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ARTICLES

Cooperative Directors: Perspective and Leadership

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Cooperative directors' perceptions of their roles, knowledge, and implementation of cooperative principles, business decision making, financial analysis, cooperative law, and division of responsibility with management were analyzed using data from forty-eight agricultural and thirty-one rural electric directors. Directors performed well in these areas with the best performance being related to decision-making scenarios. Self-assessments and performance for capabilities/situational items were consistent and favorable. However, opportunities exist to strengthen directors' informational bases, especially for cooperative law, roles and responsibilities of directors and managers, and financial analysis.

Cooperatives, like any businesses, depend on effective leadership to enhance their chances for success. Cooperative leadership is provided by an elected board of directors and a hired management team. Directors, with few exceptions, are selected from the cooperative membership and are primarily responsible for establishing long-term, broad objectives for the cooperative and for providing a resource base to achieve these targets. To reach defined objectives and to serve the best interest of the membership, the board must hire and guide the manager but not interfere in day-to-day operations.

The agribusiness sector is experiencing change consistent with that noted for much of the general economy. Mergers and acquisitions along with such factors as increased globalization and changes in government programs and regulations are affecting the nature of the sector and its cooperative component. Firms, agribusiness and otherwise, are attempting to improve their competitive position through such actions as mergers, acquisitions, strategic alliances, and partnering. Improved vertical coordination is occurring through increased direct and indirect links with customers, both as users of products and sources of inputs/raw materials.

Cooperative directors are addressing these and other issues while focusing on patrons' needs and desires. However, the effectiveness of the cooperative board ultimately depends on the knowledge, attributes, experience, and talents of all board members and their ability to focus these qualities and skills to initiate group action.

The objective of this analysis is to provide information about directors' perceptions of and attitudes toward their roles as directors and to evaluate their understanding of the cooperative environment. Special emphasis is given to board members' understanding

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and implementation of cooperative principles, business operational functions, financial analysis, and cooperative law. The study provides indications of the strengths and limitations of actual and perceived knowledge directors possess and use, and it presents opportunities to enhance cooperative directors' training. While the analysis focuses on farm supply/marketing and service cooperatives in Alabama, results and implications may generalize to other states and areas because of the similarities in organizations and backgrounds of individuals involved.

Methodology

A questionnaire consisting of six sections was developed and used to survey cooperative directors by mail and in person. Directors representing farm supply/marketing, farm credit, and rural electric cooperatives were the focus of the analysis. Examples of firms in each of these groupings include:

- *Farm supply/marketing*—Goldkist (now Southern States, Inc.), Alabama Farmers Cooperative, Mid America Dairy, Inc. (now Dairy Farmers of America), cotton gin cooperatives, and specialty marketing cooperatives;
- *Farm credit*—Production Credit Associations and Federal Land Bank Associations; and
- *Rural electrics*—Cherokee Electric, Tallapoosa River Electric, and Pea River Electric.

For analysis purposes, responses from farm supply/marketing and credit directors were grouped and designated as agricultural. Responses from forty-eight agricultural and thirty-one rural electric directors were analyzed.

Response rates were typical with the overall level at 32.5%. Farm supply/marketing directors had a 54% return rate while rural electric and farm credit directors responded at 23 and 29%, respectively. The agricultural grouping that included farm credit and supply/marketing directors had a 47% return rate. A few directors served multiple cooperatives. In these cases, directors were asked to select either cooperative and respond accordingly.

Responses were well dispersed among cooperatives. For the rural electric grouping, eight cooperatives were represented. Directors from eighteen farm supply/marketing cooperatives responded representing eleven local boards of a federation and the federation's board. Directors from two centralized and two independent locals also responded. Directors from two farm credit organizations responded.

The first section of the questionnaire was developed using the Rochdale Principles as guidelines (Cobia 1989, 27). These Principles have been the building blocks of cooperatives for over 150 years. Many of the Principles have stood the test of time as cornerstones for organizing and conducting cooperatives' business affairs. Examples of the principles are: voting on a democratic basis, equity provided by patrons/owners, and limited dividend on equity capital. Directors need to have an understanding of these principles and how they relate to their cooperative and its membership and successful operation. To assess director perceptions of the application of these principles to their cooperative, a matrix was constructed listing cooperative principles. Directors ranked the importance principles held for their organization's operation and success ranging from not important (1) to extremely important (5). Responses were scored to permit evaluation of directors' perceptions and application of each cooperative principle.

The second section of the questionnaire was developed from literature discussing the relative importance of responsibilities for cooperative directors and/or management (Cobia 1989, 308-327). While management and board responsibilities can and do vary by situation and firm, inconsistencies in action or the lack of initiative can adversely affect the cooperative. Mather, Ingalsbe, and Volkin (1990) note that many cooperatives have failed because of inept operating management and poor input and output control by their boards. Examples of responsibility items evaluated include: setting the direction of the business for the welfare of the cooperative members, handling day-to-day operations, and ensuring that business activities conform to the articles of incorporation and bylaws. These responsibilities were also placed in a matrix where the director could choose the relative importance of the responsibility between management and the board; that is, if the board is most responsible (1), if management is most responsible (5), or if management and directors share responsibility equally (3). Directors' responses indicate their perceptions relative to the efficient operation of the cooperative and potential conflicts in decision making and governance/leadership of the cooperative. Responses were scored to allow evaluation of directors' views of roles of directors and management.

The third section was developed with the assistance of cooperative leaders from the participating cooperative types to evaluate understanding of financial statements and information. The financial perceptions components by cooperative type were similar in that they related to measures of efficiency, liquidity, solvency, and profitability. However, particular measures used for these broad areas of financial status were specific to the type of cooperative; that is, the solvency measure for a farm credit director related to the farm credit industry and the efficiency measure for the director of a dairy-oriented cooperative related to dairy cooperative operations. Responses were scored to provide a measure for comparing financial information possessed by directors.

These four specific financial measures were presented with a corresponding number line to allow the director to indicate a reasonable and favorable response for his/her cooperative. These responses were evaluated relative to industry averages (Azzam and Turner 1991, Royer 1991, Staiert 1995) and levels defined by individuals experienced with each cooperative type. The number lines were constructed to allow ordinal scoring of the responses in a manner consistent with information provided by cooperative type. For example, if a response to a profitability relationship was several units above or below the defined reasonable and favorable level by cooperative type, a lower score was assigned than if the response was one unit above or below the quoted level by cooperative type. This approach allowed the directors' responses to be assessed and an understanding level (score) to be defined for the respective financially related items. If a director consistently responded differently from the defined reasonable and favorable response, conclusions were drawn about the director's perceptions of cooperative financial relationships.

The fourth section, scenario analysis, was created to evaluate directors' responses to potential real world situations. The scenarios were developed from personal interviews and interaction with industry leaders and the authors' experiences with working with boards of directors. The directors were asked to evaluate each scenario and indicate their recommended action or response as a board member. These scenarios and related responses allowed an analysis of the attitudes and perceptions possessed by a director and their impact on decision making. Industry leaders provided an order of importance for the scenario responses and related scores to use for comparison purposes.

Scores assigned for the respective perception areas defined above depended on the relationship of the director's response to the desired response as indicated by the literature

or the information supplied by cooperative industry leaders. For example, if a director's response matched the defined appropriate responses, a score of 5 was assigned. However, if the director's response deviated from the reasonable and favorable response, a value was assigned relative to the proximity to the defined appropriate response. While the assignment of scores provided an ordinal measure of informational attributes, the exact magnitude of difference between the defined appropriate response and the director's actual response was not represented.

The fifth section included a self-assessment by directors for understanding of: cooperative principles, cooperative law, financial analysis, business decision making, and strategic planning. These areas were specified in matrix format with the five self-assessment choices ranging from poor (1) to excellent (5), and directors were asked to rate their capabilities as cooperative directors. These assessments allowed the cooperative directors to indicate the areas in which they felt most proficient. Director assessment scores were evaluated relative to the previously identified actual situational scores for the areas of cooperative principles, financial knowledge, and business decision-making skills. This analysis provided a reference point for evaluating directors' perceptions of information versus application of it to prescribed situations.

The sixth and final section of the questionnaire consisted of questions that identified characteristics of the cooperative and director. These responses were used to relate the directors' perceptions and understanding of the cooperative environment (as represented by scores for the various areas) to the characteristics of the cooperative and to personal attributes. Examples of provided information include: age, percent of business the director transacts with the cooperative, availability of training programs, and educational attainment level.

Data from the first four sections of the questionnaire were analyzed to define director perceptions and understanding for the particular defined area and representative informational scores. These measures were compared with self-assessment scores and evaluated to determine their relationship with various director and cooperative characteristics using Ordinary Least Squares. The following model was used for all statistical analyses except financial perceptions:

Score = f (TDIR, NOSER, SZCOOP, PERBUS, EDU, NOOTHB, OFF, AGE, TP)
where: Score = numerical rating (1-5) based on director responses to selected perception/informational areas (cooperative principles, managers' versus directors' responsibility, and business decision-making scenarios)
TDIR = time served as a director in years,
NOSER = number of services provided by the cooperative,
SZCOOP = size of cooperative (approximate dollar activity, 1996),
PERBUS = percent of related business the director conducts with the cooperative,
EDU = education level achieved by the director (0 if high school or less and 1 if some college credits or more),
NOOTHB = number of other boards on which the director serves,
OFF = 1 if the director serves as an officer of the cooperative,
AGE = the age of the director in years, and
TP = 1 if the director has participated in a cooperative director training program.

The financial perspective model was also analyzed and is consistent with the above model except for inclusion of the financial statement analysis training variable (FTP). All variables in each model were expected to be positively related to the respective scores.

Results

General

Agricultural directors tended to be involved with more additional boards than rural electric directors, 2.3 versus 1.4 on average (table 1). One agricultural director noted involvement with a dozen different boards, while a rural electric director indicated a high of six. Average age and time served as director for the two groups were consistent at about 57 and 11 years, respectively. However, boards showed a degree of difference in composition with age and experience of directors on the boards ranging from 29 to 80 years and .5 to 47 years, respectively. Directors in both groupings showed substantial loyalty to their cooperatives in conducting related business, with the rural electric directors being more loyal. Agricultural cooperative directors conducted 81% of their related business with the cooperative, while rural electric directors conducted all of their related activity (table 1). Of course, rural electric directors had little or no option in choice since state law dictates electrical service provision for particular geographic areas. However, recent deregulation of the industry through federal legislation could somewhat alter this relationship in the future.

Table 1. Characteristics of Directors by Cooperative Type, Alabama, 1997

Characteristic and Cooperative Type	N	Units	Mean	Range	
				Minimum	Maximum
Age					
Agricultural	48	Yrs.	57.0	29	80
Rural Electric	31	Yrs.	56.9	36	80
Time as Director					
Agricultural	48	Yrs.	10.6	0.0	35
Rural Electric	31	Yrs.	11.7	0.5	47
Other Boards Served on[a]					
Agricultural	48	No.	2.3	0	12
Rural Electric	31	No.	1.4	0	6
Related Business with Cooperative[b]					
Agricultural	48	Pct.	81.3	20	100
Rural Electric	31	Pct.	99.7	90	100
Educational Attainment[a]					
Agricultural					
High School Graduate or Less	18	Pct.	38.3		
Some College	10	Pct.	21.3		
College Graduate or More	19	Pct.	40.4		
Rural Electric					
High School Graduate or Less	12	Pct.	38.7		
Some College	8	Pct.	25.8		
College Graduate or More	11	Pct.	35.5		

[a] Groups different at .10 level
[b] Groups different at .01 level.

Formal education differed between the groups of directors, with 14% more rural electric directors having received degrees beyond the bachelors level. Approximately a third of the directors in each grouping were high school graduates, and about a fourth had received some college credit. Rural electric directors were also much more likely to have received director and financial training than agricultural cooperative directors: 48 and 65 percent versus 19 and 31 percent, respectively (table 2).

Size of the cooperatives represented by responding directors varied much in terms of annual sales, especially for agricultural cooperatives (table 2). Also, rural electric directors indicated that more services were provided by their cooperatives, on average (3.1 versus 2.2). However, the range was higher for agricultural cooperatives: 10 versus 9.

Over time, various principles have evolved that relate to cooperative organization and operation. Directors were asked to assess their perceptions of selected cooperative principles and evaluate these principles' importance to their cooperatives' operation and success. Directors generally assessed their knowledge of cooperative principles to be "average (3)" to "good (4)" on a five-point scale ranging from "poor (1)" to "excellent (5)" (table 3). While there was no overall difference in their perceptions of cooperative principles, rural electric directors' responses tended to be more positive, with 23% ranking their knowledge as "excellent" and all ranking their knowledge as "average" or better.

In assessing the importance of the selected principles to the operation and success of agricultural cooperatives, directors indicated that democratic voting (one member, one vote), net income allocated to members as patronage refunds, and exchange of goods and services at market prices were "extremely important" (42%, table 4). Similarly, democratic voting (71%), open membership (58%), duty to educate members (58%), equality of the sexes in membership (50%), no unusual risk assumption (43%), and equity provided by owners/patrons (43%) were ranked as extremely important by rural electric directors.

When the "extremely" and "very important" responses were combined, agricultural directors noted democratic voting (89%), exchange of goods and services at market prices (85%), and open membership (78%) as dominant principles. Rural electric directors identified democratic voting (94%), open membership (90%), equity provided by patrons/owners (90%), and duty to educate members (87%) as dominant principles.

Table 2. Characteristics of Cooperatives Served by Responding Directors by Cooperative Type, Alabama, 1997

Characteristic and Cooperative Type	N	Units	Mean	Range	
				Minimum	Maximum
Annual Dollar Activity					
Agricultural	48	Mil.	741	0.2	23,000
Rural Electric	31	Mil.	19	3.0	40
Services Provided[a]					
Agricultural	48	No.	2.2	0	10
Rural Electric	31	No.	3.1	0	9
Director Training Available[a]					
Agricultural	48	Pct.	18.8		
Rural Electric	31	Pct.	48.4		
Financial Training Provided[a]					
Agricultural	48	Pct.	31.2		
Rural Electric	31	Pct.	64.5		

[a] Groups different at .01 level.

Table 3. Directors' Self-Assessment of Information in Selected Business Decision Areas, By Cooperative Type, Alabama, 1997

Area and Cooperative Type	N	Response[a]				
		1	2	3	4	5
		percent				
Cooperative Principles						
Agricultural	48	0.0	4.2	47.9	37.5	10.4
Rural Electric	31	0.0	0.0	35.5	41.9	22.6
Cooperative Law[b]						
Agricultural	48	6.3	33.3	41.7	16.7	2.0
Rural Electric	31	0.0	9.7	41.9	38.7	9.7
Financial Analysis						
Agricultural	48	0.0	16.7	37.5	39.6	6.2
Rural Electric	31	0.0	12.9	51.6	35.5	0.0
Business Decision Making						
Agricultural	48	0.0	6.3	22.9	60.4	10.4
Rural Electric	31	0.0	0.0	19.4	71.0	9.6
Strategic Planning						
Agricultural	48	0.0	12.5	37.5	39.6	10.4
Rural Electric	31	0.0	3.2	41.9	48.4	6.5

[a] 1 = Poor, 2 = Fair, 3 = Average, 4 = Good, and 5 = Excellent.
[b] Chi Square—groups different at .05 level.

Principles with the largest "not important responses" were cash trading only for both agricultural (46%) and rural electric (35%) cooperatives. Agricultural cooperative directors also ranked limited equity ownership share for each member (21%) as "not important," and rural electric directors ranked equality of the sexes in membership (20%) and limited dividend on equity capital (20%) as "not important."

Directly comparing responses from agricultural and rural electric directors that related the importance of cooperative principles to their organizations indicated several differences. Rural electric directors showed a stronger positive orientation toward the principles of democratic control, open membership, limited equity ownership share for each member, duty to educate members, and equality of the sexes in membership. Agricultural directors tended to give more importance to principles relating to limited dividend on equity capital and exchange of goods and services at market prices. As would be expected, open membership was more frequently important to rural electric directors (90.4% "very and extremely important," table 4) than for agricultural directors (78.8% "very and extremely important"). Rural electric membership is influenced by state law, which specifies electrical service by geographic location, while membership in an agricultural cooperative may relate more to a particular enterprise orientation or mix. Rural electric directors' strong support for member education (87.1% compared to 59.5% for the top two importance rankings, respectively) probably related to their organizations' unique role in the community and to their understanding that the need to educate members becomes more important as deregulation of the electrical industry opens once-closed boundary lines of electric service to open market competitors. The relative importance

Table 4. Importance of Selected Cooperative Principles to the Operation and Success of Responding Directors' Cooperatives, by Cooperative Type, Alabama, 1997

Principle	Cooperative Type[a]	N	Response[b] 1	2	3	4	5
			percent				
Voting is by members on democratic (one member, one-vote) basis[c]	AG	48	0.0	4.2	6.3	47.9	41.6
	RE	31	3.2	0.0	3.2	22.6	71.0
Membership is open[c]	AG	47	2.1	2.1	17.0	53.2	25.6
	RE	31	0.0	3.2	6.4	32.3	58.1
Equity is provided by patrons/owners	AG	46	2.2	0.0	23.9	41.3	32.6
	RE	30	0.0	0.0	10.0	46.7	43.3
Equity ownership share is limited for each single member[c]	AG	44	20.5	11.3	25.0	27.3	15.9
	RE	30	10.0	0.0	16.7	50.0	23.3
Net income is allocated to patrons as patronage refunds	AG	47	8.5	4.3	17.0	27.7	42.5
	RE	30	3.3	0.0	26.7	33.3	36.7
Dividend on equity capital is limited[c]	AG	46	2.2	13.0	39.2	23.9	21.7
	RE	25	20.0	4.0	24.0	36.0	16.0
Exchange of goods and services at market prices[c]	AG	47	8.4	2.1	4.3	42.6	42.6
	RE	29	7.0	0.0	27.6	37.8	27.6
Duty to educate members[e]	AG	47	6.4	4.3	29.8	40.4	19.1
	RE	31	0.0	0.0	12.9	29.0	58.1
Cash trading only	AG	44	45.5	11.4	29.6	9.1	4.4
	RE	26	34.6	10.3	24.2	15.4	11.5
No unusual risk assumed	AG	47	6.4	4.3	31.9	34.0	23.4
	RE	28	3.6	7.1	17.9	28.6	42.8
Political and religious neutrality	AG	47	12.8	12.8	25.5	21.3	27.6
	RE	30	13.3	0.0	23.3	26.7	36.7
Equality of the sexes in membership[d]	AG	46	10.9	8.7	26.0	37.0	17.4
	RE	30	20.0	3.3	10.0	16.7	50.0

[a] AG = Marketing/Supply/Finance and RE = Rural Electric.
[b] 1 = Not Important, 2 = Slightly Important, 3 = Somewhat Important, 4 = Very Important, and 5 = Extremely Important.
[c] Chi square, groups different at .10 level.
[d] Chi Square, groups different at .05 level.
[e] Chi Square, groups different at .01 level.

rural electric directors attached to limited equity ownership share per member and limited dividend on equity is consistent with current electric cooperative structures and operations. Members of such entities typically provide no preliminary equity to the cooperative (though they may pay a nominal membership fee of, say, $5) and thus there is no dividend. However, net margins may affect rates for electricity and capital accounts.

Directors' self-assessment of information availability and capabilities were similar for the areas of: cooperative principles, financial analysis, business decision making, and strategic planning (table 3). Generally, 85% or more of directors in both groups evaluated

their capabilities in the areas to be "average" (3) or above. If the top two responses were combined, both groups assessed themselves most positively in business decision making.

Rural electric directors evaluated themselves more favorably in the cooperative law area than did agricultural directors (table 3). About 42% of each group noted their abilities as "average" (3) in this area. A third of the agricultural directors and 10% of the rural electric directors indicated only "fair" (2) capabilities.

In the analysis of board members' opinions of the division of responsibility between boards and management, board members of both cooperative groups clearly recognized that day-to-day operation decisions were the manager's responsibility (75 and 77%, table 5). They also recognized their roles in being loyal to the cooperative and regularly attending board meetings. Despite their primary roles for ensuring that operations are consistent with the articles and bylaws, understanding the corporate philosophy, acting in good faith with reasonable care in handling the affairs of the cooperative, avoiding conflicts of interest, and representing the best interests of members, directors often indicated that responsibility for these items was equally shared with the manager. Responding board members noted less uniformity of understanding of their roles in establishing direction for the welfare of cooperative members, fiduciary responsibility for the long-term affairs of the cooperative, and maintaining accuracy of board meeting minutes. These responses were fairly consistent between agricultural and rural electric directors across all areas of responsibility. The only exception was noted for "maintaining accuracy of minutes of boards of directors," for which agricultural directors believed management was more responsible.

Selected questions related to financial relationships and several business-decision scenarios were used to evaluate directors' perspectives of financial analysis and decision-making areas. Directors performed well when confronted with selected financial and business-decision scenarios. Directors scored highest in the decision-making area at about 85% of the maximum score, while the average score for the financial analysis area was 71% of the maximum. Little difference in average scores for these two areas was noted between agricultural and rural electric directors. In the financial area, directors tended to score higher for questions related to liquidity and profitability measures and lower with measures of solvency and efficiency.

Statistical

With exception of the cooperative principles score model for agricultural cooperative directors, explanatory power of the respective score models was at acceptable levels (ranging from 25% to 55%) considering use of cross-sectional data (tables 6 and 7). All variables in the cooperative principles model for agricultural directors had relatively large standard errors, and the model explained only 7% of the variation in score. The rural electric directors' cooperative principle model explained 25% of the variation in score with each additional board served on by the director increasing the cooperative principle score for rural electric directors by 1.67 or almost 2.8% of the maximum score.

Models designed to explain variation in directors' perception of the division of responsibilities between management and directors explained 35% and 55% of the variation in agricultural and rural electric directors' scores, respectively (table 6). For agricultural directors, the score for relative responsibility increased by 5.83 when the director was also an officer of the cooperative and by 6.27, or 12% of the maximum score, when the cooperative had a director training program. Increased age of the agricultural director decreased score for responsibility roles between management and directors.

Table 5. Director Responses for Division of Primary Responsibilities Between Board and Management, by Cooperative Type, Alabama, 1997

Area of Responsibility	Co-op Type[a]	N	Response[b] 1	2	3	4	5
			percent				
Setting the direction of the business for the welfare of the cooperative members	AG	48	25.0	12.5	45.8	2.1	14.6
	RE	31	25.8	25.8	42.0	3.2	3.2
Fiduciary responsibility for the long-term affairs of the cooperative	AG	48	14.6	20.8	43.8	10.4	10.4
	RE	30	16.6	26.7	50.0	6.7	0.0
Managing the day-to-day operations of the cooperative	AG	48	2.1	2.1	4.1	16.7	75.0
	RE	31	0.0	0.0	0.0	22.6	77.4
Conforming to the Articles of Incorporation and Bylaws	AG	48	4.3	6.4	61.7	12.8	14.8
	RE	31	6.5	16.0	58.1	6.5	12.9
Maintaining accuracy of the minutes of the boards of directors[c]	AG	48	12.5	12.5	41.7	14.5	18.8
	RE	31	16.1	19.4	38.7	25.8	0.0
Understanding corporate philosophy	AG	48	4.2	6.3	72.9	6.3	10.3
	RE	31	0.0	9.7	80.6	6.5	3.2
Acting in good faith with reasonable care in handling the affairs of the cooperative	AG	48	2.1	0.0	70.8	10.4	16.7
	RE	31	3.2	9.7	71.0	9.7	6.5
Avoiding conflict of interest	AG	48	2.1	0.0	72.9	14.6	10.4
	RE	31	6.5	3.2	80.6	0.0	9.7
Loyalty of board member to the cooperative	AG	48	38.5	36.1	12.8	2.1	10.6
	RE	31	45.2	35.5	19.3	0.0	0.0
Representing the members' best interest	AG	48	10.4	8.3	66.7	2.1	12.5
	RE	31	19.4	16.1	64.5	0.0	0.0
Attend board meetings regularly	AG	48	41.7	12.5	37.5	2.1	6.2
	RE	31	45.2	19.4	35.4	0.0	0.0

[a] AG = Marketing/Supply/Finance and RE = Rural Electric.
[b] 1 = Board Most Responsible, 2 = Board More Responsible, 3 = Management and Directors Equally Responsible, 4 = Management More Responsible, and 5 = Management Most Responsible.
[c] Chi Square, group different at .10 level.

For rural electric directors, relative responsibility scores declined by 3.94, or 7.4% of the maximum score, when a director training program was available, contrary to expectations (table 6). However, this score was positively responsive to availability of cooperative services, 1.3 for each additional service. Educational attainment of the director also had a positive impact on responsibility score; those rural electric directors who had received some college credit or more added 3.92 to their score, or 7.4% of the maximum responsibility score.

Table 6. Regression Results for Cooperative Principles and Director Versus Management Responsibility Models for Agricultural and Rural Electric Directors, Alabama, 1997

Variable	Agricultural Principles	Agricultural Responsibility	Rural Electric Principles	Rural Electric Responsibility
Intercept	44.26 (8.720)[a]	51.19 (9.377)	102.02 (89.38)	40.38 (50.89)
Experience of Board Member	-0.041 (.1718)	-0.054 (.1909)	-0.082 (.2109)	-0.015 (.1178)
Cooperative Services Available	.4756 (.4870)	.6204 (.5447)	-0.010 (.7439)	1.302[c] (.3944)
Approximate Dollar Value of Sales 1996	.0000 (.0000)	.0000 (.0000)	.0000 (.0000)	.0000 (.0000)
Percent of Business Director Transacted With Cooperative	-0.012 (.0567)	.0061 (.0609)	-0.667 (.8867)	-0.071 (.5038)
Directors' Educational Level	-2.630 (2.662)	-0.944 (2.966)	2.641 (3.526)	3.923[c] (1.928)
Number of Other Boards on Which Director Serves	.4888 (.4752)	0.2452 (.5343)	1.668[b] (.8924)	.6442 (.5038)
If the Director is an Officer	-1.051 (2.779)	5.830[c] (3.112)	4.778 (3.703)	-0.673 (1.993)
Age of the Director	-0.019 (.1125)	-.0257[c] (.1255)	.0939 (.1707)	.1121 (.0950)
If the Cooperative Has a Director Training Program	.7353 (3.192)	6.271[b] (3.636)	.3405 (3.249)	-3.939[c] (1.792)
R-Square	.07	.35	.25	.55
F	0.28	2.26	0.72	2.86

a = Standard errors are in parentheses.
b = Significant at .1 level.
c = Significant at .05 level.

Presence of a financial training program benefited both agricultural and rural electric directors, adding 4.056 to the financial score of the former group and 5.628 to the latter group. These levels represent 13.5% and 20.8% of the maximum scores, respectively. For agricultural cooperatives, directors of businesses with larger sales activity had higher financial knowledge scores. Other variables in the financial score model had relatively large standard errors.

Models for business decision making explained 36% and 25% of the score for agricultural and rural electric directors, respectively (table 7). For directors of agricultural cooperatives, larger portions of "director business transacted with the cooperative" and "age" adversely affected the business decision score. No variables were significant in the rural electric director model for business decision making score.

Table 7. Regression Results for Financial Knowledge and Business Decision Making Scenario Models for Agricultural and Rural Electric Directors, Alabama, 1997

	Agricultural		Rural Electric	
Variable	**Financial**	**Decision**	**Financial**	**Decision**
Intercept	16.32 (6.087)	32.56 (2.589)	-12.42 (61.10)	38.37 (39.59)
Experience of Board Member	.1604 (.1248)	.1069 (.0527)	.1200 (.1608)	-0.068 (.0917)
Cooperative Services Available	.1443 (.3514)	.2062 (.1504)	-0.327 (0.477)	.2347 (.3069)
Approximate Dollar Value of Sales 1996	.0005[b] (.0000)	.0000 (.0000)	.0000 (.0000)	.0000 (.0000)
Percent of Business Director Transacted With Cooperative	.0180 (.0399)	-0.033[b] (.0168)	.2771 (.5998)	-0.107 (.3920)
Directors' Educational Level	.8180 (1.985)	-1.675 (.8190)	-1.866 (2.299)	-1.898 (1.500)
Number of Other Boards on Which the Director Serves	.0150 (.3450)	-0.119 (.1475)	.6543 (.6124)	-0.109 (.3920)
If the Director is an Officer	-0.322 (2.035)	-0.549 (.8593)	-3.396 (2.363)	1.472 (1.551)
Age of the Director	-0.002 (0.083)	-0.079[b] (.0346)	.0379 (.1207)	-0.021 (0.073)
If the Cooperative Has a Director Training Program	-1.885 (2.677)	1.064 (1.004)	-0.316 (2.171)	-1.512 (1.394)
Director Participated in Financial Training Program	4.056[c] (1.976)		5.628[c] (2.550)	
R-Square	.25	.36	.48	.25
F	1.11	2.36	1.83	.76

a = Standard errors are in parentheses.
b = Significant at .1 level.
c = Significant at .05 level.

Summary and Conclusions

Directors were asked to evaluate their expertise in cooperative principles, cooperative law, financial analysis, business decision making, and strategic management. Self-assessment ratings for the director groupings were favorable and somewhat consistent for the defined areas with the exception that about three-fourths of agricultural cooperative directors indicated only fair to average capability for cooperative law. Directors noted average to good understanding of other areas. Overall, self-assessment ratings tended to be lower for perceptions of cooperative law and financial analysis and highest for business decision making.

Director responses to situational analysis and use of information indicated a positive perspective. Generated scores for the areas of cooperative principles, roles of directors and managers, decision making, and financial analysis were at or above 70% of maximum score. Agricultural and rural electric directors performed best for decision-making scenarios at 85% and 86% of the maximum, respectively. Scores developed from director responses were consistent with self-assessment ratings. Thus, to the extent that situational questions were representative of the cooperative decision environment, directors had realistic appraisals of their capabilities.

While age of the director was not identified as an important factor affecting rural electric directors, it was isolated as having a negative impact on agricultural directors' scores in two areas: division of responsibility between the board and management and business decision making. Presence of a financial training program positively influenced financial knowledge of both agricultural and rural electric directors. Interestingly, availability of a director training program showed a positive impact for agricultural directors' score for director versus manager responsibility and a negative impact for rural electric directors. Educational attainment had a positive impact on rural electric directors' score for the division of responsibility between management and directors.

Cooperatives, and their leadership, are sometimes accused of digressing from their roots. This analysis seems to refute this observation in that it indicates that capable directors are leading participating cooperatives, and these directors exhibit a strong orientation toward cooperative principles and ideals. However, an opportunity seems to exist to strengthen directors' informational perspectives, especially related to cooperative law, roles/responsibility of directors and managers, and financial analysis. Since directors' participation in prior training programs showed substantial positive results, expectations are that future training programs would be beneficial. The evolving business environment will be even more demanding of cooperative leaders.

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