

# The Impact of Social Capital on Entrepreneurial Performance in Agriculture

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**Abstract**—In agriculture, social capital plays a major role in entrepreneurial performance. This study divides social capital into bounding social capital and bridging social capital. The data is collected by questionnaire, and the structural equation modeling is used to understand the impact of different social capitals on entrepreneurial performance in agricultural settings. The results show that both bounding social capital and bridging social capital of agricultural entrepreneurs have significant positive impacts on the performance of agricultural entrepreneurship. Agricultural entrepreneurs should strengthen strong relationships with relatives and friends to obtain more bounding social capital, and accumulate heterogeneous resources to develop bridging social capital.

## 1 INTRODUCTION

Rural entrepreneurship is different from urban entrepreneurship because the social network of entrepreneurs shows stronger geographical characteristics. Rural entrepreneurs often choose to use geographical social relationships to help enterprises grow. Trust generated by social relations is the entrepreneur's resource in social structure, that is, social capital. Especially, social capital is a special and important asset for agricultural entrepreneurs. It plays a positive role in promoting entrepreneurship activities in rural areas. In the research of agricultural entrepreneurship performance, social capital is one of the resources that most discussed. In the analysis of farmers' social capital, scholars are trying to divide it into different types. A large number of studies have shown that the social capital of agricultural entrepreneurs is conducive to the innovation and growth of agricultural enterprises, and ultimately promote the improvement of entrepreneurial performance. However, previous studies on rural social capital were limited to kinship and geopolitical social capital. Therefore, it is necessary to further explore the impact of bridging and bounding social capital on agricultural entrepreneurial performance.

## 2 LITERATURE REVIEW

### 2.1 Social Capital and Entrepreneurial Performance

Social capital, in individual or social level, is the most important resource of agricultural entrepreneurs. This study focuses on the individual level of social capital of agricultural entrepreneurs. According to Lin [1], this study defined the social capital as the various networks and social resources in the process of agricultural entrepreneurs' entrepreneurship.

Based on the research of Putnam [2], this paper divides social capital into bounding social capital and bridging social capital. The bounding social capital refers to the interaction range, trust and reciprocity formed by the communication and interaction network between agricultural entrepreneurs, their familiar relatives and friends and the agricultural entrepreneurial team. Bridging social capital refers to the social capital formed by the different networks between agricultural entrepreneurs and suppliers, customers, the public, government departments, service organizations, media and intermediaries in the external environment, including the breadth, depth, trust and reciprocity of relationships.

According to organization theory, entrepreneurial performance is entrepreneurial organization performance, which is a measure of entrepreneurial organization's goal completion degree, which is often used to measure the achievement and effectiveness of Entrepreneurship. The performance of farmers' agriculture related entrepreneurship is the achievements and benefits

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achieved by farmers through agriculture related entrepreneurship. When measuring entrepreneurial performance, the focus should be on the comparison of entrepreneurs' achievement before and after entrepreneurship and the comparison of economic benefits between entrepreneurs of the same kind. In this study, the definition of agricultural entrepreneurship performance is: the results obtained by entrepreneurs and the degree to achieve the goals.

## 2.2 The Impact of Bounding Social Capital on the Performance of Agricultural Entrepreneurship

Scholars have found that bounding social capital can provide information on value creation ability. Family members, relatives or friends who often interact provide entrepreneurs with information on raw materials, funds, channels, and internal production management [3][4]. The bounding social capital formed by familiar members can promote the entrepreneurial activities of agricultural entrepreneurs from the aspects of resource provision, emotional support and psychological enhancement. Bounding social capital is helpful on the performance of agricultural entrepreneurship for the following reasons: first, acquaintances or families provide the source of funds for entrepreneurship, making up for the shortage of entrepreneurial labor. The start-up funds of small and micro agricultural entrepreneurship activities in China are all from family members or family members. Second, the labor force in the early stage of entrepreneurship is mainly family members. Some micro businesses even have their own people to participate in. When the agriculture is busy and needs help, there are also established mutual aid behaviors among different entrepreneurial families, which are of great help to the smooth development of agricultural business activities. Third, the entrepreneurial process is full of hardships, and the understanding of family members, relatives and friends and members of the entrepreneurial team will often become the spiritual support of entrepreneurs in difficult times, and enhance their tenacity, so that they will not give up easily. Therefore, this study proposed the following hypothesis:

Hypothesis 1: the bounding social capital has a significant positive impact on the entrepreneurial performance.

## 2.3 The Impact of Bridging Social Capital on the Performance of Agricultural Entrepreneurship

Previous studies have shown that bridging social capital has a positive impact on entrepreneurial performance, specifically in the acquisition of heterogeneous resources, the identification and acquisition of entrepreneurial opportunities, and innovative business ideas. Bridging social capital can provide entrepreneurs with heterogeneous market information. Entrepreneurs can obtain entrepreneurial guidance through different channels, establish informal relationships with people inside and outside the industry, and participate in professional discussions, which can promote the cognition of entrepreneurial opportunities [5].

In agricultural entrepreneurship, entrepreneurship projects are mostly scattered in rural areas, and some entrepreneurial activities are even carried out in remote rural areas. Most of China's agricultural entrepreneurship is small and micro enterprises. Entrepreneurs themselves should participate in agricultural production and operation activities in person, so it is impossible for them to spend too much time, energy and cost to carry out the operation of social capital. Therefore, in the past, farmers' social capital in the rural environment mainly refers to the traditional social capital based on blood relationship, kinship and geography. Because these social capital are familiar with each other, they have few opportunities to obtain heterogeneous resources. In this situation, in traditional rural society, those who can obtain more favorable heterogeneous resources are often some agricultural entrepreneurs whose family members work as civil servants in government departments. They have achieved good entrepreneurial performance because of the heterogeneity of government and business relationship resources. Therefore, this study hypothesized as follows.

Hypothesis 2: the bridging social capital has a significant positive impact on the entrepreneurial performance.

According to the literature review and the hypotheses development, a research model was proposed as Fig. 1.

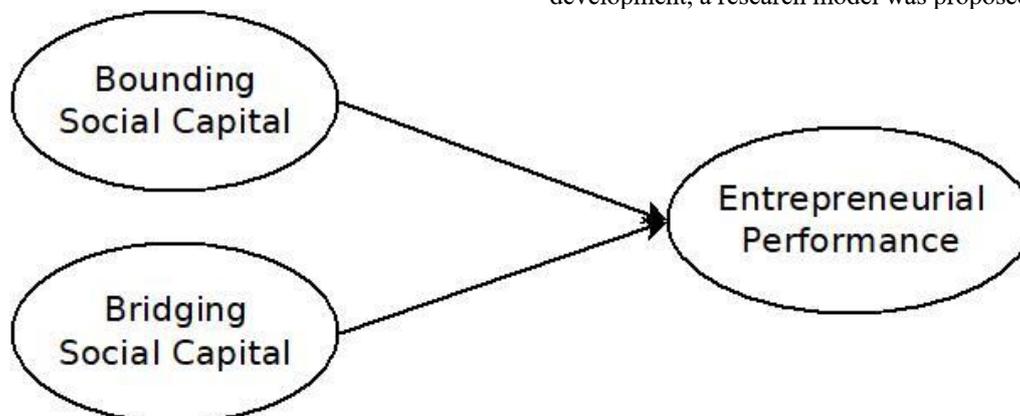


Figure 1. Research Model

### 3 RESEARCH METHOD

Based on literature review, the measurement of bonding social capital and bridging social capital were modified from Subramaniam & Youndt [6] and Han & Hovav [7]. Scales to measure entrepreneurial performance were adapted from Cooper and Artz [8]. Questionnaires were scored on a seven-point Likert scale. After removing invalid questionnaires, 326 valid responses were analyzed by the SPSS and AMOS.

### 4 ANALYSIS RESULTS

In the sample, 50.6% was male and 49.4% was female. Furthermore, 44.8% aged under 30 while 43.3% was 30-40 years old. Only 32.5% hold college degree or above while 51.2% had high school graduated. Respondents

were single account for 20.9%, and 66.6% were married but had no child.

#### 4.1 Measurement model

##### 4.1.1 Construct validity

As shown in Table I, all standardized factor loadings of questions are from 0.712 to 0.838. All composite reliability (CR) of the constructs ranging from 0.866 to 0.905 exceed 0.7 recommended by Nunnally and Bernstein (1994) indicating all constructs have internal consistency. Lastly, average variance extracted (AVE) of constructs ranging from 0.563 to 0.655, exceeding 0.5 suggested by Hair et al. (2010), and Fornell and Larcker (1981). These results demonstrated all measurement items had convergent validity.

**Table I.** Results for the measurement model

Construct	Item	Std. factor loading	Reliability	Convergent Validity
			CR	AVE
Bridging Social Capital	BRSC1	0.768	0.866	0.563
	BRSC2	0.780		
	BRSC3	0.725		
	BRSC4	0.712		
	BRSC5	0.765		
Bouding Social Capital	BOSC1	0.788	0.899	0.598
	BOSC2	0.780		
	BOSC3	0.749		
	BOSC4	0.817		
	BOSC5	0.770		
	BOSC6	0.735		
Entrepreneurial Performance	EP1	0.796	0.905	0.655
	EP2	0.838		
	EP3	0.780		
	EP4	0.809		
	EP5	0.822		

##### 4.1.2 Discriminant validity

This study examined discriminant validity of the measurement model with AVE. Fornell & Larcker [9] considered that if the square root of AVE for each

construct is greater than the correlation coefficient, the model has appropriate discriminant validity. Since the Table II shows the measurement model has an appropriate construct validity, it also indicated that the results were not largely affected by Common Method Bios.

**Table II.** Discriminant validity for the measurement model.

	AVE	Bridging Social capital	Bouding Social capital	Entrepreneurial Performance
Bridging Social capital	0.563	<b>0.75</b>		
Bouding Social capital	0.598	0.768	<b>0.773</b>	
Entrepreneurial Performance	0.655	0.694	0.695	<b>0.809</b>

### 4.1.3 Structural model analysis

The structural model was analyzed by maximum likelihood estimation. The analysis results included model fit, hypothesis tests and R<sup>2</sup>. In this study, 9 model fit

indexes were adopted from Jackson et al. [10] to report the test results. Table III showed all model fit indexes met the suggested criteria. Therefore, the research model has a good fit.

**Table III.** Model fit

Index	Criteria	Value
$\chi^2$	better smaller	270.995
DF	better larger	101.000
$\chi^2/DF$	$1 < \chi^2/DF < 3$	2.683
RMSEA	<0.08	0.072
SRMR	<0.08	0.039
TLI (NNFI)	>0.9	0.938
CFI	>0.9	0.948
GFI	>0.9	0.92
AGFI	>0.9	0.905

In Table IV, the path coefficient of bridging social capital to entrepreneurial performance is (b = 0.389,  $p < 0.001$ ), and bounding social capital to entrepreneurial performance is (b = 0.354,  $p < 0.001$ )

The results support the research hypotheses H1 and H2. The explanatory power of both bridging social capital and bounding social capital can explain 54.6% of entrepreneurial performance.

**Table IV.** Regression coefficient

Depend variable	Independ variable	Unstd. S.E.	Std. S.E.	Unstd. S.E./Std. S.E.	R <sup>2</sup>
EP	BRSC	0.389	0.087	4.495***	0.546
	BOSC	0.354	0.077	4.610***	

EP=Entrepreneurial Performance; BRSC=Bridging Social Capital; BOSC= Bounding Social Capital; \*\*\*=  $p < 0.001$

## 5 CONCLUSIONS

This study has found that both the bounding social capital and the bridging social capital have a significant positive impact on entrepreneurial performance. Agricultural entrepreneurs should win the support of relatives and friends, strengthen the relationship, maintain contacts, and obtain more bounding social capital. On the other hand, they should obtain heterogeneous resources, accumulate bridging social capital, and promote the smooth development of agricultural entrepreneurship activities. This study enriches the research on the influencing factors of entrepreneurial performance of agricultural entrepreneurs, provides a new idea for the study of social capital of agricultural entrepreneurs, and verifies the important role of entrepreneurial ability of individual entrepreneurs on entrepreneurial performance.

Social capital is only one of the influencing factors of entrepreneurial performance. Future research can carry out a comprehensive analysis of the impact of other factors on entrepreneurial performance, or consider the intermediary factors of agricultural entrepreneurs' social capital on entrepreneurial performance, and reveal the specific path of its role.

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