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THE EFFECTS OF MANAGERS' CHARACTERISTICS AND PERSPECTIVES ON THE FINANCIAL PERFORMANCE OF THAI AGRICULTURAL COOPERATIVES

Abstract:

Over the last few decades, cooperatives in Thailand have become larger, more complicated and market oriented. As a result, demand for high-quality managers in cooperatives increases. A manager who understands his or her duties and functions and with good personality, responsibility, relationship with others is a great asset of a cooperative. This paper, empirically tests the hypothesis that the characteristics and perspectives of managers affect the performance of cooperative specifically, the financial performance. Two sets of data are used. The first data set is 2011 annual cooperative financial information from Cooperative Auditing Department. The second data set is from a survey of the managers of agricultural cooperatives using mailed questionnaire. A total of 421 self-administered questionnaires were distributed to the managers of all large agricultural cooperatives in Thailand (those with more than 1,000 members). Of the 421 managers, 258 responded, and 255 were usable. Regression analysis is applied to test the hypothesis. The study results show that overall, the managers' characteristic and perception variables used in the model have limited explanatory strength on financial performance of the cooperatives, both in terms of return on assets and return on equity. Despite the limitation, the experiences as cooperative managers, his or her participation in financial training program and perception on cooperative principles could positively increase the return on assets of the society although the magnitude is quite small.

Keywords:

managers, financial performance, agricultural cooperatives

Instroduction

Like investor owned firm, cooperative managers play an important role in solving the technical business problems and managing the accounting, financing and other problems of the cooperative's operations. The cooperative managers also share some responsibilities with the board of directors, in other activities such as long-range planning, and usually assist the board make intelligent decisions (Williamson, 1998). In agricultural cooperatives, it is generally agreed that the success of their business depends mainly on management practices. Azzam and Turner (1991) found that when a manager working independently pursuing his/her responsibilities or when working with the board of directors on shared responsibilities, does contribute to the speed of adjustment toward the desired financial goal. The goal of this paper is to examine the effect of managers' characteristics and perspectives on the cooperative financial performance. The model used in the analysis, sources of data, and empirical results are discussed in the next section.

Objectives and Procedures:

The main objective of this paper is to identify the effect of managers' characteristics and perspectives on the financial performance, particularly the return on asset (ROA) and return on equity (ROE) of the cooperative societies. Data used in this paper come from two sources. The first data set is 2011 annual cooperative financial information from Cooperative Auditing Department (CAD). The second data set is from a survey of the managers of agricultural cooperatives using mailed questionnaire. A total of 421 self-administered questionnaires were distributed to the managers of all large agricultural cooperatives in Thailand (those with more than 1,000 members) during September-October 2012. Of the 421 managers, 258 responded, and 255 were usable. The survey has a good response rate of 61%.

The surveyed data cover a wide range of information on characteristics and perspectives of cooperative managers including: demographical characteristics, knowledge and perceptions of cooperative principles, financial analysis, perception of the division of responsibility between the manager and board of directors, and perceptions of management issues relating to the operation and success of the cooperative. In evaluating managers' knowledge and perceptions of cooperative principles, the ICA cooperative principles were used as guidelines. Adrian and Green (2001) mention that if a cooperative manager is unfamiliar with these principles, they are not implemented in the operation of the business, the firm could be adversely affected. A 5-level rating scale from 1 (extremely unimportant) to 5 (extremely important) is used to evaluate the importance of cooperative principles to the operation and success of their business.

In evaluating the managers' perceptions of the division of responsibility between the manager and board of directors, Baarda (2002) notes that board of directors and management are often struggle with the division of duties, supervision, and operational details between them, and can be detrimental to the cooperative. Based on Baarda and Cooperative Promotion Department (CPD), a 3-level of "board is responsible" "manager is responsible" and "board and manager are

responsible" questions in matrix format for selected items of area of responsibility is used to evaluate the managers' perceptions.

To measure the managers' perceptions on management issues relating to the operation and success of the cooperative, a variety of statements were selected from the review of Adrian and Green (2001). For all questions, a 5-level scale ranging from 1 (extremely unimportant) to 5 (extremely important) is used.

To check the reliability of measurement scales, Cronbach's Alpha Coefficient is used. All variables give a Cronbach's Alpha value of more than 0.80.

Return on Asset (ROA) and Return on Equity (ROE) are used as proxy to measure the financial performance of cooperative societies. ROA is the ratio of net income to the average total assets of the cooperative. It measures the ability of cooperative management to generate net income from their resources endowment. ROE is the ratio of net income to average total equity of the society. It describes the return members receive for their equity in the cooperative. The formulas for calculating are as follows:

ROA = (Net Income (Loss) / Average Total Asset) * 100
ROE = (Net Income (Loss)/ Average Total Equity) * 100

Regression analysis is used to determine the relationship between manager characteristics/ perspectives and financial performance of the cooperative. The empirical model is shown below:

$$PERFORMANCE = \alpha + \beta_1 (MEXP) + \beta_2 (FTRAIN) + \beta_3 (PERBOARD) + \beta_4 (PERCOOP) + \beta_5 (PERMAN)$$

Where:

PERFORMANCE = the performance measure (rate of ROA, rate of ROE in percentage)
MEXP = experiences as cooperative manager (in year)
FTRAIN = Participation in a cooperative financial analysis training program (No = 0, Yes = 1)
PERBOARD = managers' perception in division of responsibility between managers and board of directors (Fault = 0, Correct = 1)
PERCOOP = managers' knowledge and perception of cooperative principles (numerical rating of 1-5 to rank in term of the importance of cooperative principles to the operation and the success of their cooperatives, (extremely unimportant = 1, extremely important = 5)
PERMAN = managers' knowledge and perception of the managerial function (numerical rating of 1-5 to rank in term of the important of managerial function to the operation and the success of their cooperatives (extremely unimportant = 1, extremely important = 5)

Financial performance of sample cooperatives

As of 2011, the 255 sample cooperatives, in aggregate had a total asset and members' equity of 58,177 million and 19,581 million baht respectively. Their total business value in that year was 25,242 million baht with net income of 1,046 million baht or 4.15 % of total revenue. In this particular year, many cooperatives were directly affected by the flood crisis in Thailand and resulted in only 198 out of 255 sample cooperatives or 77% gained positive profit. The net income of them varied from -17.8 to 41.7 million baht.

Table1 shows the profitability ratio which provides a view of financial strength for a cooperative. The ROA ratio measures the effectiveness of the cooperative in employing its assets to generate profits. Hall and Geyser (2004) admits that, ROA relates net income to the investment of all financial resources at the command of management, and it is the most useful as a measure of the effectiveness of resource utilization. The ROE measures profitability relative to member investment. It is a measurement of efficiency with the members' investment through their original capital contributions and retained earnings of the cooperative. Ideally, return to member equity should equal or exceed what members could earn if the capital were invested elsewhere. In the fiscal year 2011, most of sample cooperatives (61.9%) had the ROA ratio ranging from 1.00 to 5.00%. The average ROA ratio was 1.68%. About half (50.20%) had the ROE ratio ranging from 1.00 to 10.00%. The average ROE ratio was 4.06%.

Table 1: Financial Performance of Sample Cooperatives

Financial Performance	Number of Society	Percent	Mean	S.D
Return on Asset				
<1.00 %	80	31.37		
1.00%-5.00%	158	61.96	1.68%	4.186
>5.00%	17	6.67		
Return on Equity				
<1.00%	61	23.92		
1.00%-10.00%	128	50.20	4.06%	49.444
>10.00%	66	25.88		

Respondents' characteristics

The ages of respondents ranged from 27 to 67 years old with an average of 47 years. 80% of the samples held bachelor degree or higher, 95% of them had training experiences in cooperative financial analysis. All of them had experiences as cooperative manager, with an average of 14.77 years. The profile of the respondents was depicted in table2.

Table2: Managers' characteristics of sample agricultural cooperatives

Managers' characteristics	Number	Percent	Mean	S.D	Range
Age (year)					
<30	6	2.35			
30-40	37	14.51			
41-50	127	49.80	47.03	7.025	27-67
51-60	83	32.55			

>60	2	0.78			
Education level					
College or less	50	19.61			
Bachelor or more	205	80.39			
Financial analysis training experience					
No	11	4.31			
Yes	244	95.69			
Experience as coop manager (year)					
1-10	103	40.39			
11-20	84	32.94	14.77	9.232	1-36
21-30	59	23.14			
>30	9	3.53			

The perception about cooperative principles

A number of cooperative principles from the ICA guideline were used and respondent managers were asked to rank, in term of the importance to the operation and success of their cooperative. Table3 illustrates the response of the respondents. More than 80% were considered “extremely important” and “very important” for 5 in 7 principles. They are “owned by user/patron” (96.51%), “providing education and training for members” (92.63%), “benefits is allocated on the basis of usage” (85.98%), “controlled by user” (83.72%), and “limited dividend to members” (80.24%).

Table 3: The response of cooperative managers to the importance of selected cooperative principles to the operation and success of their cooperatives

Cooperative Principles	Response Ranking					N
	1	2	3	4	5	
	….……%.....					
1. Open Membership	3.49	9.30	17.05	48.06	22.09	255
2. Owned by User/Patron	-	0.39	3.10	24.42	72.09	255
3. Democratic Member Control	0.78	3.88	11.63	37.21	46.51	255
4. Benefits is allocated on the basis of usage as patronage refund	3.49	3.88	6.59	41.47	44.57	255
5. Limited dividend to members	1.55	2.71	15.50	45.74	34.50	255
6. Providing education and training for members	0.39	0.78	6.20	53.10	39.53	255
7.Community and Social Responsibility	0.39	2.33	24.03	47.29	25.97	255

Note: The response ranking: 1 = extremely unimportant; 2 = unimportant; 3 = somewhat important; 4 = very important; 5 = extremely important

The understanding about Manager's versus Board's responsibility

A number of duties under the responsibility of the manager, board of directors, and both of them (by the suggestion of the CPD and Baarda) were selected. The respondent managers were asked to determine whether these selected duties fall upon, manager, board or share between them. It appears from table 4 that of their 3 duties, the majority of the respondents (93.12%) only perceived correctly one of them "managing the daily activities of the cooperative". About three-fourths of them (74.03%) failed to identify the boards' duties, "developing long-term strategic plans" (81.78%), and "evaluating the cooperative performance".

Table 4: The response of cooperative managers on the division of responsibility between managers and board of directors.

Area of Responsibility	Managers' perception of the division of responsibility		
	Manager	Shared	Board
Manager	…… …… %.....		
- Managing the daily activities of the cooperative	93.12	12.79	0.39
- Hiring and training the cooperative employees	32.94	42.25	24.80
- Educating and public relations the cooperative activities to general public	40.31	54.65	5.04
Board			
- Developing long-term strategic plans	25.97	55.81	18.22
- Approving the major investment of the cooperative	11.24	48.84	39.92
- Evaluating the cooperative performance	23.25	50.78	25.97
Shared			
- Maintaining and promote the good will of the cooperative	25.97	68.60	5.43
- Keeping the legislation concerning cooperatives	27.14	65.50	7.36

The perception about management issues

A number of management issues were selected to ask the respondents in terms of the importance to the operation and success of their cooperatives. By literature review (Adrain and Green, 2001), the more emphasis on the importance a manager perceived in these issues, the more likely the manager will be struggle to make the cooperative successful. Table 5 indicates that almost all of the respondent managers (more than 90%) considered "extremely important" and "very important" for 9 of 10 issues, "setting of the written job description" (97.65%), "setting of the

employees' incentive program" (96.47%), "perception of employee to the cooperative management" (96.47%), "perception of employee to the cooperative principles" (96.08%), "perception of board of directors to the cooperative management" (96.08%), "setting of employees' training program" (95.30%), "perception of members to the cooperative management" (92.15%), and "financial analysis within each department" (91.12%).

Table 5: The perception of cooperative managers to the importance of selected management issues to the operation and success of their cooperative

Management Issues	Response Ranking					N
	1	2	3	4	5	
	……..%.....					
1. The perception of members to the cooperative management	-	1.18	6.67	51.37	40.78	255
2. The perception of board of directors to the cooperative management	0.39	1.57	1.96	35.69	60.39	255
3. The perception of employees to the cooperative management	-	0.78	2.75	32.94	63.53	255
4. Budget allocation within each department	-	2.75	8.63	53.73	34.90	255
5. Financial analysis within each department	-	1.18	4.71	54.51	39.61	255
6. Setting of the written job description	-	0.39	1.96	43.14	54.51	255
7. Setting of the employees' training program	-	0.39	4.31	50.59	44.71	255
8. Setting of the employees' incentive program	-	0.39	3.14	41.18	55.29	255
9. Searching for product development	0.39	0.78	10.59	52.16	36.08	255
10. The perception of employees to the cooperative principles	-	039	3.53	46.67	49.41	255

Note: The response ranking: 1 = extremely unimportant; 2 = unimportant; 3 = somewhat important; 4 = very important; 5 = extremely important

Result analysis

Two regression models were used to explain the effects of managers' characteristics and perspectives on the agricultural cooperative financial performances. Table 6 indicates that the models explain very little variability in both ROA equation (R^2 = 0.08) and ROE equations (R^2=0.01), The F-statistic for the ROA equation was statistically significant at 0.01 level but that for ROE equation was not significant. In ROA model, the coefficient of MEXP is positive and statistically significant at 0.01level which indicates that increase in experience as a cooperative manager increases return on assets. This reflects that increasing experiences of managers can increase efficiency in mobilizing assets of cooperatives to generate their net margin. This finding supports the hypotheses that, the longer a manager has managed a cooperative, the better familiarize he/she has in its functions and responsibilities (Adrain and Green, 2001), and from

human capital theory, the managers with greater human capital (intelligence, etc) should produce better organizational performance.

The same relationship with ROA is true for the participation in a financial training program and perception on cooperative principles of managers. The coefficient of FTRAIN and PERCOOP are positive and statistically significant at 0.05 and .010level respectively which suggest that participation of manager in the financial training program and his/her perception on cooperative principles increase the return on asset of cooperative. Similarly, those of Fadiora (2012), Uysala and Koca (2009) and Khan (2010) investigated and found a significant positive relationship between training and development practices and organizational performance.

Table 6: Impacts of manager characteristics and their perception on financial performance of agricultural cooperatives, 2011.

	Financial Performance of Cooperatives	
	Return on Assets (ROA)	Return on Equity (ROE)
Intercept	-13.231***	-40.507
	(-3.833)	(-0.958)
MEXP	0.117***	0.794*
	(3.250)	(1.787)
FTRAIN	2.712**	-5.657
	(2.149)	(-0.366)
PERCOOP	1.107*	-3.722
	(1.682)	(-0.461)
PERBOARD	0.071	-1.490
	(0.364)	(-0.616)
PERMAN	0.414	7.755
	(0.550)	(0.841)
R^2	0.087	0.018
F-Test	4.793***	0.916
	N =255	

Notes: - Values in parentheses are t-value, Single, double and triple asterisks (*) denote statistical significance at 0.10, 0.05 and 0.01 levels respectively.

Conclusions

This paper empirically examined the effect of managers' characteristics and perspectives on the financial performance of 255 large agricultural cooperatives. The results indicate that overall, the managers' characteristic and perception variables used in the model have limited explanatory strength on financial performance of the cooperatives, both in terms of return on assets and return on equity. Despite the limitation, the experiences as cooperative managers, his/her participation in financial training program and perception on cooperative principles could positively increase the return on assets of the society.

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