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Executive Compensation Patterns and Practices in Minnesota and Wisconsin Cooperatives

David D. Trechter and Robert P. King

Cooperatives face unique challenges in compensating managers because it is more difficult to link the financial interests of the manager to those of the cooperative. One way to overcome this challenge is to use performance-based bonuses. This study of cooperatives in Minnesota and Wisconsin found that such bonuses are infrequently used. Further, evidence indicates that existing bonuses tend to be linked more to the size of the cooperative (sales, assets) than to profitability. These results suggest that more attention to this critical area is warranted.

Hiring and retaining a good manager is a critical factor in the success or failure of any business, including a cooperative. Managerial evaluation and compensation are important in motivating and retaining a cooperative manager. Despite their importance, relatively little is known about the processes local cooperatives use in evaluating managers and setting their compensation.

Cooperatives face unique challenges in competing for the supply of managerial talent and in motivating their managers once hired. In an investor-owned firm (IOF), the interests of the manager can be more closely aligned with those of the owners of the business by giving the manager equity as part of the compensation package. This ties the manager's wealth to the value of the firm, which will, presumably, rise or fall on the basis of managerial decisions. This option is both less feasible and less attractive for cooperative managers. Managers may not be eligible to own equity in the cooperative when the by-laws or tax code restrict membership to certain categories of people (for example, farmers). In addition, stock in cooperatives generally does not appreciate in value and has, therefore, limited motivational power.

Linking managerial compensation to firm profitability through performance-based bonuses is a motivational tool that can be used by cooperatives. Results of earlier studies by Akridge, Whipker, and Erickson (1989)

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and by Ginder and Henningsen (1992) indicate that cooperatives do make use of bonuses, but the degree to which these are closely linked to performance is unclear. The use of bonuses in cooperatives does not appear to differ significantly from that in IOFs.

Local cooperative boards of directors and managers need guidance in this complicated yet vital area of their responsibilities. This study adds to the understanding of managerial compensation in agribusiness firms provided by earlier studies (for example, Fiske and Hahn [1985]; Akridge, Whipker, and Erickson [1989]; Ginder and Henningsen [1992]). Specific objectives are:

1. to describe the levels and types of compensation received by managers of local cooperatives in Minnesota and Wisconsin,
2. to examine the factors associated with the form or level of compensation and the means of evaluating managers, and
3. to assess the links between the types of evaluation procedures and compensation packages used and cooperative performance.

This study combines information on evaluation practices provided by board chairs with data on compensation levels and financial performance.

Data Collection

Agricultural cooperatives in Minnesota and Wisconsin that borrow from the St. Paul Bank for Cooperatives are the population for this study. Data on cooperative characteristics, manager selection and evaluation procedures, and managerial compensation were collected by mail questionnaires. These data were supplemented with detailed financial statement data from the St. Paul Bank for Cooperatives. Choice of the 313 input supply, marketing, and service cooperatives that borrow from the St. Paul Bank was dictated, in part, by the need to have access to financial statement data in a consistent electronic format. Because the St. Paul Bank is the dominant lender to agricultural cooperatives in Minnesota and Wisconsin, the study population was judged to be representative of all agricultural cooperatives in the area.

Each cooperative was sent two questionnaires, one for the manager and one for the board chair. The manager's questionnaire included questions about the structure of the cooperative, some demographic information about the manager, the compensation package, and the procedures used for performance evaluation. The questionnaire for the board chair included information about the background of the board, the managerial selection process used, how compensation levels were determined, and the evaluation process. Thus, for the most part, each questionnaire solicited different types of information. The one exception to this is that both were asked many of the same questions about the evaluation process.

A total of 138 cooperatives returned one or both questionnaires. Of these, 120 returned both questionnaires—(a 35% overall response rate).

Figure 1 shows the wide geographic distribution of cooperatives included in the final sample of 120. Only in northern Wisconsin and northeastern Minnesota, where there is relatively little agriculture, were there no cooperatives in the sample.

Of the cooperatives in the final sample, 77% were classified by the St. Paul Bank as agricultural input cooperatives, 22% were classified as marketing cooperatives, and the remaining 2% were classified as service cooperatives such as farm record keeping cooperatives. The response rate was considerably higher for supply and service cooperatives than for marketing cooperatives (49% versus 29%). While this should not bias sample averages for separate categories or regression analysis results, the findings of this study should be interpreted with this in mind.[1]

A Profile of Evaluation Practices and Compensation in the Sample Cooperatives

Descriptive information for sample farm supply and marketing cooperatives is presented in table 1. Cooperatives in these two industry groups are further classified into size groupings based on total sales. Service cooperatives are not included in this descriptive profile because they differed considerably in size and range of services offered, and there were not enough cooperatives in this industry group to construct meaningful

Figure 1.—Geographic Distribution of Sample Cooperatives

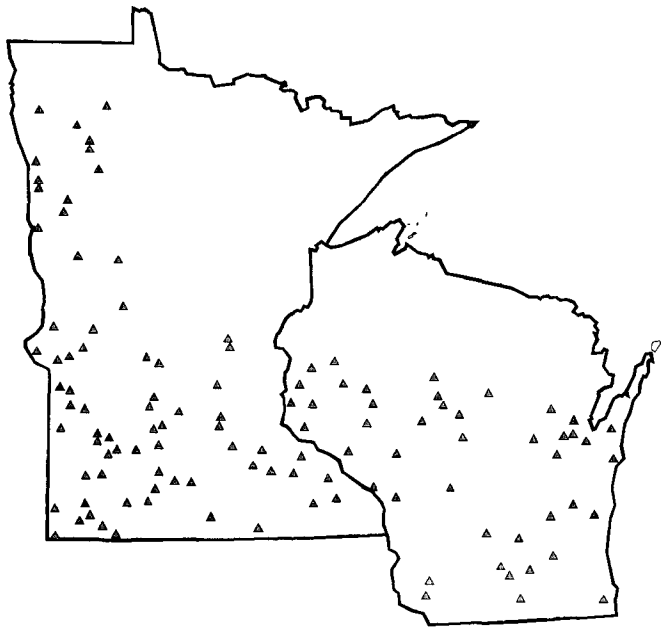

Table 1.—Selected Cooperative Characteristics

	Farm Supply			Marketing		
	Small (<$5 Million)	Medium ($5-$10 Million)	Large ($10+ Million)	Small (<$10 Million)	Medium ($10-$19 Million)	Large ($20+ Million)
Number of Cooperatives	31	39	19	9	8	5
Co-op Characteristics						
Members	725	1,519	2,379	2,061	479	1,120
Employees	10	22	38	36	10	37
Total Sales, 92	$3,065,697	$7,143,142	$15,293,465	$5,223,557	$14,810,283	$31,604,043
Total Assets, 91	$1,877,768	$3,428,815	$6,236,861	$2,352,260	$5,017,621	$9,629,180
Local Net Margin, 92	$66,636	$128,850	$165,799	$47,721	$101,065	$362,105
ROA, 92	6.7	7.1	5.9	4.9	6.5	6.1
Board Chair Characteristics						
Years on Board	11.1	9.9	12.6	6.2	10.5	10.6
Years as Chair	5.1	3.4	5.2	2.7	4.3	3.6
% with Training	81	64	58	33	50	80
Manager Characteristics						
Age	44	45	44	42	48	49
% College Degree	29	49	32	22	25	40
Years Managerial Exp.	10	14	16	10	16	19
Compensation Practices						
% Formal Evaluation	74	64	63	78	25	40
% Use Regional	48	48	16	33	38	20
% Good Communication	68	77	89	89	63	60
Average Analytic Score	52	46	50	38	31	50
Compensation Levels						
Salary	$36,865	$47,196	$60,450	$43,978	$43,938	$65,386
Bonus	$874	$1,725	$3,597	$600	$2,750	$1,360
Benefits	$4,194	$4,557	$6,584	$4,559	$4,544	$7,899
Total Compensation	$41,932	$53,477	$70,631	$49,136	$51,232	$74,645

sub-groups. All sample averages presented in table 1 reflect conditions in late 1992 or early 1993.

Sample averages for selected cooperative characteristics are presented at the top of table 1. For farm supply cooperatiives, there was a direct relationship between all size measures (members, employees, assets, etc.) and cooperative sales. This was not the case for marketing cooperatives. Sample cooperatives in the small size category (based on sales) had the largest number of members. They also had employment levels that were comparable to those of cooperatives in the largest size group. As expected, sales, asset, and net margin levels were positively related to size for marketing cooperatives. There was no clear relationship between return on assets and size for cooperatives in either of the two industry groups.

Sample averages for selected board chair and manager characteristics are presented in the middle sections of table 1. In general, board chairs of farm supply cooperatives had more years on the board and more years as chair than board chairs of marketing cooperatives. Training on compensation practices was more prevalent for board chairs of farm supply cooperatives. It is interesting to note that, while size and training on compensation were positively related in marketing cooperatives, they were negatively related for farm supply cooperatives. Average age, educational background, years of managerial experience, and compensation levels of managers followed similar patterns in both industry groups. Managerial experience was positively related to cooperative size in both industry groups.

Sample averages for several indicators of compensation practices are presented near the bottom of table 1. Use of formal written or verbal evaluations was more prevalent among farm supply cooperatives than among marketing cooperatives, as was the use of assistance from regional cooperatives in evaluating managers and setting compensation levels. It is interesting that the percentage of cooperatives using these practices declined with size for both industry groups. The good communication variable indicates that the manager and board chair were in agreement about the use or non-use of pre-defined incentive clauses to determine bonuses. This measure of good communication was greater in farm supply than in grain cooperatives.

Managerial compensation in local cooperatives has three components: salary, bonuses and commissions, and benefits. Both the level of total compensation and the contribution of each of these components to total compensation were of interest in this study. Sample averages for these three compensation components and for total compensation are presented in the lower section of table 1 for cooperatives grouped by primary industry and by size. All measures are for 1992.

The annual salary of general managers in this sample varied from a low of $21,600 per year to a high of $125,000 per year. The overall average salary was $48,650, and the overwhelming majority of managers reported a salary between $30,000 and $75,000. For both farm supply and marketing cooperatives, annual salary was positively related to cooperative size, as measured by sales volume. Salary was also positively related to total assets in both industry groups, and there was a positive relationship between salary and cooperative membership and number of employees in farm supply cooperatives.

About half of the managers in the sample received bonuses in 1992. Generally, these bonuses represented less than 10% of a manager's total compensation; the average bonus received in 1992 was $2,390. Only two of the 120 managers reported receiving commissions during 1992, and the amounts received were not large. For farm supply firms, the size of bonuses and their relative importance in total compensation increased with cooperative size. This pattern did not hold for marketing cooperatives where bonuses were largest and contributed the largest percentage to total compensation in medium sized cooperatives.

The managers were asked to report the total cost of the benefits provided to them by their cooperative on a per-month or per-year basis. They were also asked questions about the mix of benefits received. The value of benefits received by managers varied from less than $1,000 per year to more than $40,000 per year. The average value of benefits was slightly less than $5,000 per year. The value of benefits received was remarkably similar for managers of small and medium cooperatives in both industry groups. The size of the benefit package increased for larger cooperatives in both groups, but the relative contribution of benefits to total compensation was fairly stable across all industry and size categories. Most managers received life insurance, disability insurance, health insurance, and a pension as part of their benefits package. The majority of cooperatives paid for the life and disability insurance, while the pension plan and health insurance was most commonly an expense shared by the manager and the cooperative. Only 22% of the managers in the sample reported that they received a car paid for by the cooperative; another 27% reported receiving some car-related benefit.

Total compensation is the sum of salary, bonuses, and benefits. For both farm supply and marketing cooperatives, total compensation was positively related to sales, total assets managed, and managerial experience. It is interesting to observe that adding bonuses and benefits to salary increased the spread of the compensation distribution. Managers receiving a higher salary also tended to receive more valuable bonuses and benefits. The salary of the highest paid manager was 5.8 times that of the lowest paid manager. The total compensation of the highest paid manager was 6.8 times that of the lowest paid manager.

Patterns in Evaluation Practices and Compensation Levels

The descriptive profile presented in the previous section suggests that there may be consistent relationships between both evaluation practices and compensation levels and characteristics of the cooperative, the manager, and the board chair. This section presents results of a more formal examination of these relationships based on regression analysis.

Patterns in Evaluation Practices. This analysis focuses initially on relationships between four variables that describe the evaluation process and a set of five explanatory variables that describe cooperative, manager, and board chair characteristics. The descriptors of the evaluation process are the dependent variables in this analysis:

FEVAL	a binary variable equal to one if the manager received a formal evaluation from the board,
RINPUT	a binary variable equal to one if the cooperative used input from regional cooperatives in managerial evaluation,
GOODCOM	a binary variable equal to one if the manager and board chair agreed on whether pre-specified incentive clauses were used to determine bonuses, and
ASCORE	a sum of weights board chairs placed on "analytical" measures of managerial job performance.

The cooperative, manager, and board chair characteristics are the independent variables in this analysis. They are:

TA	total assets of the cooperative,
FS	a binary variable equal to one for farm supply cooperatives,
SALARY	the manager's annual salary in 1992,
CURPOS	the years the manager had been in the current position, and
CTRAIN	a binary variable equal to one if the board had received training on compensation practices.

Logit analysis was used to test for associations between these characteristics and the first three evaluation practices. The estimation results are presented in table 2.

The results for the first variable, FEVAL, indicate that three variables—SALARY, CURPOS, and CTRAIN—had statistically significant effects at the 5% confidence level. The likelihood a manager received a formal evaluation increased significantly with the manager's salary and with board training on compensation. On the other hand, the use of formal evaluation procedures declined with the length of time the manager had been in the current position. The results conform to common sense. As expected, boards were more likely to use formal evaluations when more money was involved, and it is understandable that the perceived need for formal evaluation may have declined as the manager's tenure in the job increased. When the manager was relatively new to the job, both the board and the manager may have felt the need for a more formal evaluation process since neither party may have had clear expectations about the other. Finally, if providing more explicit feedback to the manager by a formal summarization of the evaluation is good, training in executive evaluation and compensation paid off.

The second practice analyzed was the use of regional cooperative input in the evaluation of the general manager (REVAL). Regional input may be valuable because it provides an assessment of the manager's performance relative to others in similar situations. Thus, a manager who guided a cooperative through a tough year with a small loss while others in similar situations ended up with much larger losses might look much better from a regional than a local perspective. Only two variables, CURPOS and CTRAIN, were significant at the 5% level in this model. The negative sign for CURPOS and positive sign for CTRAIN indicate that regional input was more likely if the manager was relatively new to the job and if the board had received training on managerial compensation and evaluation. Again,

Table 2.—Managerial Evaluation Regression Equation Results

Dependent Variable	Estimated Coefficients*						Correct Predictions
	CONSTANT	TA	FS	SALARY	CURPOS	CTRAIN	
							percentage
FEVAL	−2.2054	−2.4427E-07	0.17803	0.000076192	−6.7826E-02	1.2670	70.6
	(−2.171)	(−1.703)	(0.3207)	(2.836)	(−2.528)	(2.730)	
RINPUT	−2.2592	1.3774E-07	1.1745	−1.1776E-08	−0.061351	1.2332	68.9
	(2.314)	(1.030)	(1.865)	(0.0006)	(−2.032)	(2.649)	
GOODCOM	0.58143	−8.8415E-08	0.13850	0.000015486	0.024244	−0.25150	75.6
	(0.6135)	(−0.6500)	(0.2452)	(0.6817)	(0.8265)	(−0.5262)	
ASCORE	34.785	1.4207E-06	10.129	−0.000051405	−0.22587	5.9997	NA
	(5.208)	(1.467)	(2.515)	(−0.3297)	(−1.198)	(1.800)	

*Numbers in parenthesis are T statistics.

these results are in line with expectations. If a manager was new to the job, the board may have had several reasons for seeking input from the regional cooperative on the manager's performance. In some cases, financial problems in the local cooperative may have prompted greater involvement by the regional cooperative. In other cases regional cooperative involvement might reflect a lack of rapport between a new manager and the board. In still others, the process of selecting a new manager may have increased the contact between the regional and the local cooperative on personnel matters, thereby convincing the board of the value of regional input in the evaluation of their manager. Finally, the process of selecting a new manager may also have prompted board training in managerial evaluation and compensation, resulting in greater regional cooperative input into this process. The statistical results support the contention that training in managerial evaluation and compensation practices does increase the probability of using input from the regional cooperative.

With respect to the third evaluation practice, good communication between manager and board chair, none of the six explanatory variables was statistically significant at even the 10% level. This lack of success in finding systematic relationships between this evaluation practice and cooperative, manager, and board characteristics was not surprising. Good communication is likely to depend on the personalities of the individuals involved. There is little reason to expect a systematic relationship between a more communicative personality and any of the factors considered here. For example, there is no reason to believe that managers and board chairs in supply cooperatives are any more or less communicative than those in marketing cooperatives.

The analytical index, ASCORE, was the relative importance assigned by board chairs to cooperative performance during the preceding year, the use of input from regional cooperatives, and the use of incentive clauses, in evaluating the performance of a manager. It was measured on a scale from zero to 100. A score of zero indicates the board chair did not consider these factors at all in the evaluation process, while a score of 100 indicates the board chair considered only these factors. The relationship between ASCORE and the explanatory variables was estimated using ordinary least squares regression. Parameter estimates are presented in table 2. Only one explanatory variable, FS, was significantly related to ASCORE at the 5% level. The coefficient for CTRAIN was significantly different from zero at the 10% level. Both had positive signs, indicating that farm supply cooperatives and boards that had received training on compensation placed greater weight on these analytical factors. The impact of board training on executive compensation and evaluation suggests that this training stresses objective measures of cooperative performance and that the lessons were taken to heart.

Patterns in Compensating Managers. The underlying question to be addressed in this section of the paper is, "What appear to be the factors considered by the board of directors when determining the rewards that a manager receives?" Two aspects of the manager's reward structure were analyzed: total compensation (salary plus bonus plus commissions plus cash value of benefits) and bonus payments.

Total Compensation. Economic theory and common sense both suggest that compensation should be linked to performance. In short, if a manager makes a firm more profitable, his or her compensation should reflect these good decisions. A number of economic studies dating back to the 1960s suggest that this relationship is not always evident (McGuire, Chiu, and Elbing [1962]; Lewellen and Huntsman [1970]; Masson [1971]; Prasad [1974]; Antle and Smith [1986]; Ciscel and Carroll [1980]). These studies indicate that executive compensation may be tied more to the size of the business managed (for example, total assets or total sales) than to the effectiveness with which it is managed (for example, profitability). In addition, as noted at the beginning of this paper, managerial compensation may be a particular challenge to cooperatives, given the limited ability to link the wealth of the manager (via stock holdings) to the well-being of the cooperative.

Ordinary least squares regression was used to analyze the relationship between total compensation (TCOMP) and a measure of profitability (local net margin, LNM), two measures of size (total assets, TA, and gross sales, SALES), two measures of managerial qualifications (years of managerial experience, MANEX, and a binary variable equal to one if the manager had a college degree, DEGREE) and one measure of job complexity (number of lines of business in the cooperative, NLINE). The original specification for the model was:

$$\text{TCOMP} = b_0 + b_1\text{LNM} + b_2\text{TA} + b_3\text{SALES} + b_4\ln(\text{MANEX}) + b_5\text{DEGREE} + b_6\ln(\text{NLINE}) + u, \quad (1)$$

where b_0 through b_6 are parameters to be estimated and u is a stochastic error term. To correct for problems with heteroscedasticity, each observation was weighted by total assets. The weighted regression estimation results are presented in equation (2), with t statistics given in parentheses for each parameter.

$$\begin{aligned}\text{TCOMP} = {} & \underset{(21.35)}{23824} + \underset{(1.750)}{0.012558\text{LNM}} + \underset{(3.569)}{0.0011428\text{SALES}} + \underset{(3.565)}{0.0033016\text{TA}} \\ & + \underset{(3.717)}{2084.9\ln(\text{MANEX})} + \underset{(4.092)}{4594.4\text{DEGREE}} + \underset{(1.138)}{814.03\ln(\text{NLINE})}\end{aligned} \quad (2)$$

Adjusted $R^2 = 0.7534$

The parameters for sales, total assets, managerial experience, and college degree were all positive and significantly different from zero at the 5% level. As expected, the parameters for local net margin and the number of business lines were also positive. The econometric results suggest that total compensation would increase by $3.30 for each $1,000 of total assets held by the cooperative, $12.56 for each $1,000 in profits, $1.14 for each $1,000 in sales, $4,590 for a college degree, and $4,800 for ten years of experience. These results indicate that both size of the cooperative (as measured by total assets and sales) and profitability were significant factors in determining the level of managerial compensation. The relationship between total compensation and years of managerial experience was somewhat more complex than for the other variables. The specification used

in this analysis assumed that the increase in total compensation resulting strictly from additional experience was greater during the early portion of a manager's career than during the later portion. These results indicate that expected managerial compensation increased by $1,445 after two years of experience, by $3,355 after five years, by $4,800 after ten years, and by $5,646 after fifteen years.

As an example, suppose a cooperative with a single line of business earned $500,000 in local net margin, had $10 million in sales, and $4 million in total assets. If the manager of this cooperative had a college degree and twelve years of experience, these results indicate that the manager's expected total compensation would be approximately $64,475.

Bonus Payments. Pre-existing bonus clauses can used to provide incentives for specific desired outcomes. Used in this way, bonuses are forward looking because the board is explicitly indicating to the manager the direction they would like to take the cooperative. For example, bonuses could be paid to a manager based on some desired level of return on assets, on an increase in the number of members who are forty or younger, or on increased business volume in a specific geographic area. Fewer than ten of the managers in our sample indicated that they had specific, pre-existing incentive clauses in their contracts.

Bonus payments can also be used to reward past actions. Such historically-based rewards may be much less focused than are pre-existing incentive clauses. Even in cases in which the manager is informed that the bonus is being paid for a specific reason, it is not clear if the board will have the same priorities in the coming year. Thus, bonuses based on unspecified past actions can be important statements by the board about their satisfaction with the manager, but they generally convey less information about where the board would like to see the manager take the cooperative in the future. Approximately 40% of all managers received bonuses based on past performance.

Because there is an important difference between bonuses based on specific, pre-existing incentive clauses and bonuses paid on past performance, the presence of incentive clauses was modeled explicitly in the statistical analysis of bonuses for this study. Local net margin, total sales, and total assets were considered as factors associated with the level of bonus in each situation. Model parameters were estimated using Tobit regression, because the bonus level for many cooperatives was at the lower bound level of zero. To correct for heteroscedasticity, observations were weighted by total assets. The model with the greatest explanatory power for this data set is as follows:

$$\text{BONUS} = \min \begin{cases} 0 \\ \underset{(-2.8732)}{-2.9264\text{E}-06(\text{TA*ICLAUSE})} + \underset{(2.8938)}{1.0752\text{E}-06(\text{SALES*ICLAUSE})} \\ \quad + \underset{(0.72060)}{5.6187\text{E}-08(\text{TA*(ICLAUSE}-1))} \end{cases} \tag{3}$$

Squared correlation between observed and expected values: 0.0690.

ICLAUSE is a binary variable equal to one if there were pre-existing incentives for the manager. In cases where there were pre-existing incentive clauses, total sales and total assets have the strongest statistical associations with bonus payments. In cases where there were no pre-existing incentive clauses, total assets were positively associated with the level of bonus payment, but the parameter for (TA*(ICLAUSE − 1)) was not statistically different from zero at even the 20% level.

For cases where there are incentive clauses, the model reduces to:

$$\text{BONUS} = \min \begin{cases} 0 \\ -2.9264\text{E}-06*\text{TA} + 1.0752\text{E}-06*\text{SALES} \end{cases} \tag{4}$$

Under this form, the econometric results imply that there was a threshold of sales that had to be achieved before a bonus was paid, and that threshold was linked to the size of the cooperative. Thus, a cooperative with $1 million in total assets had a lower threshold of sales ($2,721,726) than did a cooperative with $10 million in total assets ($27,217,260 in sales). Once the sales threshold was reached, the size of the bonus depended on total sales.

For cases with no incentive clauses, there were no sales thresholds for bonuses. The positive relationship between total assets and the size of the bonus means managers of large cooperatives received larger bonuses. This result indicates that managing a large cooperative rather than a profitable one is the key to receiving a bonus if you are the manager of a cooperative in Minnesota or Wisconsin. Paying bonuses on this basis could be counterproductive for some fairly obvious reasons—to increase sales, the margin above cost of goods could be reduced, thereby undermining the financial condition of the cooperative. This is an important conclusion to keep in mind as we turn to the final section of this paper, an examination of the link between the level and form of compensation of the general manager and the financial well-being of the cooperative.

Relationship Between Form of Compensation Packages and Cooperative Performance

Discovering the relationship, if any, between the performance of the cooperative and the form and level of managerial compensation is the ultimate goal of this research. If specific compensation practices are associated with better cooperative performance, adoption of those practices by boards of directors can be an important step toward fulfilling their financial responsibilities to their members.

The measure of cooperative performance used in this part of the analysis was local return on assets in 1992.[2] This measure of performance is familiar and readily available but has significant drawbacks. For example, cooperatives may be concerned with other performance goals (for example, attracting new members), local net margins above some level might be viewed as excessive by many members, and observed profitability may have little to do with the actions of the manager in years with uniformly good or bad performance by cooperatives in an industry group.

Factors originally considered in this study as predictors of local return on assets included: the size of the cooperative (measured by total assets),

the primary business of the cooperative, the salary level of the manager, the use of input from regional cooperatives in the manager's evaluation, the use of formal written or verbal evaluations, good communication between manager and board chair (indicated by agreement on whether or not the manager's contract contained incentive clauses), and the degree to which "analytical" factors (past performance, regional input, incentive clause) were used in managerial evaluation.

The following specification was the starting point for this third part of the analysis:

$$ROA = b_0 + b_1TA + b_2(SALARY/TA) + b_3RINPUT + b_4FEVAL + b_5GOODCOM + b_6ASCORE + b_7ASCORE^2 + u \quad (5)$$

where ROA is local return on assets in 1992, b_0 through b_7 are parameters to be estimated, u is a stochastic error term, and other variables are as previously defined. The parameters of this model were estimated using ordinary least squares regression.

Of numerous variations of this model that were considered, none was very successful in explaining variations in return on assets among the sample cooperatives. The following model is, perhaps, the most reasonable of those considered. Figures in parentheses are t statistics.

$$\underset{}{ROA92} = \underset{(0.5607)}{1.2729} + \underset{(2.066)}{62.367}SALARY/TA + \underset{(1.347)}{1.4343}GOODCOM \quad (6)$$

$$+ \underset{(2.200)}{0.20249}ASCORE - \underset{(-2.466)}{0.0026359}ASCORE^2$$

Adjusted $R^2 = 0.0610$

These results indicate that increases in the ratio of salary to total assets managed was associated with improved return on assets. By dividing salary by total assets, we have normalized salaries. The positive and significant coefficient for this variable indicates that managers of a given sized cooperative who are paid more than their peers do generate a higher ROA. Such managers tend, in short, to justify their relatively higher salaries. There was also a positive relationship between good communication and return on assets, though the coefficient for GOODCOM was not significantly different from zero at even the 15% level. Finally, these results suggest that, while the degree to which "objective" measures were used in the evaluation process was associated with performance, placing greater emphasis on such measures is not always better. In fact, the value of ASCORE that maximizes expected return on assets is only 38 on a 100 point scale. The remaining 62% of the evaluation would focus on such factors as the manager's past salary, salaries of other managers in the area, and the directors' assessment of how well the manager had positioned the cooperative for the future.

Finally, it is worth noting that there was no statistically significant relationship between the use of incentive clauses and local return on assets. Based on the relative scarcity of incentive clauses, it is not surprising to find that they were not associated with higher local returns on assets in local cooperatives in Minnesota and Wisconsin.

Conclusions

This article describes current practices of local cooperatives in Minnesota and Wisconsin with respect to managerial compensation and the processes used to evaluate managers. We analyzed the factors associated with different evaluation practices and with the level and forms of compensation. Finally we examined the relationship between compensation practices and cooperative performance. Rather than reiterate the conclusions reached for each of these objectives, we would like to draw some overall conclusions. The most important of these is that managerial compensation has probably not, heretofore, received the degree of scrutiny that is warranted. The fact that very few managers had incentive clauses and that most bonuses appeared to be related to size (sales, total assets) of the cooperative rather than profitability, are offered as evidence for this conclusion.

It is important for local boards of directors to examine the practices they use to evaluate and compensate their local manager for at least two reasons. First if, as appears to be the case, managers are being paid bonuses on the basis of size measures, this could lead to unfavorable financial results as managers expand sales or total assets at the expense of the cooperative's bottom line. Second, developing incentive clauses for a manager's compensation package can be an excellent exercise for a board of directors because it forces them to define what is important to them in terms of cooperative performance. This not only gives clear signals to management as to the direction in which the cooperative should be taken but also tells members the same thing. As cooperatives and their member-owners face a challenging future, a clear statement of the strategic goals of the cooperative is likely to be important to the long-run success of the business.

Notes

1. For additional descriptive information about the sample population of cooperatives see Trechter and King (in press).
2. Return on assets is defined as local net margin plus interest earned divided by total local assets.

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