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Farmers' Buying and Selling Patterns

Implications for Cooperatives



Farmers' Buying and Selling Patterns Implications for Cooperatives

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Abstract



This research analyzes farm characteristics and other factors that affect the buying and selling behavior of farmers. Information for 1986 was obtained by questionnaires from 2,537 farmers in the Midwest and Southeast. The major finding of this study is that the buying and selling behavior of farmers does not vary greatly by size and type of farm. Cooperatives are almost as successful in getting the business of large-farm operators as that of medium- and small-farm operators. There are, however, some differences in types and sizes of farms that provide the basis of better service to farmers and increased patronage. These differences relate to goals, time devoted to the farm business, sources of information used for farm decisions, types of services used, and opinions about commodity marketing and purchases of inputs. The business implications of these differences for cooperatives are described.

Key Words: Cooperatives, farmer, purchasing, sales behavior, farm supplies and services

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Preface

Changes in the structure of agriculture raise questions about how cooperatives should organize to serve an increasingly diverse group of farmers. Information concerning the needs and preferences of operators of various types and sizes of farms is required before the question of redesign of cooperative organizations or their functions can be addressed. This research identifies factors that will help cooperatives better serve farmers by analyzing farm characteristics and practices that affect buying and selling behavior of farmers. Information regarding farm characteristics and practices, buying and selling behavior, and farmers' opinions about purchase and sales activities of firms was obtained by questionnaire from 2,537 farmers in the Midwest and Southeast. The findings in this report are based on analysis of data provided by these farmers, most of it for 1986.

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Highlights

The most striking finding of this study was that differences in buying and selling behavior among operators of farms of various sizes and types were modest. If cooperatives can satisfy the preferences and needs of medium-sized farm operators, they should be able to meet the requirements of most large-farm operators. Cooperatives in the study area were almost as successful in getting the business of large-farm operators as that of small- and medium-farm operators.

Differences among various types and sizes of farms were identified that provide the basis for better serving the needs of farmers. They also suggest niches and business opportunities for cooperatives.

Some of the differences among farmers are listed below and their business implications were described.

- Farm characteristics of major and minor users of cooperatives were not greatly different, but farmers with more experience did have greater cooperative patronage.

- The most important goal of farmers was economic, to reach desired net income goals.

- The wife played an important role in all aspects of the farm business, but spent a relatively large portion of her time in the areas of buying, selling, managing, and planning.

- Farm magazines, family, and other farmers were important sources of information. Large-farm operators were more willing to pay for information and they used more sources.

- Both cooperative and noncooperative firms were used by the same farmer for information. These firms were sources of information primarily for purchase and sales decisions rather than management and planning.

- Use of other firms for financial and business services increased and use of production services decreased as farm size increased. Cooperatives appeared to have been more successful in selling production services.

- Farmers did not have a high degree of loyalty to a firm, whether cooperative or noncooperative. The average farmer had purchase/sale transactions with two cooperatives.

- Large differences were found in the percentage of business with cooperatives among commodities and inputs and among States.

- Farm characteristics, which cooperatives cannot control, did not explain much of the buying and selling behavior of farmers. Cooperatives can influence the price, quality, and service that affects their business volume.

Farmers' Buying and Selling Patterns

Implications for Cooperatives

Emerson M. Babb¹

OVERVIEW

Farm structure has changed slowly but dramatically over the past 30 years. In 1984, some 300,000 farms (13.5 percent of the total) grossed over \$100,000, had average net income of about \$40,000 and had average equity of about \$500,000. These 300,000 farms produced 73 percent of the cash receipts from agriculture. In contrast, about 1.4 million farms had farm sales of less than \$20,000. These farmers had income from off-farm sources that averaged \$20,000. These 1.4 million farms produced less than 6 percent of the cash receipts. This degree of concentration was the product of many forces, such as technology, and evolved over a long time. The current financial crisis in agriculture will likely accelerate this concentration. Most of the 300,000 larger farmers² and the 1.4 million small farmers² think of their operations as family farms. A farm generating \$100,000 cash receipts is not considered large. This level of receipts can be produced by 400 acres of crops, or 60 farrow-to-finish sows, or 50 dairy cows, or 150 fed cattle [6].* In fact, a farm generating \$200,000 of cash receipts is probably needed to produce income for a modest level of living. About 122,000 farms have sales over \$200,000 (5.4 percent of all farms) and they have about 54 percent of total cash receipts.

¹Emerson M. Babb is a professor in the Food and Resource Economics Department, University of Florida. The research reported in this publication was supported through a cooperative research agreement between the Agricultural Cooperative Service, U.S. Department of Agriculture, and the University of Florida. Daniel Babione and Pongchat Chunkasut were responsible for the management and processing of data. Helpful comments on an earlier draft were provided by Thomas Gray, Charles Kraenzle, and Bruce Swanson. Those desiring more detailed results should contact the author at 1130 McCarty Hall, University of Florida, Gainesville, FL 32611.

*Numbers in brackets refer to publications cited in reference section.

²The phrases "large-farm operator, small-farm operator, etc." will be shortened to "large farmer, small farmer, etc."

Problem

The cooperative system in U.S. agriculture was designed to strengthen family farms. In past years, when farms were more homogeneous, there was less need to have diverse cooperative organizations. Different types of organizations and operations may now be needed to serve the greatly altered and more diverse farm structure. It may be possible to have cooperatives that focus on large and small farms (or other segments) without losing the advantages of size in buying and selling that is now performed by a single organization.

The design of cooperative organization and functions to be performed must start with knowledge of the needs and preferences of various types and sizes of farms. Are there differences among large and small farmers with regard to farm objectives, time that can be or is devoted to the farm business, managerial skills, analytical capacity, financial strength, and risk preferences that give rise to different needs for products and services? Is commonality among members important and, if so, what provides cohesiveness?

Information about differences in needs of farmers is necessary before the question of redesign of cooperative organization can be addressed. If important differences exist in farmer needs, cooperatives may lose important segments of farmers if they use an organization designed to serve all farmers. The cooperative system would be drastically changed if it lost a major portion of either small or large farmers.

Objectives and Procedures

Given the changes in the structure of agriculture, the overall objective of this research was to identify factors that will assist cooperatives in better serving their members. The research examined farm characteristics and other factors that might affect the buying and selling behavior of farmers. Purchases of inputs and services,

sources and use of information, and sales of commodities were analyzed to determine differences associated with size of farm, type of farm, extent of cooperative patronage, and location of farm. Opinions about purchase and sales activities of firms were analyzed.

A questionnaire was used to obtain data from 2,537 farmers in Indiana, Illinois, Iowa, and Georgia with parts of surrounding States (Appendix). While these farms were larger than average, they were representative in other respects. Data were obtained in January 1987, but most of the information provided was for 1986.

Characteristics of Respondents

About 60 percent of the farmers returning questionnaires had gross sales of over \$100,000 (table 1).

Livestock/dairy type of farmers, farmers with 11 to 30 years of farming, and farmers in the Southeast and Iowa

Table 1—Characteristics of farmers in sample

Characteristic	Gross sales of farm (\$000)			
	1-39	40-99	100-199	Over 199
Type of farm	<i>Number of farmers¹</i>			
Field crops	197	448	487	453
Livestock/dairy	94	163	240	284
Other	67	41	10	28
Cooperative user²				
Major	199	366	426	418
Minor	141	268	298	338
Years of farming				
1 to 10	30	79	75	77
11 to 20	59	109	153	207
21 to 30	57	135	192	198
31 to 40	122	200	236	203
Over 40	87	116	69	64
Region				
Indiana	129	172	139	127
Illinois	125	206	252	253
Iowa	68	211	273	261
Southeast	40	65	76	127

¹Figures may not add to the same total for various categories because of incomplete responses to some questions.

²A major user of cooperatives was defined as a farm which used cooperatives for over 50 percent of its livestock sales, its grain sales, or its farm supply purchases.

had higher than average gross sales. There were 169 farmers with gross sales in excess of \$500,000. These were not separated from the \$200,000-and-over category because the number of observations was small when subdivided, particularly by type of farm or State. Further, there were usually only minor differences in the behavior of farmers with over \$500,000 of gross sales and those with over \$200,000. Where differences were found, they will be described for the very large farmer (gross sales over \$500,000).

Cooperative patronage rather than membership was used to classify farmers' involvement with cooperatives. A major user of cooperatives was defined as a farm that used cooperatives for over 50 percent of its livestock sales, its grain sales, or its farm supply purchases. Using this classification, about 57 percent of the respondents were major users of cooperatives and 43 percent were minor users (table 2). Farm size made little difference between major and minor users of cooperatives. The percentage of major cooperative users in the over \$500,000 sales class was 57 percent, exactly the same as for the overall sample. The proportion of major users was

Table 2—Characteristics of farmers in sample, by degree of cooperative use

Characteristic	Degree of cooperative use ¹	
	Major	Minor
Type of farm	<i>Number of farmers²</i>	
Field crops	907	639
Livestock/dairy	423	348
Other	79	57
Years of farming		
1 to 10	141	111
11 to 20	270	253
21 to 30	313	252
31 to 40	455	292
Over 40	202	122
Region		
Indiana	274	276
Illinois	469	341
Iowa	474	330
Southeast	200	102

¹A major user of cooperatives was defined as a farm which used cooperatives for over 50 percent of its livestock sales, its grain sales, or its farm supply purchases.

²Figures may not add to the same total for various categories because of incomplete responses to some questions.