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Cooperative and Proprietary Firm Performance as Viewed by Their Customers

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This article examines farmers' assessment of the effectiveness of cooperatives as compared with proprietary firms in providing goods and services. The areas of consideration were marketing, market share, business functions, service, stability, and public involvement. Farmers indicated that cooperatives' greatest advantages were in the areas of service and public involvement. Respondents indicated that cooperatives were more willing to provide low profit products and services, establish programs that best met needs, and provide a more dependable source of supplies and services. They also provided a greater enhancement of welfare and in general reduced the risks facing farmers.

Cooperative managers often lack the needed information for proper evaluation of relative performance of cooperative and proprietary firms. In an effort to fill this need for management information, a survey was conducted jointly by the University of Delaware and the University of Maryland. Survey questions were concerned with customers' perceptions of cooperatives versus proprietary firms in several performance areas.

In a study of the performance of cooperatives versus proprietary firms in Illinois and Indiana, it was found that farmers believed that cooperatives performed better than private agribusinesses for most criteria studied (Boynton and Babb July 1982). Fairness and serving the special needs of farmers received the strongest support. However, younger farmers and those with more formal education rated private firms' performance the highest.

Policymakers and academic economists were asked about their perceptions of relative performance by cooperatives and proprietary firms (Lang, Babb, Boynton, and Schrader). They found that at the farm level cooperatives were expected to perform better, whereas at the marketing and processing level proprietary firms were expected to perform better. Respondents' opinions about consumer and broader public level performance were mixed.

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The authors wish to thank Mr. Douglas Etter for his assistance in collecting and coding the survey data. Project was in part funded under S-176.

Modest differences were found in buying and selling behavior among operators of farms of various sizes and types (Babb 1988). Cooperatives were almost as successful in getting the business of large farm operators as that of small and medium-sized farms. Additionally, use of other firms for financial and business services increased and use of production services decreased as farm size increased. The selling of production services appeared to be a strong point for cooperatives.

The objectives of this study were to: (1) evaluate perceptions of relative performance between cooperatives and proprietary firms, (2) evaluate the differences in perceptions by customer type, (3) assess relationships between customers' attitudes and relevant social-economic aspects, and (4) advise management of possible alternative courses of action available to improve the image of cooperatives.

Procedures

A survey was mailed in the fall of 1985 to a random cross section of 1,000 customers of cooperative stores in Maryland and Delaware. It is the authors' perception, in the absence of detailed studies, that most Delaware and Maryland farmers are members of at least one, if not more, cooperatives. A recent study conducted in the Midwest found that 85 percent of the farmers were members of one or more cooperatives (Babb 1988).

The questions for the survey were patterned after the work of Lang, Babb, Boynton, and Schrader at Purdue University, which provided a framework to be used in evaluating cooperatives and proprietary firms. Customers were asked to indicate preferences in one of four categories (cooperative, proprietary, no difference, or don't know) to questions related to marketing, market share, business functions, customer service, business stability, and public involvement. Questions such as these allowed the assessment of farmers' feelings regarding the effectiveness of cooperatives at increasing farmers' bargaining position and access to factor and product markets.

The responses were tabulated by relative percentages. The data were then ranked giving a (+1) value for a response in favor of cooperatives, a (-1) value for a response in favor of proprietors, and a zero for neutral feelings. Respondents who did not answer a particular question or stated that they did not know were not considered in the analysis. Means were calculated to show the direction of support for a given question, and significance levels were calculated to test the hypothesis that relationships were not statistically different from zero.

Other measures of evaluation were the Kendall Tau-b statistic, which indicates the association between two ordinal variables, and the chi-square test for independence. The Kendall statistic gives a measure of the presence, direction, and magnitude of a linear type relation between the two variables. Respondents' perceptions were analyzed using six different criteria: farm receipts, age, education, years farming, income, and acres farmed. The relative frequencies, Tau-b values, and chi-square values are summarized and tabulated in the report for those responses passing a 10 percent chi-square significance level. The data were also analyzed by the type of store: (1) centrally owned and operated by the cooperative, (2) locally owned (store locally owned but managed by cooperative), and (3) grain elevators.

The response rate was 29 percent, with 290 completed surveys returned, and 217 reporting that they were currently engaged in farming. The average age was 51 with a range of 19-93, and the average level of education was 12.5 years. The mean farm size was 403 acres with the largest being 4,000 acres, and the average respondent had farmed for 28 years.

Customers' Perceptions of Cooperative versus Proprietary Firms

Marketing

Those farmers responding indicated areas of strength for cooperatives with respect to marketing in all statements except one (table 1). Of the eight statements, seven were found significant and cooperatives were favored in six. Farmers strongly supported the statement "better voice in marketing decisions that affect you," with a 40 percent response rate.

There was a negative relationship between level of farm receipts and preference for cooperatives, with a Tau-b value of -0.187 on a scale of -1 to +1. Farmers also believed that cooperatives provided greater price stability (29.6 percent). Of those responses showing a significant difference, farmers felt relatively strongly that cooperatives enabled farmers to make greater reductions in their production cost, but were inconsistent in that they were essentially neutral concerning lower prices for farm supplies and services. No apparent reason for this inconsistency surfaced during the study.

As farmers' ages increased their perceptions of cooperatives improved. The statements dealing with marketing options, coordination between production and marketing, and market services received support from 36.7, 27.3, and 31.9 percent of the respondents, respectively. The Tau-b statistic for receipts and preference concerning the question of providing more marketing options was .105, indicating a weak negative association between farm receipts and farmers' perception of cooperatives. Farmers' responses to statements about prices for farm supplies and services were not significant. As age increased farmers tended to rate cooperatives higher on the question of prices for supplies and services. When farmers were asked to respond to the statement "pay higher prices to farmers for commodities" their response was 16.2 percent, indicating a preference for proprietor firms.

The three statements "promote greater price stability," "better grain grading practices," and "enable farmers to reduce production costs" showed a high percentage of the respondents indicating "no difference" and "don't know" (65, 69, and 60 percent, respectively). In particular, the "no difference" selection for all three exceeded 41 percent. It is possible that management may have an incorrect interpretation of farmers' opinions about these issues.

To the statement "pay higher prices for commodities" respondents perceived proprietary firms more favorably by about a 2-1 ratio. However, about 54 percent saw no difference or did not know. If the responses of those who

Table 1.—Opinions Concerning the Performance of Cooperatives and Proprietary Firms with Respect to Selected Marketing and Business Characteristics, 1985

Statement	Co-ops	Prop.	No Dif.	Don't Know	Total
Percent					
Marketing:					
Better voice in mkt. decisions	40.9	5.3	27.4	26.4	100.0 **
Provide greater price stability	29.6	5.4	40.9	24.1	100.0 **
Reduce production costs	31.0	8.6	34.7	25.7	100.0 **
Improved coordination between production and mkt.	27.3	10.5	31.6	30.6	100.0 **
Provide more mkt. options	36.7	16.9	26.5	19.9	100.0 **
Better mkt. services	31.9	14.0	33.8	20.3	100.0 **
Lower prices for farm supplies and services	27.2	25.7	39.5	7.6	100.0
Pay higher prices for commodities	16.2	29.5	34.3	20.0	100.0 **
Market Share:					
Presence creates a more competitive environment	42.3	18.7	21.7	17.3	100.0 **
Exercises greater restraint in the use of mkt. power	20.9	5.7	28.9	44.5	100.0 **
Predominant firm in the area	32.6	28.0	19.0	20.4	100.0
Business Functions:					
Advertising expenditures per dollar sales is greater	33.0	12.4	15.1	39.5	100.0 **
More convenient location	33.2	10.2	52.3	4.3	100.0 **
Better management	24.9	26.5	34.5	14.1	100.0
More efficient	22.5	32.4	25.3	19.8	100.0
Return on investment higher	24.2	15.1	15.6	45.1	100.0 *
More friendly relations with customers	33.7	12.0	50.5	3.8	100.0 **
Customer Service and Satisfaction:					
Establish programs that best meet needs	45.2	7.5	35.5	11.8	100.0 **
Willing to provide low profit products and services	50.3	10.9	24.0	14.8	100.0 **
More prompt attention to complaints or problems	34.6	13.5	45.4	6.5	100.0 **
Provide more technical assistance	36.9	12.3	41.2	9.6	100.0 **
More liberal credit terms	28.0	11.3	40.8	19.9	100.0 **
More dependable source of supplies and service	50.7	8.6	35.3	5.4	100.0 **
Advertisements are more useful	41.7	4.6	44.0	9.7	100.0 **
Provide higher quality supplies	28.7	7.1	57.1	7.1	100.0 **
Business Stability:					
Provide greater enhancement of welfare	42.1	4.2	30.1	23.6	100.0 **
Provide greater reduction of risks	38.4	2.8	39.8	19.0	100.0 **
Held in greater confidence	35.8	9.3	38.6	16.3	100.0 **

Statement	Co-ops	Prop.	No Dif.	Don't Know	Total
Percent					
Public Interest and Involvement:					
Provide a greater voice in decision making	57.4	3.7	24.5	14.4	100.0 **
Better representation of farmers' interest	54.1	7.9	23.6	14.4	100.0 **
Greater efforts to expand the market for commodities	38.8	7.5	28.0	25.7	100.0 **
Better corporate citizen	37.1	6.6	36.6	19.7	100.0 **
Greater enhancement of consumer welfare	30.1	4.9	31.7	33.3	100.0 **
Active interest in community affairs	39.2	14.4	26.9	19.5	100.0 **
More ethical business practices	27.4	10.3	43.7	18.6	100.0 **
More gifts for public services and charities	18.1	7.9	24.2	49.8	100.0 **

* = at .05 significance level for test of mean differences.

** = at .01 significance level for test of mean differences.

saw strength in proprietary firms and who saw no difference are combined the total is approximately 64 percent.

Market Share

Farmers favored cooperatives with respect to market share for all statements. Of the three questions asked, two were found significant (table 1). More than 42 percent of farmers indicated that the cooperatives' presence created a more competitive environment. The Tau-b values for age and years in farming versus firm preference were both positive at .222 and .187, respectively. A consistent negative score would be expected, considering the high correlation between age and years in farming.

Respondents thought cooperatives were the predominant firm in the area, although this finding was not significant. About 40 percent of the respondents, however, indicated "no difference" or "don't know."

A basic premise is that cooperatives create a more competitive environment and, thus, improve the position of farmers. The fact that 42 percent of the respondents believed the presence of cooperatives created a more competitive environment should be viewed by management as a positive characteristic.

The question "exercise greater restraint in the use of market power" had a relatively high "don't know" response rate, possibly due to a lack of understanding of the term "market power."

Business Functions

In four of the six questions concerning business functions, farmers' responses were found to be significant (table 1). The respondents gave cooperatives an edge with respect to spending more per dollar of sales on advertising, having more convenient locations, and maintaining more friendly relations with customers.

Approximately 24 percent of the farmers felt that cooperatives had higher rates of return on investment. The two statements that were negative but not significant were "better management" and "operate with greater overall efficiency." Two important merchandising aspects of any firm are more convenient locations and more friendly relations with customers. It was found that 50 percent of the respondents did not perceive cooperatives as more service and customer oriented than proprietary firms. These findings present a real challenge to management. Additionally, only 22.5 percent of the respondents perceived cooperatives as being more efficient. This may be, in part, related to an earlier question concerning reduction in production costs, where 60 percent of the respondents indicated that they perceived no difference or did not know. An opportunity exists in this situation for management to prove to their customers that they are, indeed, interested in achieving efficiency.

Customer Service and Satisfaction

Cooperatives showed their real strength with respect to service (table 1). Farmers did show very consistent support of cooperatives concerning their establishment of programs that best meet farmers' needs (45.2 percent). This question generated significant relationships between receipts, age, and acreage versus farm type.

Farmers also showed a positive attitude toward the willingness of cooperatives to provide low-profit products and services and in cooperatives' prompt attention to complaints or problems. Respondents credited cooperatives with being a more dependable source of supplies and service, as well as providing more accurate information about those supplies and services. As receipts, percentage of income from farming, and acreage increased, so did the likelihood of choosing proprietors over cooperatives. Fifty-seven percent of the respondents perceived no difference in the characteristic of providing higher-quality supplies, and 45 percent indicated no difference in attention to complaints or problems.

Business Stability

Forty-two percent of the farmers responding indicated that cooperatives provided greater enhancement of welfare (table 1). Almost 40 percent, however, answered that there was no difference between cooperative and proprietor firms concerning the provision of a greater reduction of risk facing farmers, as well as their being held in greater confidence. All questions dealing with stability were found to be significant.

Cooperatives were thought to provide reduction in risk through common purchases of supplies and commodities. A need for improvement was indicated, however, with 40 percent of the respondents perceiving "no difference" in the reduction of risk. This was confirmed by similar proportions for the statement "held in greater confidence." In times of dramatic change farmers tend to look to their cooperative for reduction in risk, and, as the economic situation becomes even more turbulent, the role of cooperatives could become more important.

Public Interest and Involvement

Farmers felt strongly that cooperatives provided a greater voice in decisions that will affect them (57 percent) and that cooperatives made greater efforts to represent the interest of farmers (54 percent) (table 1). Cooperatives were also rated higher concerning questions about making greater efforts to expand farm commodity markets and taking active interest in community affairs (38.8 and 39.2 percent, respectively). Consistent with previous findings, respondents were more positive toward proprietors as receipts and acreage increased, whereas they moved toward cooperatives as age increased.

Summary

Farmers indicated that cooperatives' best performance was in the areas of service and public involvement. A high percentage of the respondents believed that cooperatives were more willing to provide low-profit products and services, establish programs that best met needs, and provide a more dependable source of supplies and service. Farmers responded positively to the idea that cooperatives provided greater enhancement of welfare and, in general, reduced the risk facing farmers.

Farmers did not, however, believe that cooperatives paid more for their commodities. Cooperatives were also perceived as not operating as efficiently as proprietary firms or as having higher quality management. Overall perceptions, with respect to public involvement, favored cooperatives. The most favorable responses for cooperatives were for: representing the farmers' interests, efforts to expand markets for agricultural commodities, taking an active interest in community affairs, and providing a greater voice in decisions that will affect customers.

For many of the questions the sum of the percentage of respondents in the categories of "no difference" and "don't know" exceeds 50 percent. The authors recommend that cooperative management review these responses individually. If cooperatives actually wish to be different, or at least to be perceived as being different when compared with their competitors (in this case proprietary firms), a challenge exists. Additionally, for those items with a high percentage of the patrons not knowing an answer, there may be an excellent opportunity for educational programs. Since customer perceptions change over time and because there is the possibility of error in the discovery and interpretation of these perceptions, cooperative management should measure customer perceptions frequently.

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