Research on the Impact of Entrepreneur Structure Hole on the Survival Performance of SMEs

Guowen He, Xiaofeng Zhang

Research Center of Cluster and firm Development, Jiangxi University of Finance and Economics, Nanchang 330013, China

Abstract:

In the face of increasing competitive pressure, SMEs that are short of resources, technology and talents are faced with great pressure to survive. Entrepreneurs' structuring holes in social networks is a key channel for SMEs to obtain the resources they need. On the basis of field research, this paper establishes an effect model of entrepreneur structural hole on SMEs' performance and puts forward relevant hypotheses. Through 225 samples from different provinces, cities and regions across the country, it empirically tests the effect of entrepreneur structural hole on SMEs' performance and its internal mechanism. The research found that: Entrepreneurial structural hole has a significant effective influence on SMEs' performance, through the strategic guidance of SMEs on SMEs' performance, Entrepreneurs need to think highly of the diversity of structural holes to improve the survival performance of SMEs.

Keywords: *Entrepreneur structural hole, Micro firms, Survival performance.*

I. INTRODUCTION

In recent years, China's SMEs is of great significance in the number and scale of firms, in the number of employment in the society, and in the proportion of tax paid firms in the whole country [1]. SMEs bring into play more and more important affect in China's national economy, and are also the largest and most active market subject in China [2]. However, it is estimated that nearly 30% of the private small firms in China closed down in two years, and 60% of them disappeared in no more than five years [1]. Yi said at the 10th financial forum that the average existence time of SMEs in China is about 3 years, while the average existence time of SMEs in the United States is 8 years, and the life span of SMEs in Japan have as long as 12 years. In the context of the Internet era, with the acceleration of technological progress and more and more fierce global competition, how to break through the high mortality rate of SMEs in our country has become a novel topic we are facing, and also the only way for China to develop from a

world power to a world power.

Based on the investigation of SMEs in many provinces of China, this paper uses empirical analysis to explore the effect of the structural hole strategy of SMEs on SMEs' performance. It has made the following contributions in theoretical and practical innovation: first, it has expanded the structural hole theory, and the the structural hole theory's application, most of the research focuses on: information science [3], private lending [4], great joint, weak joint [5], innovation [6], firm patents [7], relationship formation [8], etc. There are few literatures that empirically analyze the entrepreneurial structural hole and verify the effect of the strategy on the performance of SMEs, At the same time, it enriches the research on the antecedent variables of the survival performance of SMEs, reveals the influence of various dimensions of the entrepreneurial structural hole on SMEs' performance; secondly, it analyzes the path of the improvement of the survival performance of SMEs from the perspective of the theory of "relationship structural hole seeker". For SMEs, the domestic researchers' main concerns on the financing difficulties of SMEs and the policies of understanding the status of firms Research is carried out in various aspects, such as: financing [9], development of SMEs and transformation of government functions [10], government support [11], etc. From the perspective of "relationship structural hole seeker" of entrepreneurs, there are relatively few literatures about how entrepreneurs can improve the performance of SMEs through "finding hole", "filling hole" and "analyzing hole" in their daily business process. this paper puts forward the mechanism model of entrepreneur structural hole, firm strategy orientation and survival performance of SMEs, and clarifies that entrepreneur structural hole is guided by firm strategy It has always affected the survival performance of SMEs. Third, it has expanded the relevant theories of entrepreneur theory, entrepreneur theory, and many literatures on entrepreneurs from the perspective of social capital, such as: the effect of Entrepreneur Social Network on firm performance [12], the effect of Entrepreneur Social Network on firm Dynamic Capability [13], the measurement methods of Social Network [14-16]. To study entrepreneurs from the perspective of "relationship structural hole seeker" is a further expansion of entrepreneur theory.

II. LITERATURE REVIEW AND RESEARCH HYPOTHESIS

2.1 Entrepreneur Structural Hole and Survival Performance of SMEs

(1) Entrepreneur structural hole

Entrepreneur structural hole the so-called structural hole is the non-redundant relationship between two relatives. In the network research, structural hole is defined as the gap between non-interconnected subjects. Individuals occupying structural hole enjoy information superiority and control superiority [17]. It is found that the main body occupying the structural hole is in the position of information hub in the network, which is conducive to achieving better economic benefits, obtaining good ideas and improving productivity [17-19]. Entrepreneurs can explore the growth opportunities of SMEs through their own social networks, optimize the relationship structure of SMEs in social networks, and establish a network environment

conducive to the growth of SMEs themselves [20]. This paper divides the measurement dimension of entrepreneur's structural hole into two dimensions: the abundance of entrepreneur's structural hole and the diversity of entrepreneur's structural hole types. On the one hand, the richness of entrepreneurs' structural holes can provide entrepreneurs with more access to information and bring a lot of network information resources [21]. On the other hand, the variety of entrepreneurs' structural holes can bring heterogeneous information to entrepreneurs and obtain diversified information [22].

(2) The influence of entrepreneur structural hole on the survival of SMEs

For SMEs, the elements on which firms rely for normal operation and development: labor, technology, knowledge, market opportunities, good business model, innovative thinking, etc. all come from external networks of firms, especially network nodes [23]. Therefore, the relevant resources in social network are very important for SMEs. The acquisition of these resources requires entrepreneurs to seek to build more structural holes through social networks. The more the number of entrepreneur structural holes is, the more abundant the information the firms get through the structural holes, the more elements SMEs can get. Based on the above discussion, this paper puts forward the following assumptions:

Hypothesis H1a: the more number of entrepreneurial structural holes, the stronger the survival performance of SMEs.

Technology, capital and other related resources are the key factors for the survival of SMEs. The acquisition of these resources needs to establish full contact with corresponding intermediaries, research and development institutions, consulting institutions, relevant government departments and even peer firms through the social network of entrepreneurs, so as to maintain a good "relationship". By maintaining a good "relationship" with various social groups or departments, SMEs can maintain the needs of many elements in the operation process of SMEs. Moreover, SMEs can obtain innovative thinking or technology and other resources through the network, so that the products or services of SMEs can quickly win the favor of consumers and gain competitive advantage [24]. The more types of entrepreneurial structural holes can improve the management level and technical level of firms, as well as the innovation ability of business model of SMEs, so as to bring more rich customer experience and obtain more customer resources for SMEs [25], which further enhances the survival ability of SMEs. Based on the above discussion, this paper puts forward the following assumptions:

Hypothesis H1b: the more types of entrepreneurial structural holes, the stronger the survival performance of SMEs.

2.2 Strategic Orientation and Survival Performance of SMEs

Strategy can bring into play a key affect in the survival and development of firms [26]. Different firm strategies can make firms different from other firms and better develop than other firms. Strategic orientation is how an organization adapts to or changes its environment, so that it can gain a better position in the market or industry. There are different categories of firm strategy, among which IO (innovation orientation) and MO (customer orientation) are important

categories of firm strategy orientation. MO (market orientation) focuses on existing users and existing markets, while IO focuses on the future market of firms [27], each firm's strategic orientation is different, and its response to the market environment and relevant information is different [28]. Strategic orientation directly affects the performance of the firm [29]. For firm entrepreneurship strategy, the relationship of business performance and MO, entrepreneurial strategy has an effective relationship with business performance [30], and IO has a significant influence on business performance [31].

MO is very important for every small and micro firm owner. It is directly related to the survival of SMEs. The core of MO is to make customers satisfied and maintain the market share and profits of firms through customer satisfaction. Some studies have shown that MO has an effective correlation with the performance of firms. MO and other factors will restrict the performance of firms. Therefore, for small and micro business owners, customers' needs and preferences are the most important factors to pay attention to. To meet customers' needs in terms of quality, and through various preferential strategies and business models to shorten the distance with customers, increase the intimacy between business owners and customers, and strive to cultivate loyal customers to maintain the long-term survival of firms. Based on the above discussion, this paper puts forward the following assumptions:

Hypothesis H2a: MO has a significant influence on SMEs' performance.

Many studies have confirmed that the IO of firms has a significant influence on the performance of firms. For example, Microsoft has brought huge profits and market share for firms through technological innovation. The IO of a firm is an effort made by a firm to meet potential customers and future market needs [27]. For SMEs, innovation is more difficult, because the capital needed for innovation, especially technological innovation, cannot be borne by SMEs. But SMEs can purchase novel technologies through open innovation network to improve the production process, reduce the cost of raw materials through joint ordering, use social logistics, e-commerce to increase the market size of firms. Through the packaging strategy to improve the product grade, through the joint ordering to reduce the procurement cost, to ensure the supply channel with the wholesale joint number, to improve the viability of SMEs. Based on the above discussion, this paper puts forward the following assumptions:

Hypothesis H2b: IO has a significant influence on SMEs' performance

2.3 Entrepreneur Structural Hole and Strategic Orientation of SMEs

(1) Entrepreneur structural hole and MO of SMEs

Entrepreneurs and their firms are all in the corresponding social networks. The more important affect of entrepreneurs is to constantly explore the structural holes in their own networks, so that firms and themselves can obtain more intermediary opportunities and key information [32]. Entrepreneurs acquire the opportunities, resources and information needed by firms through building their own relationship network, and develop and utilize them [33]. Therefore, the richer the structural holes entrepreneurs build through the network, the more information they can get from it. The more structural holes they have through the network, the

more information they can get, the more detailed and specific information they have, and the more accurate the strategy of implementing MO for SMEs in an all-round way, the more products and services they can meet the needs of consumers. There are more kinds of structural holes that entrepreneurs construct through the network itself. The more channels for SMEs to obtain different resources, the stronger the heterogeneity of related resources, the more able to meet the needs of SMEs for various resources, the more conducive to the implementation of market-oriented SMEs. Based on the above discussion, this paper puts forward the following assumptions:

Hypothesis H3a: MO bring into play a significant influence on SMEs' performance due to the abundance of entrepreneurial structural holes

Hypothesis H3b: MO bring into play a significant influence on SMEs' performance due to the diversity of entrepreneur structural hole

(2) Entrepreneur structural hole and IO of SMEs

The "node" position in social network is the intersection of ideas. The "node" position is also the "network position" of novel ideas and technologies. If SMEs can occupy the key "nodes" with their own structural hole strategy, they can obtain novel technologies, novel thinking, novel business models and novel ideas for SMEs, which can not only increase the existing market share, but also better cater to the future development trend [23]. Compared to large SMEs, the best way for SMEs to obtain scarce resources for their own development is through the structural hole established by entrepreneurs between SMEs and relevant institutions. Therefore, the richer the structural holes constructed by SMEs, the richer the information resources available to SMEs. The more kinds of structural holes SMEs construct, the more ways SMEs can obtain different information and other related resources, the stronger the heterogeneity of related information resources, and the more the affect of IO in SMEs. Based on the above discussion, this paper puts forward the following assumptions:

Hypothesis H4a: IO bring into play a significant influence on SMEs' performance due to the abundance of entrepreneurial structural holes

Hypothesis H4b: IO bring into play a significant influence on SMEs' performance in the diversity of entrepreneurial structural hole

III. RESEARCH DESIGN

3.1 Research Model

AS the above hypotheses and analysis, this paper proposes a research model (as shown in Fig 1) on the effect of the entrepreneurial structural hole on SMEs' performance. According to the research model, on the one hand, the dimensions of the entrepreneurial structural hole have an influence on SMEs' performance; on the other hand, the entrepreneurial structural hole affects the survival performance of SMEs through the strategic orientation of SMEs Understanding of the situation has an effective regulatory influence on SMEs' performance in the entrepreneurial structural hole, as shown in Fig 1:
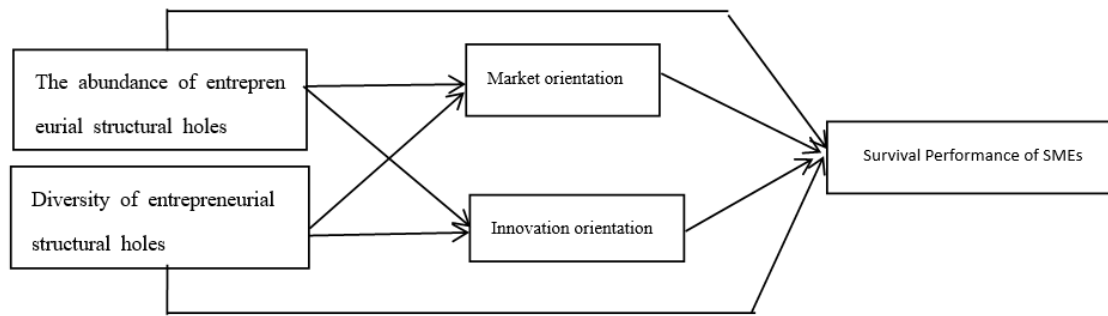
Fig 1: Effect of entrepreneur structural hole on survival performance of SMEs model

(1) Research method

This paper first tests the validity and reliability of the survey of each variable in model, through factor analysis, the validity and reliability of each variable is good, then carries on Pearson correlation analysis to the relevant variables of the model based on the significant correlation analysis of each variable. At the same time, we test the multicollinearity and heteroscedasticity of each variable. On the basis of no serious multicollinearity and heteroscedasticity between variables, we analyze the regression results and put forward relevant suggestions.

(2) Data sources and sample characteristics of SMEs

The data of this paper were collected through interviews and questionnaires. First of all, according to the existing mature scale of relevant literature, combined with the characteristics of SMEs, the questionnaire was designed; then, the entrepreneurs of 27 SMEs were selected as a small sample to investigate, analyze the validity and reliability of the survey data, and modify the questionnaire properly combined with the interview; finally, A simple random sampling method was used to select 400 SMEs for a questionnaire survey. The time of questionnaire survey: from December 2018 to March 2019, 400 questionnaires were issued and 246 were collected in this survey, excluding 21 questionnaires with missing options, of which 225 were valid. In this survey, except for the samples made by the author, every sample made by friends from other provinces has the status of mobile wechat video survey, so as to ensure that all samples are filled in by small and micro business owners. The characteristics of the sample firms in this paper in TABLE I:

TABLE I. Basic characteristics of sample micro entrepreneurs and firms (N=225)

Corporate characteristics	Categories	Frequency (number)	Frequency (%)
Entrepreneur degree	Junior secondary and below	69	30.8%
	High School or tech	87	38.8%
	Specialty	27	12.1%
	four-year programme	41	18.3%
	Master degree or above	1	0.4%

Sex of entrepreneur	Male	127	56.7%
	Female	98	43.8%
Years of entrepreneurship	Within 25 years	36	16.1%
	25-35years	72	32.1%
	36-45 years	75	33.5%
	46-55 years	31	13.8%
	>=55 years	11	4.9%
Time of establishment	Within 1 year	29	12.9%
	1-3 years	60	26.8%
	4-6 years	55	24.6%
	7-10 years	31	13.8%
	Over 10 years	50	22.3%
Scale of firm	1-10 individuals	149	66.5%
	10-50 individuals	45	20.1%
	50-100 individuals	20	8.9%
	100-200 individuals	6	2.7%
	Over 200 individuals	5	2.2%
Industry	forestry, animal husbandry, Agriculture, and fishery	3	1.3%
	Manufacturing	20	9%
	Industry of electricity, gas, and so on	5	2.2%
	Wholesale and retail, accommodation and catering	98	43.7%
	Finance, real estate, construction	18	8%
	Leasing and business services	10	4.5%
	Transportation, warehousing, and postal services	3	1.3%
	Information Transmission, and so on	10	4.5%
	Research institutions, and so on	1	0.4%
	Other industries	57	25.4%
firm Years Revenue	1000 thousands	161	71.9%
	1000-3000 thousands	24	10.7%
	3000-5000 thousands	14	6.3%
	5000-10000 thousands	12	5.4%
	Over 10000 thousands	14	6.3%

3.2 Variable Setting, Measurement and Inspection

(1) Entrepreneur structural hole. Based on the research results of Cosine et al. on the entrepreneurial structural hole [34], combined with the characteristics of SMEs, this paper divides the entrepreneurial structural hole into: the richness of entrepreneurial structural hole

(Aosh), the diversity of entrepreneurial structural hole (diversity of entrepreneurial structural hole), Dosh in this paper, Dosh is used to replace the abundance of entrepreneurial structural hole, and Dosh is used to replace the diversity of entrepreneurial structural hole] two dimensions are used to develop the scale, and relevant measurement items (relevant items in TABLE II) are developed and measured with Likert 5-point scale. Among them, 1 represents "very disagree" and 5 represents "very agree".

(2) Strategic orientation. This paper uses Pierre et al. for reference to divide the dimensions of strategic orientation [27]. Through interviews and appropriate modifications, it is divided into two dimensions: market orientation (MO) and innovation orientation (IO).

For the measurement of the two dimensions, this paper uses the measurement scales of Liu and Pierre for reference, and develops the measurement items of strategic orientation of SMEs (relevant items in TABLE II) in combination with firm interviews, and measures this variable with the Likert 5-point scale [35,27]. Among them, 1 represents "very disagree" and 5 represents "very agree".

(3) The survival performance of SMEs. This paper uses the measurement scale of Jia and Ciarevalella for reference [36,37]. The survival performance of SMEs is measured by three dimensions: the ability of continuous operation, the ability of SMEs to cope with crisis, and the ability of SMEs to seize opportunities (see TABLE II for related items), and the measurement is conducted by using Likert 5-point measurement. Among them, 1 represents "very disagree" and 5 represents "very agree"

In addition, the control variables used for reference are firm size and firm age. In order to prevent its interference to the survival performance of SMEs. The measurement items of the above variables as TABLE II shown.

TABLE II. Variables measurement items and Eigenvalues

Variables and items	Mean	Standard deviation	Factor loading	Cronbach'sα	K M O
The abundance of entrepreneurial structural holes					
You have a large number of individuals, organizations, and relationship resources that advise you on how to solve corporate problems	3.33	1	0.8		
There are many ways you can get market information and business opportunities from your existing relationships	3.59	0.99	0.84	0.73	0.68
Talk to you about the management of Your Business. Individuals outside your business are very familiar with each other	3.46	0.99	0.79		
Diversity of Entrepreneur structural hole					

You participate in and join social groups, fellow students get-together and chamber of Commerce activities with high frequency	3.38	1.18	0.75		
Your contact with your partner is high, and you should be able to do so at least once a week	3.76	1.03	0.8	0.68	0.66
You have a very close relationship with your partner	3.81	1.07	0.8		
MO					
Your company's innovative product is to create novel value for customers	3.69	1.26	0.71		
Your company is committed to demand research	3.58	1	0.75		
Collect and analyze market information every week	3.74	0.88	0.73	0.77	0.81
Your company responds to the actions of its competitors	3.68	0.96	0.75		
The top management of Your Company often discusses the strategy of its competitors	3.64	0.99	0.66		
Innovation oriented					
In the competition, your firm can take the lead in adopting novel varieties and novel technologies	3.68	0.84	0.72		
Your company has taken the initiative to adopt novel production methods	3.6	1.1	0.76		
Your firm emphasizes the research and novel technology and the introduction of novel technology	3.57	1.02	0.73	0.79	0.83
Your company's novel product revenue accounts for a larger proportion of total revenue	3.33	0.97	0.61		
Your firm obtains the novel technology the novel variety the speed to be quite quick	3.38	0.86	0.71		
Survival performance					
Your company has great ability of continuous operation	3.76	1.04	0.86		
Your company has great ability to deal with crisis	3.57	0.88	0.84	0.78	0.69
Your company has a great ability to seize opportunities	3.67	0.82	0.8		

3.3 Reliability, Validity, Multicollinearity and Heteroscedasticity Test

In this paper, the reliability of related variables was tested Cronbach αcoefficient. When the Cronbach α coefficient is more than 0.7, the variable is considered to have high reliability. As shown in TABLE II, the entrepreneur structural hole diversity's Cronbachαcoefficient is 0.68, and other coefficients are more than 0.7. In terms of validity, all item factor loads were above 0.6, KMO values were above 0.7 or close to 0.7, and Bartlett statistical values were significantly different from 0, with high validity of each variable. In this paper, the VIF values of each variable are between 1-2, and the residual scatter plot has no obvious trend of change.

IV. EMPIRICAL ANALYSIS AND HYPOTHESIS TEST

4.1 Correlation Analysis

In this paper, firstly, we analyzed Pearson correlation among the explanatory variable (Aosh, Dosh), MO, IO, usoe, survival performance and control variable. According to the results in TABLE III: except for control variables, the correlation between the two variables is significant (p<0.01). Therefore, regression model in this paper can be verified.

TABLE III. Descriptive statistics of variables and correlation coefficient matrix

Variables	mean	Standards	Corporate years	Scale of firm	Aosh	Dosh	MO	Innovation oriented
Corporate years	3.08	1.35						
Scale of firm	1.62	1.16	0.09					
Aosh	3.45	0.80	0.02	0.16**				
Dosh	3.65	0.82	0.02	0.07	0.60***			
MO	3.66	0.73	0.01	0.21***	0.56***	0.45***		
Innovation oriented	3.51	0.69	-0.03	0.10	0.36***	0.32***	0.50***	
Growth Performance	3.67	0.79	0.09	0.13**	0.50***	0.38***	0.63***	0.46***

Note: *, * *, * * * Show significant correlations at 10%, 5%, 1% (bilateral) levels, respectively

4.2 Hypothesis Test

In this paper, we use Wen et al. for reference to test the significant effect and regulatory effect, and test the hypothesis proposed in this paper [38]. The analysis results as in TABLE IV and TABLE V. TABLE IV: model 1 is the regression of the interpreted variable (t(Firmware). Model 2 is interpreted variable (and control variable (first, the regression coefficient of firmsize and Aosh was significant (P<0.01), and the F value of the model was significantly increased. Compared with model 1, the model fitting degree was optimized after Aosh was increased in model 2, and R^2 was increased by 23.3% (P<0.01). Therefore, Aosh had agreatexplanatory influence on SMEs' performance. Suppose H1a is supported.

TABLE IV. Significant effect of MO and IO on the richness of entrepreneur structural hole and the survival performance of SMEs

Explanation Variables	Explained Variables							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Constant	3.393***	1.808***	1.856***	1.051***	0.79**	2.479***	1.581***	0.886**
	(0.145)	(0.229)	(0.202)	(0.23)	(0.236)	(0.215)	(0.271)	(0.272)
firmage	0.044	0.043	-0.004	0.046	0.045	-0.021	0.054	0.051
	(0.039)	(0.034)	(0.030)	(0.031)	(0.03)	(0.032)	(0.035)	(0.032)
firmsize	0.086*	0.033	0.079	-0.004	-0.011	0.027	0.054	0.023
	(0.045)	(0.04)	(0.035)	(0.037)	(0.036)	(0.038)	(0.041)	(0.038)

Aosh		0.485*** (0.058)	0.49*** (0.051)		0.549*** (0.067)	0.304*** (0.055)		0.371*** (0.058)
MO				0.677*** (0.058)	0.216*** (0.061)			
IO							0.522*** (0.068)	0.372*** (0.067)
F	2.634*	25.373***	35.212***	48.527***	41.467***	11.245***	21.619***	29.229***
R^2	0.023	0.256	0.323	0.397	0.43	0.132	0.227	0.347
ΔR^2		0.233		0.374	0.174		0.204	0.091

Note: *, * *, * * * Show significant correlations at 10%, 5%, 1% (bilateral) levels, respectively

Model 3 in TABLE IV is the MO regression of the explanatory variable (Aosh) and the control variable (regression coefficient is significant, P<0.01). Model 4 is the life performance of the interpreted variable to the control variable, Compared with model 1, when model 4 increased MO, R^2 increased by 37.4% (P<0.01), indicating that MO has a great explanatory influence on the interpreted variable, assuming that H1a is supported. In model 5, the explained variable (regressed the explained variable (Aosh), the controlled variable (and the MO (regression coefficient was significant, P<0.01). The F value of model 5 increased significantly, compared with model 2, R^2 increased by 17.4% (P<0.01). That is to say, after adding MO on the basis of model 2, model 5's ability to interpret the interpreted variables (is rapidly improved, which also means that market-oriented significant effect is significant. In model 5, the regression coefficient of the explained variable (to the explained variable and the MO is significant (P<0.01), that is to say, MO bring into play a part of significant effect between the explained variable and the explained variable. H3a is assumed to be supported.

Model 6 in TABLE IV is the regression of IO to explanatory variable and control variable (regression coefficient is significant, P<0.01). In Model 7, the explained variable regressed the control variable and IO (regression coefficient was significant, P<0.01), and the F value increased. Compared with model 1, R^2 increased by 20.4% (P<0.01), It shows that IO has a great explanatory influence on the survival performance, and H2b is supported. In model 8, the explained variable regressed the explained variable (Aosh), the controlled variable and the IO (regression coefficient was significant, P<0.01), and the F value increased significantly. Compared with model 2, R2 increased by 9.1% (P<0.01). That is to say, after adding IO to model 2, model 8's ability to interpret the interpreted variable is rapidly improved, which also means that the significant effect of IO is significant. In model 8, the explained variable (bring into play a part of mediating influence on the explained variable, the control variable and the intermediate variable (regression coefficient is significant (P<0.01), that is to say, IO bring into play a part of mediating effect between the explained variable and the explained variable. H4a is assumed to be supported.

TABLE V. Significant effect of MO and IO on diversity of entrepreneur structural hole and survival performance of SMEs

Explanation Variables	Explained Variables							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Constant	3.393***	2.134***	2.075***	1.051***	0.848***	2.545***	1.581***	1.034**
	(0.145)	(0.252)	(0.222)	(0.23)	(0.25)	(0.226)	(0.271)	(0.293)
firmage	0.044	0.04	-0.007	0.046	0.045	-0.023	0.054	0.05
	(0.039)	(0.037)	(0.032)	(0.031)	(0.031)	(0.033)	(0.035)	(0.034)
firmsize	0.086*	0.069	0.114***	-0.004	-0.002	0.048	0.054	0.048
	(0.045)	(0.042)	(0.037)	(0.037)	(0.036)	(0.038)	(0.041)	(0.039)
Dosh		0.356***	0.391***		0.113**	0.262***		0.243***
		(0.06)	(0.053)		(0.056)	(0.054)		(0.059)
MO				0.677***	0.62***			
				(0.058)	(0.064)			
IO							0.522***	0.432***
							(0.068)	(0.069)
F	2.634*	13.661***	22.359***	48.527***	37.904***	8.822***	21.619***	21.679***
R^2	0.023	0.156	0.233	0.397	0.408	0.107	0.227	0.283
ΔR^2		0.133		0.374	0.252		0.204	0.127

Note: *, * *, * * * Show significant correlations at 10%, 5%, 1% (bilateral) levels, respectively

Model 1 in TABLE V is the regression of the interpreted variable. In model 2, the survival performance of SMEs was regressed and the explanatory variable (Dosh) at the same time (Dosh regression coefficient was significant, P<0.01), and the F value of model 2 was significantly increased. Compared with model 1, when the explanatory variable (Dosh) was increased in model 2, R^2 was increased by 13.3% (P<0.01), indicating that the diversity of structural holes had a great explanatory influence on SMEs' performance. Suppose H1b is supported. Model 3 in TABLE V is the regression of MO to explanatory variable (Dosh) and control variable (regression coefficient is significant, P<0.01). Model 4 is the life performance of the interpreted variable to the control variable, Compared with model 1, R^2 increased by 37.4% (P<0.01) after adding MO in model 4, indicating that MO has a great explanatory influence on the explained variable. In model 5, the explained variable regressed the explained variable (Dosh), the controlled variable (FIR size) and the MO regression coefficient was significant, P < 0.05), and the F value increased significantly. Compared with model 2, R^2 increased by 25.2% (P<0.01). That is to say, after adding MO on the basis of model 2, model 5's ability to interpret the interpreted variable is rapidly improved, which also means that market-oriented significant effect is significant. In model 5, the regression coefficient of the explained variable to the explained variable (Dosh) and the intermediary variable (MO) is significant (P<0.01), that is to say, MO bring into play a part of significant effect between the explained variable and the explained variable. It is assumed that H3b is supported.

The model 6 in TABLE V is the regression of IO to Dosh and the control variable (the

regression coefficient is significant, P<0.01). In Model 7, the explained variable (the regression coefficient is significant, P<0.01) and IO (regression coefficient was significant, P<0.01), and the F value increased. Compared with model 1, R^2 increased by 20.4% (P<0.01), It shows that IO has a great explanatory influence on the survival performance, and H2b is supported. In model 8, the explained variable (regressed to the explained variable (Dosh), the control variable and the IO (regression coefficient was significant, P<0.01), and the F value increased significantly. Compared with model 2, R^2 increased by 12.7% (P<0.01). That is to say, after model 8 adds IO to model 2, the ability to interpret the interpreted variable is improved rapidly, which also means that IO as an intermediary variable has a significant significant effect. In model 8, the regression coefficients of survival performance to Dosh, firm size and IO were significant (P<0.01). In other words, IO bring into played a part of mediating effect between explanatory variables and survival performance. H4b is assumed to be supported.

V. CONCLUSION

After the above empirical analysis and discussion, this paper obtains conclusions:

First, the effect of entrepreneurial structural hole on SMEs' performance is effective and positive. (a) the explanatory variable entrepreneur structural hole's two dimensions have a direct influence on SMEs' performance. (b) the entrepreneur structural hole has a significant influence on SMEs' performance through the firm strategic orientation. Second, the empirical results show that the strategic orientation of firms, namely MO and IO, has a significant indirect influence on SMEs' performance. Thirdly, corporate strategic guidance bring into play an indirect affect in the influence of entrepreneurial structural hole on SMEs' performance.

REFERENCES

[1] Wang Junfeng, Wang Yan (2012) Study on the development of SMEs of China. Business research 9(425): 86-93

[2] Qu Xiaoyu (2017) An exploratory study on the influencing factors of simple innovation in SMEs: Based on discourse analysis and concept lattice weighted group DEMATEL method. Science and technology management 38(09): 104-113

[3] Wang Dan (2009) Application and Prospect of structural hole theory in information analysis. Journal of information 01:183-186

[4] Dong Xuemei, Li Feiyang (2011) Study on the supervision of rural private lending based on the structural hole theory. Nanfang finance 08: 40-43

[5] Granovetter, Mark S (1973) The strength of weak ties. American journal Sociology 78: 1360-1380

[6] Qian Xihong, Yang Yongfu, Xu Wanli (2010) An interactive effect model of firm network location, absorptive capacity influence on innovation performance. Management world 05: 118-129

[7] Ahuja G (2000) Collaboration networks, structural holes, and innovation: a longitudinal study. Administrative Science Quarterly 45(3): 425-455

[8] Walker G., Kogut B., Shan W (1997) Social capital, structural holes and the formation of an industry network. Organization Science 8(2): 109-125

[9] Liu Kegu (2009) Building China's grassroots financial system, promoting grassroots economic

development and urban and rural employment -- Also on the solution to the financing difficulty of small firms in China. Management world (11): 1-10

[10] Wen feng'an (2014) The development of SMEs and the transformation of government functions in the process of comprehensively deepening reform. Management world 11: 184-185

[11] Shi Qinghua (2016) Analysis of how the government supports SMEs in the novel normal of economy. Modern economy discussion 10: 49-53

[12] Sun Junhua, Chen Chuanming (2009) Research on the entrepreneurs' Social Network influence on corporate performance: take Chinese manufacturing listed companies as examples. Nankai management review 02: 28-36

[13] Geng Xin, Zhang Tiqin (2010) The influence of entrepreneur's Social Network on the organization's dynamic capability - based on the understanding of the situation of the firm. Management world 06: 109-121

[14] Bian Yanjie, Qiu Haixiong (2000) Social Network and its effect of firms. Chinese Social Sciences 02: 87-99

[15] Peng M. W., Luo Y. (2000) Managrial Ties and Firm Performance in a Transition Economy: The Mature of a Micro? macro Link, Academy of Management Journal 43(3): 486-501

[16] Acquaah M. (2007) Managerial social capital, strategic orientation and organizational performance in an emerging economy. Strategic Management Journal 28(12): 1235-1255

[17] Burt Ronald (1992) Structural holes: the Social Structure of Competition. Cambridge: Harvard University Press

[18] Gargiulo M., Benassi M. (2000) Trapped in your own network cohesion structural holes and the adaptation of social capital. Organization Science 11(2): 183-196

[19] Reagans R., Zuckerman E. W. (2001) Networks, diversity and productivity: the social network of corporate r&d teams. Organization Science 12(4): 502-517

[20] Cai Shuangli, Yu Xian, Lu Zhengying (2013) Optimizing the structure of entrepreneurs from the perspective of interest balance and reproduction. Journal of Zhongnan University 1(196): 122-128

[21] Saparito P. DcCDM (2006) social capital, cognition, and entrepreneurial: A theoretical framework entrepreneurship. Theory and Practice 30(1): 41-56

[22] Burt R. S. (1997) The Contingent Value of Social Capital. Administrative Science Quarterly 42(2): 339-365

[23] Cui Haiyun (2015) Research on the relationship between open innovation network and catching up ability of latecomers. Doctoral dissertation, University of foreign economic and trade

[24] Burgers J H, Van Den Bosch F A J, Volberda H W (2008) Why novel business development projects fail: Coping with the differences of technological versus market knowledge. Long Range Planning 41(1): 55-73

[25] Kaya N, Patton J (2011) The effects of knowledge-based resources, MO and learning orientation on innovation performance: An empirical study of Turkish firms. Journal of International Development 23(2): 204-219

[26] Tang Z, Hull C (2012) An investigation of entreprenereurial orientation, perceived environmental hostility and strategy application among Chinese SMEs. Journal of Small Business Management 50(1): 132-158

[27] Pierre Berthon, James M Hulbert, Leyland F. Pitt. (1999) To serve or create? strategic orientations toward customers and innovation. California Management Review 1(42): 37-58

[28] Shoham A, Fiegenbaum A (2002) Competitive determinants of organizational risk － taking attitude: the affect of strategic reference points. Management Decision 40(2): 127-141

[29] Wiklund, Shepheed (2015) Entreprenereurial Orientation and Small Business performance: A Configurationa Approach. Journal of Business Venturing 20(5): 71-91

[30] Cano C.R., Canillat F.A., Jaramillo F. (2004) A Meta-analysis of the Relationship between MO and Business Performance: Evidence from five Continents. International Journal of Research in Marketing 21(2): 176-200

[31] Hult G.T.M., Hurley R.F., Knight G.A (2004) Innovativeness, its Antecedents andinfluence on Business Performance. Industrial Marketing Management 33(5): 429-438

[32] Lu Zhengying, Cai Shuangli (2013) cosine: structural hole exploration, network production and network welfare surplus -- cross case experience analysis of firm network growth. Financial and trade research 01(18): 131-138

[33] Fan Zuobing, Tao Siqin (2018) Study on the effect of entrepreneur network relationship on business performance. Productivity research 10(26): 129-132

[34] Cosine (2013) Empirical research on the effect of entrepreneurial structural hole on firm growth Performance. Finance and economics of Tianjin University

[35] Liu kechun (2015) Analysis of the effect of social capital of agricultural firms and farmers on firm Performance -- a survey of small and medium-sized agricultural firms based on industrialized management. China's rural economy 09: 43-56

[36] Jia Zhenquan (2017) Study on the social network influence on the survival and development of small firms. Beijing University of science and technology

[37] Ciavarella M A (2004) The big five and venture survival: is there a linkage. Journal of Business Venture 19(4): 465

[38] Wen Z L, H. J.T, Z. L. (2005) Regulatory effect and significant effect's comparison and application. Journal of psychology 02: 268-274