



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



**THE IMPACT OF THE RELATIONSHIP BETWEEN  
MANAGERS AND THE BOARD OF DIRECTORS ON  
FINANCIAL PERFORMANCE OF AGRICULTURAL  
COOPERATIVES**

Department of Agricultural and Applied Economics  
Texas Tech University  
November 04, 2015

Sanja Zivkovic  
Darren Hudson  
Phil Johnson  
John Park

# INTRODUCTION

- ❖ A cooperative is a user-owner and user-control business that allocates benefits on the basis of use
- ❖ Linked roles of members-owners, directors and managers
- ❖ Success of a cooperative mainly depends on a good board-manager relationship



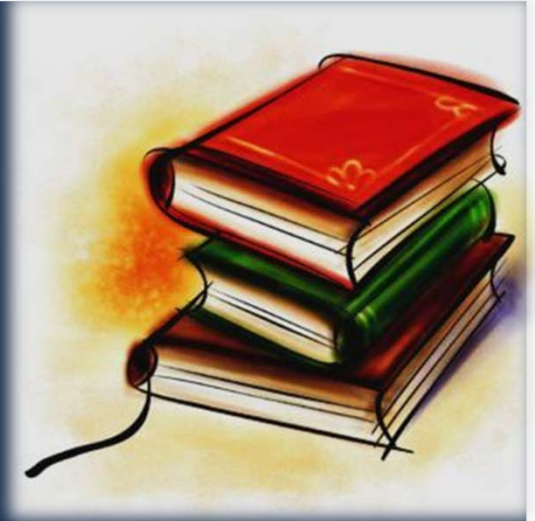
# RESEARCH OBJECTIVE

Evaluate the relationship between the board of directors and management in agricultural cooperatives, and examine the impact of this relation on financial performance of agricultural cooperatives



# THEORETICAL VIEWS OF MANAGERIAL BEHAVIOR

- ❖ Agency theory
- ❖ Managerial hegemony theory
- ❖ Stewardship theory

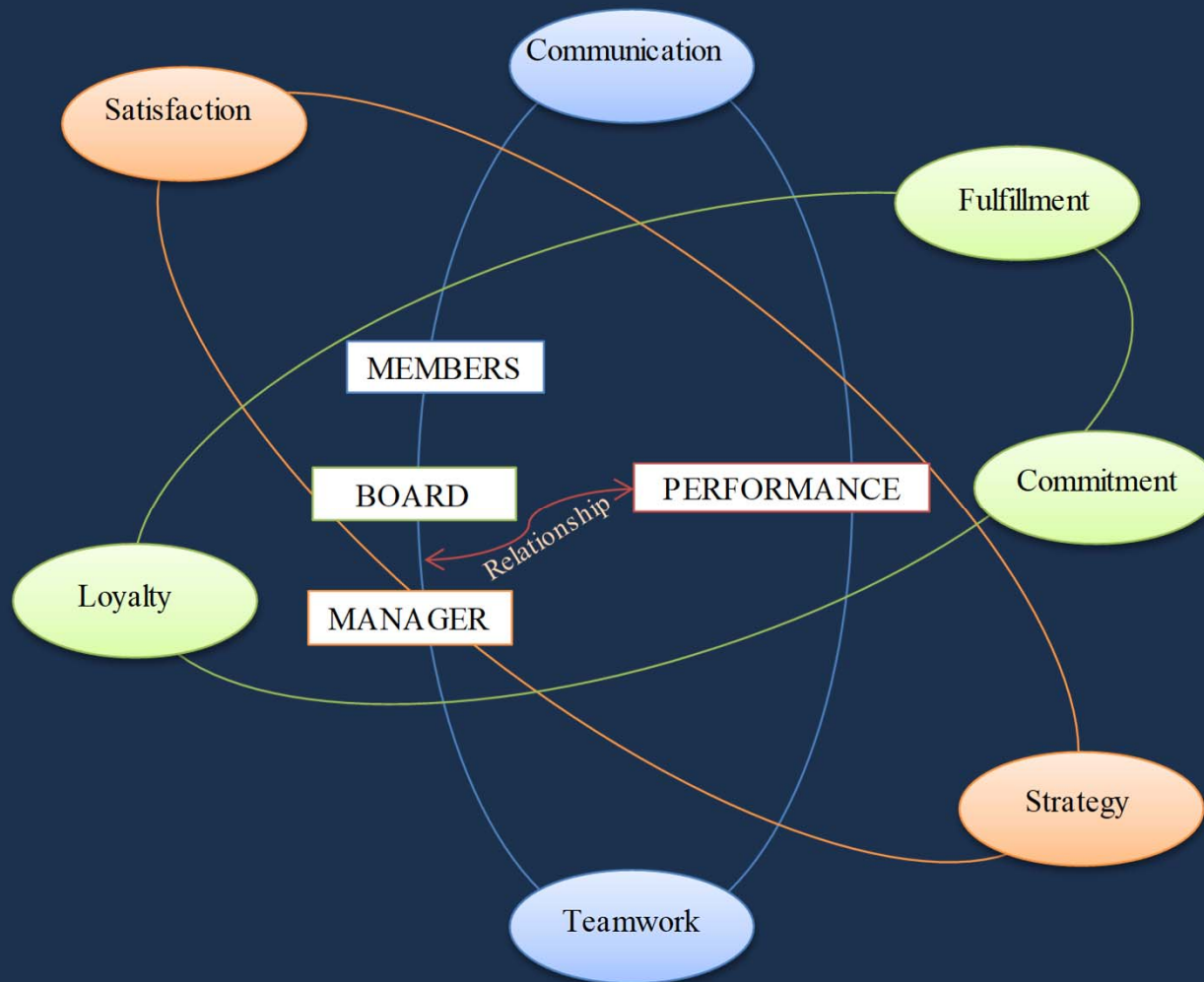


# STEWARDSHIP THEORY

- ❖ Managers are good stewards and team players, motivated by a need to achieve intrinsic satisfaction
- ❖ Managers identify themselves with the corporation
- ❖ What motivates individual action by managers is their personal perception



# FACTORS AFFECTING PERFORMANCE



# METHODS AND PROCEDURES

- ❖ TACC Managers Conference in Ruidoso (July 9-11, 2014)
- ❖ TACC Board Conference in Ruidoso (July 23-25, 2014)
- ❖ Sample of 148 agricultural cooperatives in Texas (296 individuals)
- ❖ Two data collection methods



# MODEL TESTING APPROACH

Dependent variables:

$$\text{Return on assets (ROA)} = \frac{\text{Net Margin}}{\text{Total Assets}}$$

$$\text{Return on equity (ROE)} = \frac{\text{Net Margin}}{\text{Total Equity}}$$

# MODEL TESTING APPROACH

$$ROA / ROE = \alpha_0 + \alpha_1 size + \alpha_2 meet + \alpha_3 stplan + \alpha_4 inter + \alpha_5 conf + \\ + \alpha_6 career + \alpha_7 loyal + \alpha_8 relat + \alpha_9 cotgin + \alpha_{10} memb + \varepsilon$$

*size* = average sales of a single cooperative / average sales of all cooperatives,

*meet* = frequency of official meetings with the board,

*stplan* = frequency of engagement in strategic planning,

*inter* = interaction between size and strategic planning,

*conf* = number of meetings and conferences attended per year,

*career* = belief that a manager will spend the rest of his/her career in the cooperative,

*loyal* = belief that a manager must always be loyal to his cooperative,

*relat* = satisfaction with the relationship with the board,

*cotgin* = dummy variable for a cotton gin cooperative,

*memb* = dummy variable if a manager is member of the cooperative.

# DESCRIPTIVE STATISTICS

- ❖ 296 individuals (148 managers and 148 chairmen)
- ❖ 78 individuals responded (48 managers and 30 chairmen)
- ❖ Managers response rate was 32.43%
- ❖ Chairmen response rate was 20.27%



# DESCRIPTIVE STATISTICS

Table 1. Age of the managers

Age	25-30	31-35	36-40	41-45	46-50	51-55	≥56
Number of managers in %	4%	7%	4%	11%	7%	30%	37%

Table 2. Education level of the managers

Education	High school	Some college	Undergraduate	Graduate
Number of managers in %	20%	28%	37%	15%

# DESCRIPTIVE STATISTICS

Table 3. The frequency of official and unofficial meetings

Frequency of meetings	Once a week	Once a month	Once every few months	Once a year	Once every few years	Never
Officially	0%	85%	15%	0%	0%	0%
Unofficially	39%	50%	9%	0%	0%	2%

Table 4. The frequency of engagement in strategic planning

Frequency of engagement in strategic planning	Once a year	Once every two years	Once every three years	Once every five years	Never
Managers	43%	7%	9%	19%	22%

# DESCRIPTIVE STATISTICS

Table 5. Ranking each of the following items in order of importance

	Ranking
Customer service/Product quality	1st
Employee retention	2nd
Profitability/Patronage refunds	2nd
Capital improvement	5th
Attracting new members	6th
Stock retirement	6th

# DESCRIPTIVE STATISTICS

Table 6. Average satisfaction level of the managers

Average satisfaction level with:	Scale from 1 to 10
Amount of communication	8.43
Quality of communication	8.57
Job	8.88
Business relationship with the board	9.02

# RESULTS

## ROA MODEL

Table 7. Results for return on assets model

Independent variable	Parameter Estimate	Standard error	P value
Size of the cooperative	-0.0210	0.0315	0.5103
Frequency of meetings with the board	-0.0350	0.0353	0.3282
Frequency of strategic planning	0.0768	0.0468	0.1097
Interaction size and strategic planning	-0.0771	0.0401	0.0627
Meetings and conferences attended	0.0025	0.0138	0.8549
Spending the rest of career in coop	-0.0223	0.0326	0.4986
Loyalty	0.0901	0.0280	0.0028
Relationships with the board	0.0150	0.0086	0.0905
Cotton gin cooperative	0.0762	0.0232	0.0023
Member of the cooperative	0.0413	0.0235	0.0875

$R^2 = 0.6742$

Adjusted  $R^2 = 0.5837$



# DESCRIPTIVE STATISTICS

## ROA MODEL

Independent variable	Mean	Std deviation	Minimum	Maximum
ROA	0.1519	0.1098	-0.0112	0.3838
Size of the cooperative	1.0000	0.6887	0.0091	1.8247
Frequency of meetings with the board	0.8511	0.3599	0.0000	1.0000
Frequency of strategic planning	0.4255	0.4998	0.0000	1.0000
Interaction size and strategic planning	0.5057	0.7479	0.0000	1.8247
Meetings and conferences attended	2.7021	0.9761	1.0000	4.0000
Spending the rest of career in coop	0.7021	0.4623	0.0000	1.0000
Loyalty	0.8936	0.3117	0.0000	1.0000
Relationships with the board	9.0574	1.2176	3.6000	10.0000
Cotton gin cooperative	0.5532	0.5025	0	1.0000
Member of the cooperative	0.6170	0.4914	0	1.0000

# RESULTS

## ROE MODEL

Table 8. Results for return on equity model

Independent variable	Parameter Estimate	Standard error	P value
Size of the cooperative	-0.1401	0.0561	0.0171
Frequency of meetings with the board	-0.1579	0.0694	0.0289
Frequency of strategic planning	-0.0230	0.0795	0.7739
Interaction size and strategic planning	-0.0066	0.0586	0.9116
Meetings and conferences attended	0.0208	0.0248	0.4059
Spending the rest of career in coop	0.0221	0.0508	0.6656
Loyalty	0.3208	0.2265	0.1653
Relationships with the board	0.0292	0.0096	0.0044
Cotton gin cooperative	0.1947	0.0400	<.0001
Member of the cooperative	0.0745	0.0369	0.0509

$R^2 = 0.8807$

Adjusted  $R^2 = 0.8475$

# DESCRIPTIVE STATISTICS

## ROE MODEL

Independent variable	Mean	Std deviation	Minimum	Maximum
ROE	0.2253	0.3017	-1.3698	0.6598
Size of the cooperative	1.0000	0.6887	0.0091	1.8247
Frequency of meetings with the board	0.8511	0.3599	0.0000	1.0000
Frequency of strategic planning	0.4255	0.4998	0.0000	1.0000
Interaction size and strategic planning	0.5057	0.7479	0.0000	1.8247
Meetings and conferences attended	2.7021	0.9761	1.0000	4.0000
Spending the rest of career in coop	0.7021	0.4623	0.0000	1.0000
Loyalty	0.8936	0.3117	0.0000	1.0000
Relationships with the board	9.0574	1.2176	3.6000	10.0000
Cotton gin cooperative	0.5532	0.5025	0	1.0000
Member of the cooperative	0.6170	0.4914	0	1.0000

# WHAT DO MANAGERS NEED?

- ❖ Managers require from the board:
  - Chairman engagement in strategic planning
  - Board members to get training
  - Determine direction and long term goals for the cooperative

# CONCLUSIONS

- ❖ Special dynamic creates a unique situation in terms of the relationship between managers and the board
- ❖ Good relationship between managers and the board of directors is perceived as the most important determinant of performance
- ❖ Cohesion between the board and the managers would enhance their productivity and effectiveness by resulting in higher profitability

THANK YOU

QUESTIONS?