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Compensation of Farmer Cooperative Directors – A Statistical Analysis

NCR 194 -- Research on Cooperatives

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Service on the board of directors of cooperatives involves a significant commitment of time and mental energy. Some members, who would make excellent directors, may not seek election to this office because of these demands. But, director compensation can have a positive influence on members' decisions about serving on their board.

A survey of cooperative director compensation was conducted to examine the extent of difference in policies and potential for their improvement. It has long been pointed out that director compensation is relatively low or modest by most standards of comparison.¹ Low compensation may create insufficient incentives for many qualified members to pursue election to cooperative boards and for current directors to perform more effectively.

This paper summarizes the director compensation survey so that cooperatives can use the results for reviewing or designing new policies for their boards. In addition, it raises potential issues for designing future research to determine the impacts of compensation policies on director candidate recruitment and director performance.

The survey identified two general types of financial compensation: (1) per diem or per-meeting payment, and (2) annual stipend or retainer. There were 419 responses to financial compensation questions. Farm supply (205) and grain (173) cooperatives were the predominant type of cooperative that participated in the compensation section of the survey. Two cooperatives indicated that no compensation is paid to directors. In regard to directors' travel expense, the survey asked only whether covered or not. For many local cooperatives, travel expense is negligible, but 247 out of 419 pay these expenses. There were 25 cooperatives that cover travel expenses but do not pay any additional compensation. In 8 cases, only board officers receive compensation.

The terms "per diem" and "per-meeting payment" were used in this context as synonymous. Some respondents explicitly indicated that their "per-meeting payment" applied for each day of a meeting's duration but board meetings are for the most part one day. Many cooperatives have variations for half day or for evening meetings. There are 300 who compensate directors with a per-meeting payment. A few cooperatives mentioned that this payment was only for meetings attended and was therefore not automatic.

Stipends provide fixed annual payments as a method of compensation. This method gives implicit recognition to the fact that board meetings are not the only occasions for a director's work. Among cooperatives that compensate with a stipend, several pay their directors monthly and others annually. Out of 419 survey responses, 69 reported stipends as their sole method of compensating directors and 11 cooperatives exclusively pay stipends to board chairs.

Given these two general procedures of compensation, there are several variations and combinations for compensating directors and officers of the board. The following major procedures and variations reported by cooperatives are presented in tables and graphs:

- Per-meeting payment
- Annual stipend
- Higher per-meeting payment to board chairs
- Exclusive or higher annual stipend for board chairs
- Higher per-meeting payment to board secretaries
- Higher annual stipend for board secretaries
- Combined per-meeting payment and annual stipend
- Combined per-meeting payment and annual stipend for board chairs
- Combined per-meeting payment and annual stipend for board secretaries
- Variations in amounts paid in combined compensation for board officers

The amounts paid by cooperatives using these procedures are summarized with five statistical measures: mode, mean, median, range and stem-and-leaf plots. Several of the tables report these measures by three different ranges of cooperative total sales and by the total number of observations. Furthermore, the number of cooperatives in each sales range and the number in the mode (mode count) are also reported in some of the tables.

The 27 cooperatives without compensation per-meeting or by stipend are excluded from the summary statistics.

The mode is a useful measure when you want to know what methods or values are prevalent, which is the usual orientation of cooperative policies and is of interest to farmers. There are a few cases of ties for the mode or bimodal values, but several commonly used compensation values are almost as frequent as the mode. In fact, compensation data are multi-modal in the sense that there are different clusters of identical per-meeting rates or stipend amounts which cooperatives adopt. This distribution characteristic is evident when examining stem-and-leaf plots that show relatively long runs or strings of identical values.

The median is another informative measure that reflects majority preferences, and is more robust than the average or mean.

In Table 1 the mode and the mean per meeting rate for cooperatives were different in each of the three sales ranges but for the total cooperatives the average rounds out to the mode value of \$100. In total, 63 cooperatives paid the mode value of \$100, listed in Table 1 as the Mode count (#).

There were 42 cooperatives with per meeting compensation in the sales range \$90-8000 million. A double asterisk, **, indicates bimodal values, reported in a footnote to the table. Several other compensation amounts are also frequently observed, as presented in the stem-and-leaf plot that accompanies Table 1. Note that data in stem-and-leaf plots are usually ascending, but they are displayed in this paper in descending order.²

Five observations were designated as high outliers, labeled as H in the stem-and-leaf plot of Table 1 data. These and other relatively high per meeting rates influence the means to be larger than the medians. More than half of the cooperatives in the Table 1 category (159) compensate below the mean value of \$100.

Table 1: Per meeting compensation for directors, reported for cooperatives in sales ranges and in total, 2003

Sales range* (\$ million)	Co-ops (#)	Mode (\$)	Mode count (#)	Mean (\$)	Median (\$)	Range (\$)
2-26	145	100	31	83	75	4 – 400
27-89	113	100	26	95	80	20 – 300
90-8000	42	**	**	173	150	10 – 700
Total	300	100	63	100	75	4 – 700

* Total sales in 2001 as reported by cooperatives in the RBS annual survey.

** A two-way tie for the mode between \$100 and \$200 with each having 6 responses.

Director compensation with a stipend or fixed annual payment is used much less frequently than per meeting payments, with 69 cooperative reporting this method (Table 2). Several cooperatives pay stipends to their directors monthly and others annually. In Table 2 the monthly stipends are reported as an annual equivalent.

The stipend is almost like a small salary, but this feature should not imply that directors have a constant involvement with operating decisions. Instead, the role of directors in any form of business is to advise and provide fiduciary monitoring. In this respect, attendance at board meetings is the *sin qua non* of a director's function, and compensation in theory can be adequately paid with a per-meeting rate. In practice, cooperatives and other businesses find it advantageous to involve directors in a range of community and public affairs. In addition, cooperative directors play a critical role in maintaining positive relations with members, which often stretches their work well beyond the board meetings.

The mode stipend of \$1,200 was paid by 17 cooperatives (Table 2). Note that a \$1,200 stipend is equivalent to the mode per-meeting rate of \$100 for those cooperatives that would have twelve board meetings per year. However, there are two important differences. First, several cooperatives only pay the-per-meeting rate for meetings attended, whereas those cooperatives with an annual stipend, even if disbursed on a monthly basis, pay their directors regardless of meeting attendance. Second, many cooperatives have more than twelve board meetings per year, and often the number of meetings fluctuates, so per meeting payments have that flexibility.

The mean stipends in all sales ranges are larger than the medians due to the influence of a few relatively large annual stipends (Table 2). The stem-and-leaf plot of Table 2 data shows that the stipend of \$25,000 is especially influential on the mean in this data set with only 69 observations, and that a majority pay less than \$1,000.

Table 2: Annual stipend for directors, reported for cooperatives in sales ranges and in total, 2003

Sales range* (\$ million)	Co-ops (#)	Mode (\$)	Mode count (#)	Mean (\$)	Median (\$)	Range (\$)
2 - 26	40	1,200	7	1,032	735	150 – 6000
27 - 89	20	1,200	8	1,373	1,200	360 – 5300
90 -1880	9	**	**	4,164	1,200	480 – 25000
Total	69	1,200	17	1,539	900	150 –25000

* Total sales in 2001 as reported by cooperatives in the RBS annual survey.

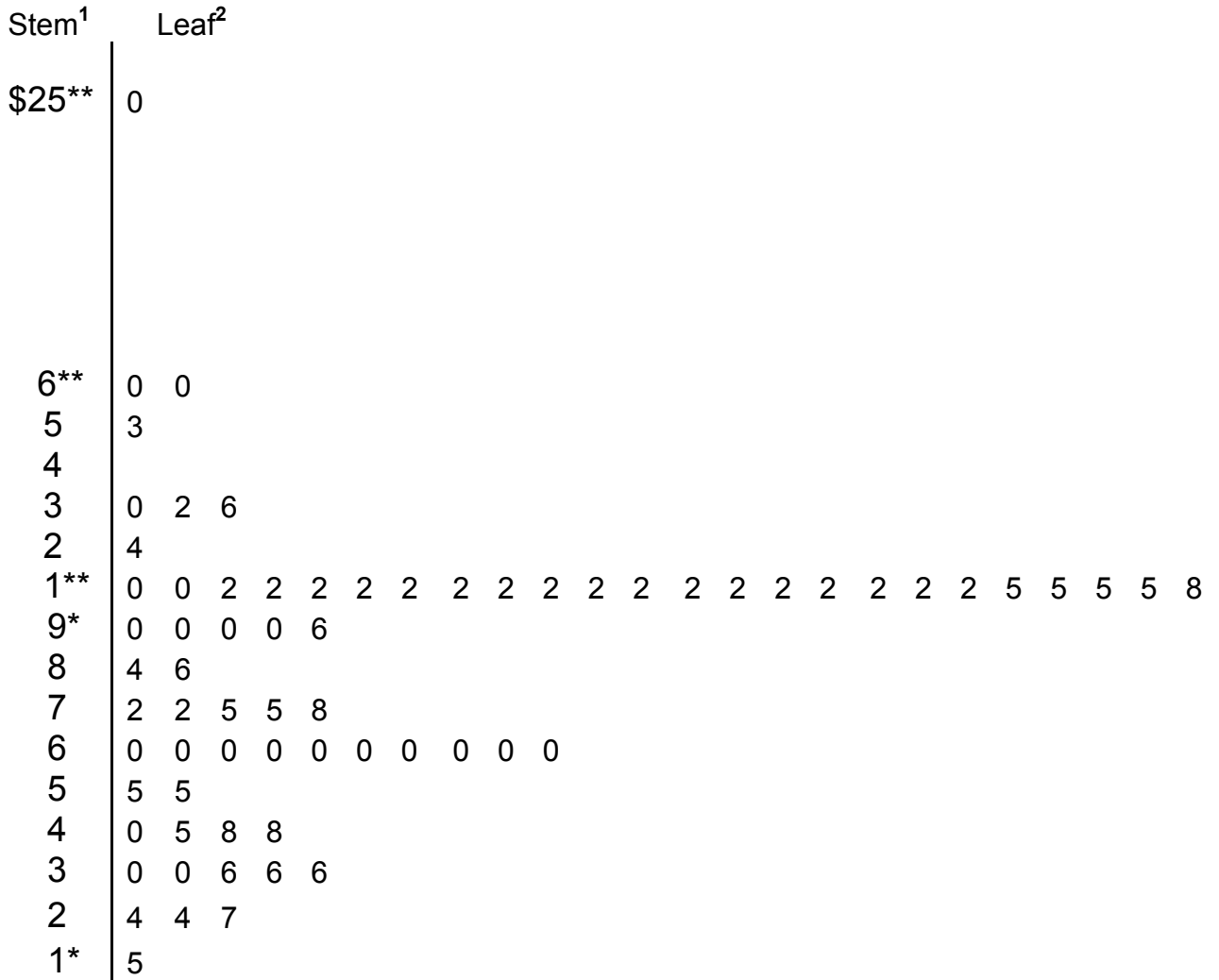
** A two-way tie of 2 responses for \$600 and for \$1,200.

The survey asked for differences in compensation policy for officers of the board. The major distinctions are higher rates paid per meeting and more frequent, as well as higher, stipends for the board chair (president) and for the secretary. Higher rates and stipends for other officers are much less frequently observed in the survey results and have not been summarized.

Table 3 summarizes the per-meeting rate for the board chairs of 248 cooperatives that do not also pay stipends. The per-meeting rate is higher for the board chair than for other directors in 79 cooperatives out of the 248 that exclusively compensate with a per-meeting payment.

The means or averages in Table 3 are higher than in Table 1 with the exception of cooperatives with sales in the \$90 – 8000 million range. In that range, the mean payment for board chairs in 33 cooperatives is \$169, compared to the mean of \$173 for directors in 42 cooperatives (Table 1). This is due to the effect of a few who pay a relatively high per-meeting rate to all directors (included in Table 1), but only the board chairs receive a stipend in addition (excluded from Table 3).

Stem-and-Leaf plot of Table 2 data for 69 cooperatives.
 Director compensation by annual stipend, 2003



¹Stems in the range marked by an asterisk are \$100's, and in the range marked by two asterisks are \$1,000's.

² One leaf is \$10 in the 100's stem range and is \$100 in the 1,000's stem range.

Table 3: Per meeting compensation for board chairs, reported for cooperatives in sales ranges and in total, 2003

Sales range* (\$ million)	Co-ops (#)	Mode (\$)	Mode count (#)	Mean (\$)	Median (\$)	Range (\$)
2 – 26	121	100	19	92	75	4 – 263
27 – 89	94	100	16	110	100	20 – 500
90 – 8000	33	150	4	169	150	10 – 700
Total	248	100	37	109	100	4 – 700

* Total sales in 2001 as reported by cooperatives in the RBS annual survey.

Table 4 summarizes the results for 80 cooperatives that pay stipends to board chairs but no per-meeting payments. Stipends are paid to board chairs in 11 cases where they are not paid to non-officer directors. In another 36 cases chair stipends are higher than the amounts paid to non-officer directors. Payments of higher stipends are reflected in comparing the means of Table 2 and Table 4, or are observable in the stem-and-leaf plots that accompany these tables. Note that the mean is much larger than the mode and median in the largest sales range and in total.

Table 4: Annual stipend for board chairs, reported for cooperatives in sales ranges and in total, 2003

Sales range* (\$ million)	Co-ops (#)	Mode (\$)	Mode count (#)	Mean (\$)	Median (\$)	Range (\$)
2 – 26	46	1,200	6	1,173	830	50 – 9000
27 – 89	24	1,200	5	1,414	1,200	350 – 5300
90 – 1880	10	1,200	2	5,396	1,200	480 – 25000
Total	80	1,200	13	1,733	1,000	50 – 25000

* Total sales in 2001 as reported by cooperatives in the RBS annual survey.

The per-meeting rate for board secretaries is summarized in Table 5. The board secretaries are paid higher per meeting rates than directors in 52 cases. In addition, board secretaries receive per-meeting payments in 10 cases when either no such payments are made, or stipends are paid, to non-officer directors. In fact, 8 out of those 10 have a per-meeting payment only for the board secretary.

Table 5: Per meeting compensation for board secretaries, reported for cooperatives in sales ranges and in total, 2003

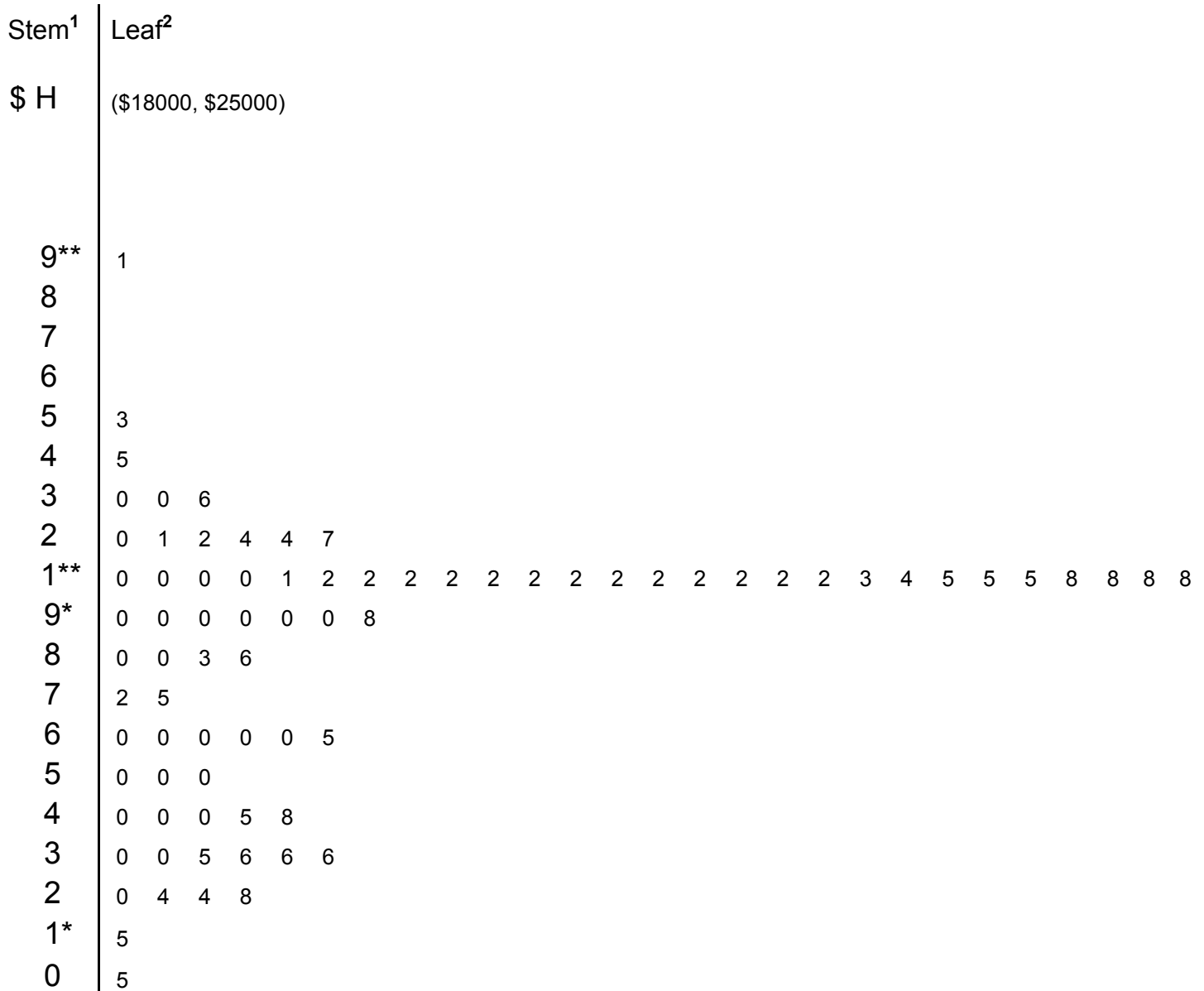
Sales range* (\$ million)	Co-ops (#)	Mode (\$)	Mode count (#)	Mean (\$)	Median (\$)	Range (\$)
2 – 26	118	100	21	90	75	4 – 270
27 – 89	99	100	19	103	90	20 – 315
90 – 8000	37	**	**	201	175	10 – 700
Total	254	100	44	111	95	4 – 700

* Total sales in 2001 as reported by cooperatives in the RBS annual survey.

** A two-way tie of 4 responses each for \$100 and \$150 as mode.

Stem-and-Leaf plot of Table 4 data for 80 cooperatives.

Board chair compensation by annual stipend, 2003



¹ Stems in the range marked by an asterisk are \$100's, and in the range marked by two asterisks are \$1,000's.

² One leaf is \$10 in the 100's stem range and is \$100 in the 1,000's stem range.

The stipend payments for board secretaries in 68 cooperatives are summarized in Table 6. Although there are 69 cooperatives paying stipends to non-officer directors, as reported in Table 2, several in that category also have a per-meeting payment to board secretaries so are not included in Table 6. The survey cooperatives that only compensate with stipends, pay board secretaries a higher amount than non-officer directors in 28 cases. In addition, there are 8 cases where stipends are paid to board secretaries but not to non-officer directors. Note that the mean is much larger than the mode and median in the largest sales range and in total.

Table 6: Annual stipend for board secretary, reported by cooperatives in sales ranges and in total, 2003

Sales range* (\$ million)	Co-ops (#)	Mode (\$)	Mode count (#)	Mean (\$)	Median (\$)	Range (\$)
2 – 26	41	1,200	6	1,099	900	60 – 6000
27 – 89	18	1,200	5	1,160	1,200	250 – 2700
90 – 1880	9	1,200	2	4,384	1,200	480 – 25000
Total	68	1,200	13	1,550	930	60 – 25000

* Total sales in 2001 as reported by cooperatives in the RBS annual survey.

Combined Compensation Policy

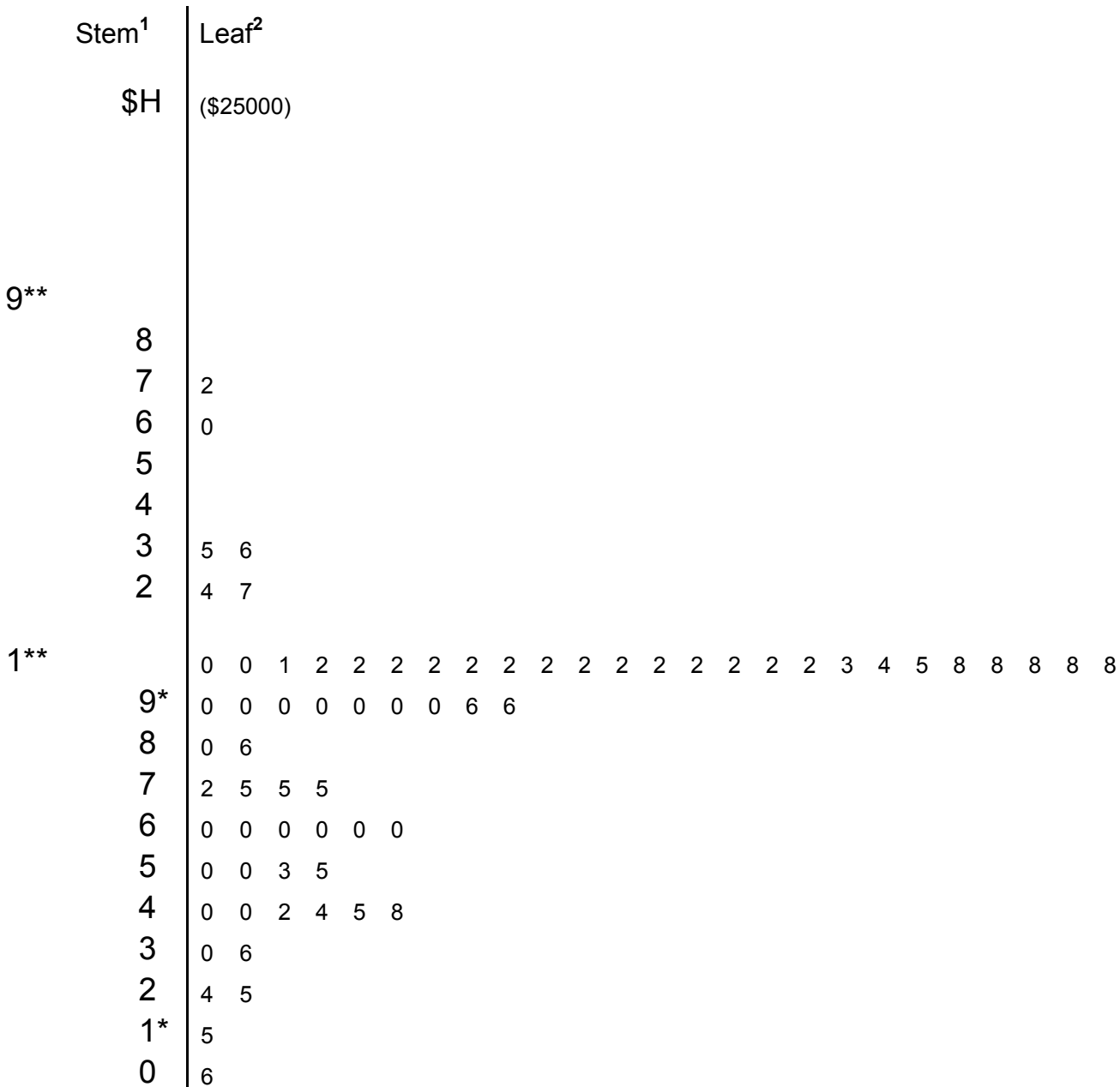
A combined policy of per meeting and stipend payments can provide more exact compensation for services performed. Payments per meeting can be regarded as a variable cost, connected to a specific activity that varies in total amount; in this case, by the number of board meetings. In contrast, stipends can be considered a fixed cost, similar to an annual salary. Stipends compensate for tasks that directors do outside the board room, such as having to discuss issues with members, or having to read more industry and USDA reports than other members.

The per-meeting rates and stipends for 15 cooperatives are summarized in Table 7. With combined compensation, the mean per-meeting rate is lower, but the mode and median are the same as it is for those cooperatives using single compensation with a per meeting payment (Table 1). The mean stipend is higher in the combined policy but the median is lower than for those cooperatives paying a stipend only (Table 2). This mixed result is due to the influence on the mean of a \$20,000 stipend paid by one out of only 15 cooperatives with a combined compensation policy.

Table 7: Combined compensation for directors of payments per meeting and annual stipends, 15 cooperatives, 2003

	Mode (\$)	Mode count (#)	Mean (\$)	Median (\$)	Range (\$)
Per meeting:	100	4	87	75	10 – 250
Stipend:	1,200	4	2,513	750	250 – 20000

Stem-and-Leaf plot of Table 6 data for 68 cooperatives.
 Board secretary compensation by annual stipend, 2003



¹ Stems in the range marked by an asterisk are \$100's, and in the range marked by two asterisks are \$1,000's.

² One leaf is \$10 in the 100's stem range and is \$100 in the 1,000's stem range.

Tables 8 and 9 show the values of combined compensation for board chairs and secretaries, respectively. Compensation of both kinds is often higher for board chairs than for secretaries; however, stipends are relatively much higher than are the per-meeting payments.

Diverse tasks can be compensated more efficiently by using a combined policy, and this is more evident with the data for board chairs and secretaries. Both types of officer have a special role to play at board meetings, and they have work that is carried on between meetings. However, board chairs are likely to have more work beyond or outside of that which focuses primarily on the meetings.

Table 8: Combined compensation for board chairs of payments per meeting and annual stipends, 2003

Per Meeting:

Sales range* (\$ million)	Co-ops (#)	Mode (\$)	Mode count (#)	Mean (\$)	Median (\$)	Range (\$)
2 – 26	29	100	7	88	75	10 – 400
27 – 89	25	100	8	106	100	50 – 300
90 – 8000	15	75	4	187	200	50 – 400
Total	69	100	16	116	100	10 – 400

Stipend:

2 – 26	29	**	**	1,022	300	50 – 9000
27 – 89	25	600	4	3,964	600	100 – 80000
90 – 8000	15	30,000	2	16,282	6,000	100 – 60000
Total	69	300	7	5,405	600	50 – 80000

* Total sales in 2001 as reported by cooperatives in the RBS annual survey.

** A three-way tie of 3 responses each for \$300, \$500, and \$1,200 as the mode.

Table 9: Combined compensation for board secretary of payments per meeting and annual stipends, 2003

Per Meeting:

Sales range* (\$ million)	Co-ops (#)	Mode (\$)	Mode count (#)	Mean (\$)	Median (\$)	Range (\$)
2 – 26	37	100	7	79	75	10 – 200
27 – 89	26	100	5	99	88	10 – 300
90 – 8000	12	75	4	160	158	50 – 300
Total	75	100	12	99	75	10 – 300

Stipend:

2 – 26	37	100	6	393	275	50 – 1425
27 – 89	26	600	4	3,328	600	150 – 65000
90 – 8000	12	300	2	9,821	3,100	100 – 45000

Total	75	300	8	2,919	400	50 – 65000
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* Total sales in 2001 as reported by cooperatives in the RBS annual survey.

Table 10 shows some aspects of the data for Tables 8 and 9 that reveal information for understanding how combined compensation policies are used. These tables use data from 88 cooperatives. There are 56 cooperatives that have a combined policy for both chairs and secretaries of the board. There are 13 cooperatives that provide a combined policy only for the chair and 19 that offer it only for the board secretary (Table 10).

The fact that there is only one case where a board chair receives a higher per meeting rate than directors shows that the stipend is the primary way to compensate the board chair for their work apart from running board meetings. In contrast, board secretaries with combined compensation policies are paid a per-meeting rate that is higher in 22 cases than what is paid to non-officer directors. This reflects their extra work in managing the minutes and other items of board meetings. The rates paid to secretaries were often only \$10 or \$15 per meeting higher than the rates paid to other directors, which suggests compensation for very specific responsibilities related to board meetings.

Table 10: Differences in combined compensation policies for board chairs and board secretaries in 88 cooperatives, 2003

Special Aspects	Chair	Secretary
Number of cooperatives with combined compensation policy:	69	75
Combined policy applies to only one officer:	13	19
Per meeting rate is above amount paid to other directors:	1	22
Stipend is above amount paid to other directors:	61	57

Conclusions

The purpose of collecting director compensation data is to inform cooperatives about how other associations handle this aspect of governance. Both the extent of differences in compensation values and differences in methods are useful information for cooperatives when reviewing or updating their policies.

The statistical presentation in this paper emphasized mode values and frequencies displayed in stem-and-leaf plots. Another form of presentation was simple counts of the number of times the values of common compensation methods differed between directors, board chairs and secretaries. More research is needed to determine the impact of compensation on board performance.

Reference Notes

¹ Surveys of director compensation have been conducted at several points in time and for geographic areas. A few of these studies were examined as a part of the research for this paper and are listed in chronological order.

Beverly Rotan, *Cooperative Employee Compensation, 1999*, USDA, RBS Research Report 189, Oct. 2001.

KPMG Peat Marwick, *The Center for Cooperatives' 1992 California Cooperative Executive and Director Compensation Survey*, 1992.

Bruce L. Anderson and Brian M. Henehan, *Director Compensation in Northeast Agricultural Cooperatives*, AE Ext. 88-27, Oct. 1988.

Karen Zimbelman, *Director Compensation Survey*, National Cooperative Business Association, unpublished, 1986.

Bruce L. Swanson, *Manager and director Compensation of Selected Farmer Cooperatives, 1982*, USDA/ACS, unpublished, 1982.

² Frederick Mosteller and John W. Tukey, *Data Analysis and Regression*, 1977, p. 43-48. Note that Tukey originally developed the stem-and-leaf plot display in a book published in the same year, *Exploratory Data Analysis*, 1977.