action, and control.
_____ provide reading corner, lounge, or some other form of community space.

8. Rank the following reasons in order of importance in the formulation of your co-op.

_____	improved product selection	_____	social/political reasons
_____	improved food quality	_____	improved personal service
_____	community development/group autonomy	_____	other (please specify)

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_____ provide a cutting edge for social/economic/political action.
_____ provide a distribution system consistent with religious beliefs.
_____ provide a distribution system emphasizing individual awareness, action, and control.
_____ provide reading corner, lounge, or some other form of community space.
_____ sponsor social events.

B U L L E T I N

STATE TAXATION OF COOPERATIVES
Issued by Revenue Division
Michigan Department of Treasury

As a general rule cooperatives are subject to the same Michigan taxes that apply to similar business enterprises in this state.

The five state taxes most likely to apply to a cooperative venture are the sales, use, single business, motor fuel, and employee withholding taxes, administered by the Michigan Department of Treasury. Inquiries about any of these taxes should be addressed to the Revenue Division, Michigan Department of Treasury, Treasury Building, Lansing, Michigan 48922.

Sales Tax:

Under the current law, any kind of business organization engaging in a regular and continuous selling of tangible property requires a sales tax license. Such a license is obtained by completing a prescribed registration form and submitting with a remittance of $1.00 to cover the annual license fee.

Based on the information contained on the application form, it may be necessary for an applicant to post a surety or cash bond to insure the proper filing of monthly or quarterly returns, with payment of any tax due.

As a general rule, the department does not consider cooperative buying clubs as retailers of tangible property. Such clubs are subject to tax based on the purchase price of the tangible property they purchase for distribution to participants, if such property is taxable under the current laws.

There is one misconception which has developed with reference to buying clubs. For one reason or another some clubs have been advised by the wholesale supplier that they need a sales tax license if they wish to buy at wholesale prices. This is not true. There is no provision in the sales tax law which prescribes the prices a merchant charges to his customers. The only limitation in the law is the requirement that to purchase merchandise tax exempt for 'resale' purposes it is mandatory that the seller obtain from the buyer his sales tax license number. This indicates the purchaser is properly licensed to buy the merchandise being acquired without payment of sales tax.

Any person, including cooperatives, licensed as a retailer, is required to file monthly, quarterly, or annual tax returns. Failure to file the returns by the due date will result in a penalty rate of 5% of the tax for each month a return is delinquent, up to a maximum of 25%, plus interest accruing at the rate of 3/4 of 1% (9% per year) from the date the tax was due until paid.

Use Tax:

The use tax is complementary to the sales tax and requires payment of a 4% tax on any merchandise purchased or rented from an out-of-state seller. In addition,

use tax applies on telephone charges, the rental of accommodations, and transfers of vehicles, airplanes, watercraft, and snowmobiles from one private owner to another.

Single Business Tax:

This tax is imposed on all persons, including cooperatives, having gross receipts in excess of $40,000.00 per year. Section 35(1)(c) of the Act exempts from the tax any person who qualifies for exemption from federal taxes under Section 501c of the Internal Revenue Code. Section 35(1)(g) exempts a nonprofit cooperative housing corporation.

Those cooperatives not qualified as exempt under the federal code and who have gross receipts in excess of $40,000.00 should register with the Revenue Division to obtain filing instructions and reporting forms. The cooperative is required to file an annual return by the last day of the fourth month after the end of the tax year. If the estimated annual liability exceeds $500.00, quarterly returns are also required.

Motor Fuel:

A cooperative that operates as a wholesale distributor of gasoline must register with the Revenue Division and remit the 11¢ per gallon gasoline tax that applies on all gasoline received. The annual license fee is $5.00.

A cooperative operating as a retail dealer of gasoline must also register with the Revenue Division. However, the 11¢ per gallon gasoline tax is paid to the wholesale distributor from whom the retailer purchases the gasoline. The retail dealer will require a sales tax license and will collect and remit the 4% sales tax direct to the department.

Registration for these taxes is handled by the Motor Fuel Division.

Income Withholding:

All employers in Michigan, including cooperatives, are required to withhold the state personal income tax of 4.6% from all employees. Registration for payment of taxes withheld is also handled by the Registration Division.

APPENDIX 2.B Non Federation Sources of Supply of 34 Preorder Cooperatives by Product Category

Product Category	Consumer Cooperative	Local Producer	Commercial Wholesaler	Other
Dairy Products	2	1	4	
Eggs		13	2	
PreBaked Goods		4	4	
Flour/Beans	1		4	
Dried Fruit/Nuts	2		4	
Canned Goods	2		5	
Fresh Produce		3	8	
Fresh Meat		1	1	
Frozen Goods			3	
Carbonated Beverages	1		2	
Fruit Juices	2		6	
Alcoholic Beverages				
Tobacco				
Health Goods	2	1	5	
Household Goods	1		6	
Books	2	1	5	1
Pet Supplies			1	
TOTAL	15	24	60	1

Appendix 2.C Data Base for Figure 2.2 — The Number of Product Categories Carried Arrayed by Age of Preorder Cooperative

M. F. O. F. C.

Preorder Number	Age	# of Product Categories
1	36	5
2	60	7
5	18	7
6	40	9
7	30	11
8	24	3
9	15	5
10	7	6
11	15	4
13	48	10
15	30	9
17	72	4
18	3	4
19	15	2
20	30	8
21	30	8
22	6	4
23	30	8
25	26	8
26	48	6
29	72	9
31	42	6
32	24	8
47	36	7

I. C. C.

Preorder Number	Age	# of Product Categories
14	12	10
35	36	5
36	9	8
38	9	9
39	5	10
41	30	12
48	4	7

F. O. R. C.

Preorder Number	Age	# of Product Categories
34	18	4
36	36	7
42	8	4
44	11	8
45	2	6
46	13	6
49	12	5
50	8	8
52	24	7

Appendix 2.D Computation of Decision Making Indicies

The column headed manager was given a value of one, staff two, board of directors three, standing committee four, and general membership five. Many of the cooperatives marked more than one column of both the proposal development and decision to implement. Values for these columns were averaged. Several of the issues have not been faced by the preorder cooperatives. As a result some of the co-ops indicated how they would handle such a question, which was used in the calculations. As some did not respond the total of the columns was divided by the number of questions answered.

EXAMPLE:

2 decisions made by staff

4 decisions made by board of directors

2 decisions made by board of directors and/or membership

2 decisions made by membership

10

4 issues not yet faced

$2(2) + 4(3) + 2(3 + 5/2)) + 2(5) = 34$

$34/10 = 3.4$

Appendix 2.E. Data Base for Figure 2.6 Indices of Policy Proposal Development and Implementation Decentralization in Preorder Cooperatives Arrayed by Number of Households

Preorder Number	Development Indice	Implementation Indice	Number of Households
1	5.00	5.00	25
2	3.00	5.00	60
3	3.00	5.00	75
5	5.00	5.00	13
9	3.00	4.54	30
10	3.00	5.00	18
11	4.71	5.00	20
12	3.40	3.80	42
13	3.28	4.14	50
14	3.00	5.00	86
15	3.22	4.22	90
17	2.00	2.00	12
18	3.00	5.00	25
19	2.30	5.00	
20	3.00	3.67	100
21	5.00	5.00	43
23	1.00	5.00	40
24	5.00	5.00	42
27	4.40	5.00	26
28	2.60	4.50	130
29	3.00	3.00	300
31	3.20	3.30	175
32	3.00	5.00	30
36	3.57	4.85	35
37	5.00	5.00	9
39	4.15	5.00	25
41	2.54	4.46	75
43	5.00	5.00	22
44	4.00	5.00	75
45	2.00	5.00	18
47	5.00	5.00	26
48	5.00	5.00	7
49	1.70	3.20	75
51	4.00	4.00	40
52	2.00	4.65	45

Appendix 2.F, Regression Equations Estimating the Efficiency of Member Participation in Preorder Cooperatives With Less Than 100 Households

Eq. 1a) $P_{\$20} = 1.4957 + .0403S \quad r^2 = .9 \quad F = 2.92$
$\qquad\qquad\qquad\qquad\quad (1.71)$

Eq. 2a) $P_{\$20} = .8715 + .0755S - .0003S^2$
$\qquad\qquad\qquad\quad (.64) \qquad (.30)$

$r^2 = .14 \quad F = 1.44$

Eq. 3a) $P_{\$20} = 3.877 + .0245S - .00723CGP$
$\qquad\qquad\qquad\quad (1.01) \qquad (1.70)$

$r^2 = .25 \quad F = 3.05^*$

Eq. 4a) $P_{\$20} = 1.065 + .0633S - 3.619(P2) + 2.852\ (P3) - 2.703(P4)$
$\qquad\qquad\qquad\quad (2.69) \qquad (2.12) \qquad\quad (1.81) \qquad\quad (1.16)$

$R^2 = .41 \quad F = 2.79^*$

Appendix 3.B. Source of Supply for Cooperative Stores in 17 Product Categories

	Federation	Other Co-op/ Local Producer	Commercial Wholesaler
Flours, Beans, Noodles	49	1	4
Dried Fruit/Nuts	49	0	12
Fruit Juices	32	15	27
Canned Processed Goods	22	2	22
Household Goods	18	8	15
Dairy Products	19	30	27
Eggs	0	33	10
Pre-baked Goods	2	35	8
Fresh Produce	4	27	28
Health/Hygiene	8	10	27
Books	6	9	30
Frozen Goods	2	1	22
Pet Supplies	6	2	8
Carbonated Beverages	0	4	7
Fresh Meat	0	2	2
Alcoholic Beverages	0	0	2
Tobacco	0	0	1

Appendix 3.B. Data Base for Figure 3.7 and Table 3.5.

Case No.*	Store No.	Sales	Cons. Part. Rate	Training Methods				Allocation Method			
				On-The-Job	Exper. Member	Written Instr'n	Spec. Trng. Sn.	Signup Task/Times	Staff Assign.	Rotate Teams	Task Team
1	1	$104620	10%	1	0	0	0	1	0	0	0
	2	150000	45	1	0	0	0	1	1	0	0
2	3	226000	30	1	0	0	0	1	1	0	0
	4		5	1	0	1	0	1	1	0	0
3	5	25740	33	1	0	1	0	0	1	0	0
	6	6570	n.a.	1	0	0	0	1	0	0	0
4	7	117000	10	1	1	0	0	1	1	0	0
	8	n.a.	30	1	0	1	1	1	0	0	0
5	9	44000	25	1	0	1	0	1	1	0	0
6	10	260000	9	1	0	1	1	1	1	0	0
7W	11	279700	1	1	0	0	0	0	1	0	0
3W	12	112800	2	1	0	0	0	0	1	0	0
	13	50000	100	1	0	1	0	1	0	0	1
	14	100000	81	1	0	1	0	1	0	0	1
9	15	47900	28	1	0	0	0	1	0	0	0
10	16	268260	1	1	0	1	0	1	0	0	0
11W	17	125350	2	1	0	1	0	1	0	0	0
	18	106000	20	1	0	0	1	1	0	0	0
	19	100000	30	1	0	0	1	0	1	0	0
12	20	13010	13	1	0	0	1	1	0	0	0
	21	74000	54	1	1	0	0	1	1	0	1
13	22	73000	95	1	1	0	0	0	0	1	0
14	23	15000	86	1	0	1	0	1	0	0	0
	24	n.a.	100	1	0	1	0	1	0	0	0
	25	n.a.	30	1	1	1	1	1	0	0	1
15	26	45780	50	1	1	1	1	0	0	0	1
16	27	58890	5	1	0	0	0	0	1	0	0
17	28	300000	68	1	0	0	0	1	0	0	0
18	29	14400	25	1	0	1	0	1	1	0	1
	30	n.a.	20	1	0	0	0	0	1	0	0

Appendix 3.B. (continued)

Case No.*	Store No.	Sales	Cons. Part. Rate	Training Methods				Allocation Method			
				On-The-Job	Exper. Member	Written Instr'n	Spec. Trng. Sn.	Signup Task/Times	Staff Assign.	Rotate Teams	Task Team
19	31	68500	30	1	1	0	0	1	0	0	1
20	32	73150	18	1	0	1	0	1	1	1	1
21	33	53000	30	1	0	1	0	1	0	0	0
	34	13000	15	1	1	1	1	1	1	1	1
22	35	73480	75	1	0	1	1	0	0	0	1
23	36	187220	98	1	1	1	1	1	0	0	1
24	37	350000	2	1	0	1	1	1	0	0	0
	38	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	39	n.a.	4	1	0	0	1	0	1	0	0
25	40	63620	95	1	1	1	1	1	0	0	1
	41	103600	59	0	1	0	1	1	0	0	1
	42	502000	4	1	0	1	1	1	1	1	0
	43	632200	2	1	0	0	0	0	1	0	0
	44	400000	20	1	0	0	1	1	1	0	0
	45	375000	5	1	0	0	1	1	1	0	0
	46	30700	15	1	0	1	0	1	0	0	1
26W	47	207000	1	1	0	1	0	1	0	0	0
	48	n.a.	100	1	0	1	1	1	0	0	0
27	49	149100	16	1	0	0	0	1	0	0	0
	50	n.a.	n.a.	1	0	1	0	1	0	0	0

*Case numbers followed by a W indicate a worker cooperative.

Appendix 3.B. (continued)

Case No.	Store No.	Nominal* Discount	Discount/ hr/mon	COGS/ Patron	Development Indice	Implementation Indice
1	1	15	5	$105	2.64	3.29
	2	PR	n.a.	300	2.43	4.00
2	3	15	n.a.	161	n.a.	n.a.
	4	0	0	n.a.	n.a.	n.a.
3	5	V	n.a.	51	3.14	3.93
	6	0	0	n.a.	2.95	4.21
4	7	20	5	585	2.64	3.00
	8	n.a.	n.a.	n.a.	2.30	3.90
5	9	14	3.5	110	2.85	4.20
6	10	17	4.2	217	2.14	4.21
7W	11W	0	0	n.a.	2.00	3.85
8W	12W	10	1.67	161	2.00	2.00
	13	0	0	250	n.a.	n.a.
	14	0	0	444	2.69	2.77
9	15	16	n.a.	120	2.67	3.00
10	16	V	5.0	96	2.15	3.27
11W	17W	10	2.5	100	2.54	2.18
	18	V	n.a.	106	n.a.	n.a.
	19	0	0	100	2.96	3.96
12	20	25	6.25	130	3.86	4.64
	21	V	n.a.	93	3.07	4.29
13	22	0	0	215	1.3	3.31
14	23	10	2.5	167	3.17	4.67
	24	0	0	n.a.	n.a.	n.a.
	25	0	0	n.a.	4.00	5.00
15	26	20	n.a.	153	3.00	2.86
16	27	20	1.25	196	1.68	2.57
17	28	15	3.75	150	4.39	4.39
18	29	20	n.a.	48	3.03	3.33
	30	25	n.a.	n.a.	3.00	3.89

Appendix 3.B. (continued)

Case No.	Store No.	Nominal* Discount	Discount/ hr/mon	COGS/ Patron	Development Indice	Implementation Indice
19	31	10	5	n.a.	2.69	4.77
20	32	V	1.0	244	2.77	2.56
21	33	V	1.0	212	3.21	2.07
	34	V	n.a.	65	1.00	3.57
22	35	20	5.0	67	3.57	3.79
23	36	10	5.0	234	3.44	4.40
24	37	15	n.a.	175	2.71	3.71
	38	0	0	n.a.	3.00	2.33
	39	15	n.a.	n.a.	2.00	3.20
25	40	10	n.a.	127	2.50	2.79
	41	13	n.a.	159	3.00	1.66
	42	n.a.		100	2.79	2.47
	43W	0	0	181	2.07	2.18
	44	n.a.	n.a.	n.a.	2.00	2.79
	45	50	n.a.	341	2.24	3.38
	46	V	n.a.	61	3.37	3.56
26	47W	20	5.0	296	2.35	2.35
	48	0	0	n.a.	n.a.	n.a.
27	49	20	5	181	2.89	3.67
	50	0	0	n.a.	2.29	3.43

* PR Patronage refund
V Variable discount based on number of hours worked
NM No markup

Appendix 3.D. Wage Rates, Fringe Benefits, and Turnover Rates for Staff of Cooperative Stores - 1978

Case No.	Wage Rate	Fringe Benefits	Turnover Rate For Previous Two Years
1)F	$3.00		3.00
2)P	2.65	none	.35
3)F	4.65		1.00
5)F	3.25	subsidized (CETA)	n.a.
7)F	2.85	paid holidays	.33
9)F	3.00	paid vacations	.75
10)F	3.85	medical, vacat., sick day	1.16
11)F	3.00	n.a.	1.85
12)F	2.65	discount	1.00
13)P	3.50	none	1.0
14)P	2.65	none	4.67
15)F	2.65	n.a.	2.0
16)F	3.50	medical, paid vacation	.13
17)F	3.00	discount	.00
18)F	2.75	discount	.00
19)F	4.25	paid vacation	1.00
21)P	2.65	n.a.	1.00
22)P	5.26	paid vacation	1.00
27)P	V	discount	1.00
28)F	3.50	discount, vacation	.00
31)P	3.00	n.a.	n.a.
32)P	V	n.a.	1.00
33)P	2.65	n.a.	2.00
35)F	3.00	n.a.	3.00
36)F	3.00	n.a.	2.00
37)F	3.00	health, vacation	.87
39)P	3.00	n.a.	n.a.
40)F	2.65	n.a.	4.33
41)P	2.65	n.a.	1.50
42)F	3.65	holidays, vacat., sick	.67
43)F	3.50	n.a.	.11
44)F	3.75	n.a.	1.33
45)F	3.50	n.a.	.22
47)F	2.75	n.a.	2.00
49)F	2.65		2.00

F = full-time staff

P = part-time staff

V = varied and nominal salary

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