

# The Effect of Ownership Concentration and Related Diversification Strategy of Entrepreneurial Enterprises on Enterprise Performance

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## ABSTRACT

Based on the theory of principal-agent theory, this paper makes an empirical study on the process of influencing the performance of enterprises by using the analysis method of "power-decision-performance" analysis, using hierarchical regression and group regression analysis to analyze the diversification strategy of entrepreneurial enterprises analysis. The results show that the ownership concentration of entrepreneurial enterprises has a positive impact on the financial performance of entrepreneurial enterprises and has a negative impact on the market performance of entrepreneurial enterprises. The increase of ownership concentration will inhibit the diversified development tendency of entrepreneurial enterprises, and the related diversification strategy which has a positive effect on the financial performance and market performance of the enterprise. The related diversification strategy has some mediating effect in the process of the impact of ownership concentration on the performance of the firm, and the negative report of the media has a negative adjustment in this process.

**Keywords:** entrepreneurial enterprises, ownership concentration, related diversification strategy, media negative report

## INTRODUCTION

Entrepreneurial enterprises usually lack of resources and business experience, and they have lower organizational identification and limited influence, lack of wide and steady external network connections, sound internal organization system and the reputation and legality owned by mature enterprises; their growth and development are restricted in various aspects (Haeussler,2012; Park and Steensma,2012). Due to limited resources, in the allocation process of resources, the decision-making power of decision makers with different backgrounds become an important factor to influence the enterprise's strategic decisions (Adams, 2005). Ownership concentration is a quantitative index through which ownership concentration situation of the company is presented by the different share holding percentages by all share holders. Meanwhile, it can also serve as an index to measure the stability degree of listed companies (Demsetz and Villalonga, 2001). For entrepreneurial enterprises, ownership concentration degree can effectively reflect the decision-making power difference between the founder and the company management during the strategic decisions making process. Therefore, according to the analysis framework of "power-decisions-performance", the difference between strategic decisions-making and implementing are caused by the difference of ownership concentration will exert important impact on the performance level of entrepreneurial enterprises.

Domestic and foreign scholars have made a lot of studies on effect of ownership concentration on enterprises' performances. These researches mainly focus on the behavior modes of the enterprise owners and managers in different equity allocation modes. Based on related theories mainly include the principal agent theory, stakeholder theory and entrepreneurial orientation theory. Researches on the principal-agent theory as a framework mainly focus on the benefit encroachment behaviors between the principal and the agent. To research the behavior motivations of major shareholders, minority shareholders and the management in order to damage the company's

#### **Contribution of this paper to the literature**

- The promotion of ownership concentration can improve the financial performance of the enterprise in the short term, but it will damage the market performance in the long run.
- The related diversification strategy has a positive effect on the promotion of entrepreneurial enterprises' performance, which can not only improve the short-term financial performance, but also enhance the long-term market value.
- The improvement of ownership concentration can inhibit the development of the related diversification strategy of entrepreneurial enterprises.
- It is an effective way to improve the financial performance of entrepreneurial enterprises by reducing ownership concentration and promoting the development of the related diversification strategy accordingly.
- Media's negative reports will influence enterprises to implement the diversification strategy in a short term and it have adverse effect on the enterprise's financial performance. But its influence on the enterprise's long-term value is limited.

interests for personal gains in different ownership allocation modes, including major shareholders' actions to damage the company's interests through connected transactions (Shleifer and Vishney, 1997), minority shareholders' actions to damage the company's interests by "hitchhiking" (Amihud and Lev, 1981) and the management of company assets by "entrenchment effect" (Yang Fan, 2013), etc. The stakeholder theory focuses on the company utility loss during the implementation of the "shareholder goals". In order to preserve the benefits of the stakeholders and create a harmonious and stable development environment, enterprises are bound to pay for corresponding governance costs. In different ownership allocation modes, the benefit transfer bring by stakeholders exist differences. The different profit-oriented by such differences will influence the company's overall profitability and long-term value (Dyck and Zingales, 2004). The entrepreneurial orientation theory believes that the entrepreneurial process is a style of executives in implementing decisions and practical activities, while the entrepreneurial orientation is the behavior of decision-making and practice in entrepreneurial activities (Lumpkin and Dess, 1996). The decision-making statuses of entrepreneurs with different backgrounds in the company's decision-making process will decide the company's strategic choice of direction, furthermore, different strategic choices will make corresponding influence on the company's performance (Chen and Ho, 2000).

These studies to some extent reflect the relationship between ownership concentration and corporate performance. But they also exist some defects. First, they main focus on the influence of ownership concentration on interest allocation. While, the lack of research on the impact of ownership concentration on strategic decisions. Due to previous researches mostly use large enterprises with mature decision-making mechanisms as the object; hence, when considering the influence of ownership concentration, interest allocation is mostly taken as the starting point. But, as primeval entrepreneurial enterprises, since the perfect decision-making mechanism is not yet established, so ownership concentration most reflect the fight of decision-making power between enterprise founders and the management. Second, in terms of the measurement of enterprises' performance level, generally, enterprises' financial performance or market performance are taken as the standard, failing to distinguish between short-term performance and long-term performance. Thus, they can't give an overall evaluation on the influence of ownership concentration on the enterprise's performance. Third, most studies mainly research the direct influence of ownership concentration on enterprises' performance and ignoring the role of the strategic process during the ownership concentration affecting the enterprise performance. The black box of ownership concentration influence on the enterprise performance is not opened. Fourth, during the enterprises development which exist a process from internal governance to external governance. Previous studies mainly focus on the internal governance process; external governance researches is relatively less. The important role of second-level like the media on enterprises' strategic decisions are ignored. Hence, they failed to describe the whole process of enterprises' decision-making.

## **LITERATURE REVIEW AND THEORETICAL HYPOTHESES**

### **The Influence of Ownership Concentration of Entrepreneurial Enterprises on Enterprise Performance**

The principal-agent theory is the main basis for scholars to analyze the relationship between ownership concentration and enterprise performance. According to the principal-agent theory, there are two hypotheses about the influence of ownership concentration on enterprise performance in the academic circle, namely the "synergy" hypothesis (Jensen and Meckling, 1976) and the "infringement effect" (Lim and Mak, 1999) hypothesis. These two

hypotheses were proposed respectively in light of the principal-agent risk between enterprises' management and the peripheral shareholders, between major shareholders and minority shareholders. Furthermore, they both have the support of related empirical analysis (Bai Chong'en, Liu Qiao, 2005). This paper believes that the "synergy effect" and "infringement effect" exist simultaneously in ownership concentration, and that the influence of ownership concentration on enterprise performance depends on the correlation of these two effects. The reason of previous researches' disputation is that there was no effective distinction of the measurement of enterprise performance; there is certain one-sidedness with financial performance or market performance alone as the research object. Hence, this paper further classified enterprise performance into short-term financial performance and long-term market performance, hoping to better explain the influence of ownership concentration on enterprise performance in different time dimensions.

In the short term, an enterprise's financial performance is mainly decided by its operations and production state (Hsueh & Kuo, 2016). In this process, the information asymmetry between the management and peripheral shareholders is the main aspect to influence the enterprise performance; the "synergy effect" of ownership concentration is bigger than the "infringement effect". The ownership concentration's improvement can enhance the convergence between major shareholders' individual interests and the company's interest, and give major shareholders a stronger motivation to supervise the management. In this case, the information asymmetry between the company's internal management and peripheral shareholders is alleviated, so the enterprise's performance is promoted in a short term (Feng Licheng, Zhou Jiren, 2006). For small and medium-sized enterprises in the rapid development phase, a higher ownership concentration degree means that the ownership is usually concentrated in the founders or their stakeholders. At the moment, the interest convergence effect is more obvious and it will be fully demonstrated in the enterprise's financial statements (Jensen and Meckling, 1976).

In the long term, the enterprise's management situation is relatively steady; thus, the market performance of the enterprise mainly depends on the stakeholders' "emptying behavior" to the enterprise; ownership's "infringement effect" is bigger than the "synergy effect". The improvement of ownership concentration make the principal-agent risks between major shareholders and minority shareholders prominently, so major shareholders have both the motivation and the ability to infringe minority shareholders' interests (Tu, Tu, & Jhangr, 2016). From the angle motivation, medium and minority shareholders entrust the supervision rights to major shareholders, they can enjoy the interests from major shareholders' monitoring on managers without paying the cost. As a result, major shareholders have the motivation to occupy the interests of minority shareholders to make up for the monitoring cost (Shelifer and Vishny, 1997). From the angle capability, due to major shareholders have a high control power over the company. They can control the company's management decisions and occupied minority shareholders' interests through connected transactions; thus, the enterprise's market performance is declined (Denis, 1998).

Based on the above analyses, this study proposes following hypotheses:

- H1a:** There is a positive correlation between entrepreneurial enterprises' ownership concentration and their financial performance.
- H1b:** There is a negative correlation between entrepreneurial enterprises' ownership concentration and their market performance.

## **The Influence of Diversification Strategies of Entrepreneurial Enterprises on Enterprise Performance**

In order to develop and expand, entrepreneurial enterprises' products and services will not be limited to a certain industry or market. Instead, they will implement diversification strategies (Villalonga, 2004). Wrigley (1970) first introduced the concept of professional measurement in the process of enterprise diversification, subdivided enterprises' management types into single product type, dominant product type, related product type and unrelated product type. Compared with large enterprises, entrepreneurial enterprises possess limited resources and obvious specificity attributes. In order to avoid enormous risks of cross-industry operation, they tend to converge in the business fields that entrepreneurial enterprises are familiar with, namely, choose the related diversification strategy (Campa and Kedia, 2002).

Academic circles generally believed that the related diversification strategy plays an active role in promoting the enterprise's financial performance. Compared with the adoption of unrelated diversification strategy and vertically integrated enterprises, enterprises which adopt related diversification usually achieve better comprehensive performances (Rumelt, 2008). From market occupation angle, the transition of entrepreneurial enterprises from professionalism strategies to technology-related diversification strategies can make the products or businesses increased, expanding scope of the market expand and further promoting the enterprise performance (Palich, 2000). From product promotion angle, the related diversification strategy mode implemented by entrepreneurial enterprise is to carry out products development based on its core technologies, developing variety

products or business combinations and promoting its existing or new products into more industries using reputation, trademarks and other advantages; the enterprise's financial performance will be better demonstrated (Villalonga, 2004). From the resources utilization angle, because entrepreneurial enterprises exert the technical synergy effect to perform diversification management, they can make full use of the existing advantages of technologies, products sales channels and product markets, expanding the operation scope. Meanwhile without excessive increase the operation cost, instead they can enhance the short-term financial performance and the financial strength of themselves (Yu pengyi, 2005).

Entrepreneurial enterprises' implementing of related diversification strategy can not only promote the financial performance in a short term, but also can promote the enterprise's market value in the long run. First, the related diversification strategy can reduce the operation risks brought by market fluctuation, so the enterprise profits tend to be steady. For enterprises with small scale and high growing nature, implementing related diversification strategy can gain a higher market value (Zhang Yi, 2005). Second, due to the enhancement of market uncertainty, the key of enterprises' long-term development is to adapt to the fast changing of the market. The related diversification management of entrepreneurial enterprises will give them possibility to form a new core competitiveness rapidly when unexpected changes occur in the market (Marchant, 2014). Last, enterprises implement related diversification management can promote enterprises' social recognition and promote the public's anticipation of the enterprise's development prospect, so as to increase the firm's stock price in a long run (Wang. C, 2012).

Based on the above analysis, this research presents following hypotheses:

- H2a:** There is a positive correlation between entrepreneurial enterprises' related diversification strategy and their financial performance.
- H2b:** There is a positive correlation between entrepreneurial enterprises' related diversification strategy and their market performance.

### **The Influence of Entrepreneurial Enterprises' Ownership Concentration on the Related Diversification Strategy**

In China, most entrepreneurial enterprises are technical entrepreneurial enterprises. Due to a short set up time and immature ownership allocation mode, the ownership is usually concentrated in a few founders with professional technical background. The higher order theory holds that the background of the top management has an important influence on the strategic choice of the enterprise (Hambrick, 1984). There must be different attitude between the entrepreneurial enterprises' early founders composed mainly by professional technical staff and that of the management who mainly engage in the company's management and operation.

For the management, enterprises' diversification is beneficial to expand the enterprise scale; thus, managers can gain the remuneration equivalent to the enterprise scale (Jensen and Murphy, 1990). Managing enterprises with bigger scale can also promote the managers' power and reputation (Jensen, 1986; Stulz, 1990). At the same time, enterprises' diversification strategy can enhance the importance of managers to the enterprise, so their positions in the company are strengthened (Shleifer, 1989). As a result, the management tend to implement the related diversification strategy.

Compared with the management of the enterprise, enterprise founders with technical background usually resist the related diversification strategy. From the enterprise development angle, enterprise founders with stronger technical background usually have own characteristics, and easy to form tunnel thinking. Resources owned by entrepreneurial enterprises are usually in shortage and special. Founders are worried that decentralized operation will damage the operation performance, they prefer to use the limited resources into a single field, namely implementing the singled development strategy (Dennis and Sarin, 1997). While the improvement of profit level brought by the professional operation will enhance entrepreneurs to insist professional development strategy continually (Larry and Rene, 1993). From the individual interests angle of founders, if the enterprise to enter an unfamiliar field, the founders may lose the dominant rights in enterprise (Tihany, 2005). Moreover, once the investment efficiency is failed, the founders' early gains may suffer from significant losses. So private shareholders rarely tend to implement the diversification strategy. Besides, entrepreneurial enterprises usually realize the short-term growing by financing and introduce institutional investors to be the company's major shareholders inevitably. Institutional investors are prone to excessive short-sighted and they usually use standard discounted present value to evaluate the enterprise's performance. If the present value of the enterprise activities is negative, the strategic behaviors of the enterprise in current stage will conflict with the interests of the investors, even though these behaviors may bring promotion of long-term value for the company (Hansen and Hill, 1991).

The ownership concentration of entrepreneurial enterprises usually means the company founders' control. Improvement of the ownership concentration will promote the founders' decision-making abilities in the company's strategies and guarantee that the founders' decisions can be carried out smoothly (Chen, 2010), while

founders with technical background usually resist the related diversification strategy. Hence, the promotion of ownership concentration usually restrain the development tendency of related diversification strategy. Meanwhile, the improvement of the ownership concentration will enhance the tendency of the major shareholders to supervise the management. Since there is a significant positive correlation between the interests of major shareholders and the benefits of the enterprise; thus, major shareholders must be more strict in supervising the company's management, so as to ensure that the interests of shareholders are not compromised. The increase of supervision tendency further reduces the probability for management to implement a diversification development strategy (Amihud, 1981).

Based on the above analysis, this paper proposes following hypothesis:

**H3:** The ownership concentration of entrepreneurial enterprises is negatively correlated to the related diversification strategy.

### **The Mediating Effect of the Influence of the Related Diversification Strategy on Ownership Concentration in Entrepreneurial Enterprises' Performance**

According to the analysis framework of high order management theory "executive features-strategic choice-corporate performance", in the process of resources allocation and decisions, senior management team of orientation has a decisive effect. At the same time, the impact of decision makers with different backgrounds will certainly realized through different strategic choice processes (Bertrand, 2003). In innovative enterprises, there exist the conflicts between the enterprise founders with technical background and the specialty is engaged in the management of enterprise management. The overall strategic tendency of the enterprise depends on the ability comparison between the founders and the management, this comparison is expressed through ownership concentration. Therefore, the influence of ownership concentration on entrepreneurial enterprises is actually the result of different strategies implemented by different decision makers in order to realize the maximum interests. Decision makers exert impact on the operation management and decision schemes through the strategy implementing process, further indirect effect on the corporate performance (Xiang, 2003).

The essence of enterprises' related diversification strategy is the enterprise's resource allocation in different fields (Raymond, 2010). According to the "Ultimate Property Right Theory", the reason that different ultimate decision makers bring different enterprise performance lies in the difference of resource allocation motivations caused by the difference of ultimate property owners' way of exercising the ownership (Liu, 2003). Ownership concentration has influence on enterprise performance is mainly because that decision makers with different backgrounds attach different degrees of importance on related products and the different amounts of resources allocation due to this (Barney, 2001). Since entrepreneurial enterprises are in early stage of development, their decision-making mechanism is yet imperfect and the resources are limited, in this condition, the realization of decision makers' expected development goal needs to be based on resource fight. Hence, the influence of the "ultimate property subject" expressed by ownership concentration on enterprise performance must be realized through the strategy decision-making process.

Based on the above analysis, this paper presents following hypotheses:

**H4a:** The diversification strategy has an intermediary effect on the financial performance of entrepreneurial enterprises.

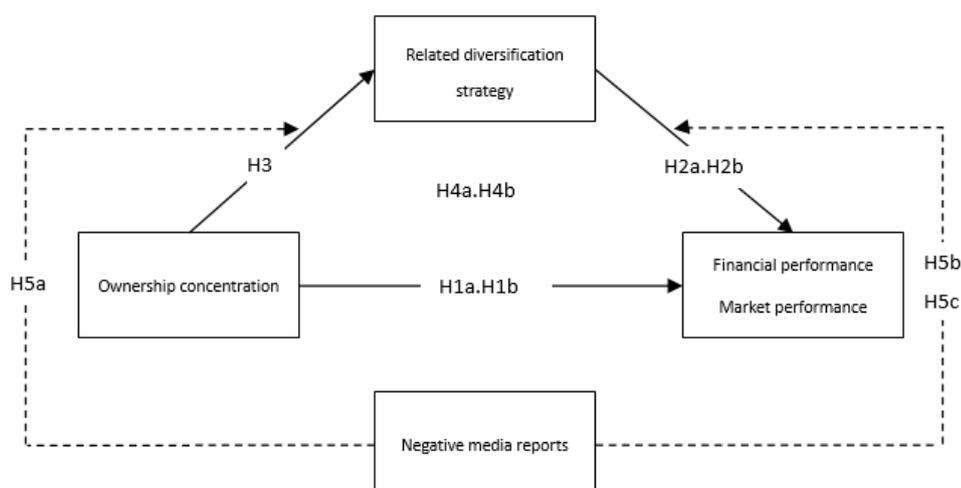
**H4b:** The diversification strategy has an intermediary effect on the market performance of entrepreneurial enterprises.

### **The Regulating Effect of Negative Media Reports**

Based on the stakeholder theory, corporate governance is a process of various power game together. Apart from first-level stakeholders like shareholders, customers and suppliers, the media and other external factors which can influence the company are second-level stakeholders. External stimuli reported by the media tend to have effect on the strategic choices of enterprises' decision makers and further to influence making and implementing of enterprises' development strategies.

#### ***The regulating effect of media's negative reports on the influence of ownership concentration on diversification strategy***

Media reports can cause the difference of enterprises' strategic choices by influencing the decision-making layer's anticipation of risks. When the enterprise's strategies are recognized by external stakeholders such as the media, usually the confidence of enterprise owners will be strengthened in current strategy. But when the enterprise's strategy reports negative by media, the enterprise's risk expectation will be increased. Further, they



**Figure 1.** Theory Model Diagram

will doubt the development strategy. For the enterprise's diversification strategies, no matter related diversification strategies or unrelated diversification strategies, most media are against them. For entrepreneurial enterprises, Because of its decision-makers within itself exists the contradiction between technical founders and management, enterprise owners usually present that the diversification strategy is a tool for the management to gain personal development (Liu, Shao, etc., 2005). Media's negative reports on diversification development will deepen the enterprise owner like the founders' distrust in the management, so the principal-agent risks are increased and enterprise founders insist on single development strategy (Burgman, 1996). The public recognition of entrepreneurial enterprises is relatively lower and the ability of resisting market risks is weak. So after negative reports appear, enterprises with higher ownership concentration, due to the stronger decision-making abilities of their founders, have an more obvious tendency to terminate the diversification strategy.

Based on the above analysis, this paper presents the following hypothesis:

**H5a:** Media governance plays a negative role in the influence of ownership concentration on entrepreneurial enterprises' diversification strategy.

### *The regulating effect of negative media reports on the influence of diversification strategy on enterprise performance*

Negative reports not only itself directly play a role of corporate governance, but also exert the company's governance function by improving the functions of other governance mechanisms. Due to the external governance function of the media, two enterprises with similar diversification levels may have different performances (Zheng, etc., 2011). Media's different attention on listed companies will cause different interests tunneling of major shareholders. Major shareholders have the motivation to develop diversified management in order to tunnel interests for personal gains. Under the diversified management situation, the more times listed companies have negative reports by the media, the bigger the possibility of major shareholders to empty interests, so it lead to enterprise's financial indexes and market performance declined (Chen and Deng, 2014). In addition, enterprises implement diversified corporation means involving various neterogeny products or market, especially for entrepreneurial enterprises, they are lack of enough experience when they produce new products or enter new market, it results lower error-tolerant rate for entrepreneurial enterprises to implement diversified strategy. In the process of developing the diversification strategy, negative information disclosure would reduce investors' expectation to implement the diversification strategy of entrepreneurial enterprises; thus, result in poor market performance and damage financial indexes and market performance of enterprise.

Based on the above analysis, this paper put forward the following hypotheses:

**H5b:** Negative media reports have a negative regulating effect on the influence of diversification strategy on entrepreneurial enterprises' financial performance.

**H5c:** Negative media reports have a negative regulating effect on the influence of diversification strategy on entrepreneurial enterprises' market performance.

To sum up, the hypotheses in this paper can be summarized as **Figure 1**.

**Table 1.** Variables Measurement Indexes System

Variable Name	Measurement Index	Calculation Method
ownership concentration(OS)	the sum of the shareholding ratios of the top ten shareholders	select the ten people who hold the most shares in the management layer and add their shareholding ratios
	the ratio of shareholders in the management layer	the sum of the people who hold shares in the management layer/the total number of the management layer
enterprise diversification strategy (ED)	Herfindahl index	$H = 1 - \sum S_i^2$ $S_i$ refers to the percentage of the business income of the $i$ industry in the total income
Enterprise performance	Financial performance	Returns ratio of total assets ROA net margin/average balance of total assets
	Market performance	Tobin's Q (market value of stock right+ net debt market value) / (total assets - net intangible assets), In it, the non-tradable shares market value is replaced by net asset in the calculation.
Negative media reports (NR)		$NR = R_1 + 2R_2$ $R_1$ is fact negative reports, $R_2$ is descriptive negative reports, Perform logarithm treatment after summing them up.

**Table 2.** Descriptive Statistics

Variable Name	N	Maximum	Minimum	Range	Mean Value	Standard Deviation
the sum of the shareholding ratios of the top ten shareholders	262	0.858	0.337	0.521	0.661	0.093
ratio of shareholders in the management layer	262	1.000	0.001	0.999	0.435	0.200
diversification strategy index	262	0.797	0.000	0.797	0.125	0.216
negative media reports	262	13.000	0.000	13.000	0.890	1.805
financial performance	262	-0.137	0.275	0.412	0.073	0.056
market performance	262	0.785	8.783	7.998	2.346	1.366

## VARIABLES SELECTION AND DESCRIPTION

### Samples and Data

This paper respectively selects the growth enterprises market of Shenzhen Stock Exchange from 2012 to 2015 and the small & medium-sized enterprises board of IT listed companies from 2011 to 2015 as the research samples. And, after excluding the companies which have ST and \*ST types financial abnormalities, delisted companies and sample enterprise with data missing\*abnormalities, 109 sample enterprise were obtained. Among them, there are 77 growth enterprises market IT listed companies and 32 small & medium-sized enterprises board. The data used in this research is from the Ti'an database. The missing data in the database were through the Sina Finance to download the annual statements of listed companies. The data needed by the experiment is calculated by EXCEL and then arranged and recorded manually to guarantee the authenticity and correctness of the data used in this research. After excluding the years with incomplete annuals information disclosure, 262 effective observation samples were obtained.

### Variable Definition and Measurement

In this paper, the measurement index and calculation method of the related variables are shown in [Table 1](#).

### Descriptive Statistics of Variables

In order to analyze the research results, this study adopted SPSS19.0 software to perform descriptive statistics analysis on the variables. The analysis result is shown in [Table 2](#).

**Table 3.** Pearson Correlation Analysis Statistics

	OS	ROA	TQ	SIZE	LEV	GROWTH	YEAR
OS	1						
ROA	0.110*	1					
TQ	-0.142**	0.309***	1				
SIZE	-0.060	0.117*	0.156**	1			
LEV	0.047	-0.059	-0.198***	-0.031	1		
GROWTH	0.065	0.249***	0.033	0.024	0.127**	1	
YEAR	-0.068	-0.021	-0.023	0.021	-0.004	-0.141**	1

### Correlation Analysis of Variables

SPSS 19.0 software is used to perform correlation analysis on the variables and the result is shown in [Table 3](#).

## REGRESSION ANALYSIS

### Multiple Linear Regression Analysis

#### Model establishment

The objective of this study is to analyze the relationship between ownership concentration (OS), executive team’s characteristics (EC), diversification strategy (ED), media governance (NR) and enterprise performance. Since these variables are all continuous variables, the multiple linear regression method is used to realize the study objective. The specific research model is as follows:

$$ROA_t = \alpha_0 + \alpha_1 SIZE_{t-1} + \alpha_2 LEV_{t-1} + \alpha_3 GROWTH_{t-1} + \alpha_4 YEAR_{t-1} \tag{model 1}$$

$$ROA_t = \alpha_0 + \alpha_1 SIZE_{t-1} + \alpha_2 LEV_{t-1} + \alpha_3 GROWTH_{t-1} + \alpha_4 YEAR_{t-1} + \alpha_5 OS_{t-1} \tag{model 2}$$

$$TQ_t = \alpha_0 + \alpha_1 SIZE_{t-1} + \alpha_2 LEV_{t-1} + \alpha_3 GROWTH_{t-1} + \alpha_4 YEAR_{t-1} \tag{model 3}$$

$$TQ_t = \alpha_0 + \alpha_1 SIZE_{t-1} + \alpha_2 LEV_{t-1} + \alpha_3 GROWTH_{t-1} + \alpha_4 YEAR_{t-1} + \alpha_5 OS_{t-1} \tag{model 4}$$

$$ROA_t = \alpha_0 + \alpha_1 SIZE_{t-1} + \alpha_2 LEV_{t-1} + \alpha_3 GROWTH_{t-1} + \alpha_4 YEAR_{t-1} + \alpha_5 ED_{t-1} \tag{model 5}$$

$$TQ_t = \alpha_0 + \alpha_1 SIZE_{t-1} + \alpha_2 LEV_{t-1} + \alpha_3 GROWTH_{t-1} + \alpha_4 YEAR_{t-1} + \alpha_5 ED_{t-1} \tag{model 6}$$

$$ED_t = \alpha_0 + \alpha_1 SIZE_{t-1} + \alpha_2 LEV_{t-1} + \alpha_3 GROWTH_{t-1} + \alpha_4 YEAR_{t-1} \tag{model 7}$$

$$ED_t = \alpha_0 + \alpha_1 SIZE_{t-1} + \alpha_2 LEV_{t-1} + \alpha_3 GROWTH_{t-1} + \alpha_4 YEAR_{t-1} + \alpha_5 OS_{t-1} \tag{model 8}$$

#### Regression result and analysis

Multiple linear regression was performed on the diversification strategy, ownership concentration and enterprise performance. The regression result analysis is shown in [Table 4](#).

From the parameter estimation of the regression result we can see that there is a significant linear positive correlation between ownership concentration and ROA and a significant linear negative correlation with Tobin’ Q. Assuming that H1a and H1b verification passed. From this we can come to the conclusion that when studying the influence of ownership concentration on the performance of entrepreneurial enterprises, the financial performance or the market performance alone as the study object is unreasonable. The promotion of ownership concentration bring the simultaneous existence of “synergy effect” (Jensen and Meckling, 1976) and “infringement effect” (Bai Chong’en, 2005). The influence of ownership concentration on the performance depends on the ratio of these two effects. In a short term, the performance level of an entrepreneurial enterprises depends on its production operation behaviors and the “synergy effect” plays the main role. In this condition, the promotion of ownership concentration can improve the interests convergence between major shareholders and the management so that the enterprise can achieve better performance. However, in the long run, under the circumstances that the enterprise’s production and operation situation tend to be steady, the impact of the “infringement effect” is prominent. The over-concentration of ownership allows the major shareholders to have both the motivation and the ability to occupy minority shareholders’ interests. The occurrence of interest occupation behaviors will influence the enterprise’s long-term market performance and damage its market value.

**Table 4.** Regression Parameters Estimation of Diversification Strategy, Ownership Concentration and Enterprise Performance

Model	model1	model2	model3	model4
dependent variable	ROA		TQ	
OS		-0.087**		0.106*
SIZE	0.108*	0.141**	0.149**	0.114*
LEV	-0.089	-0.195***	-0.200***	-0.093
GROWTH	0.259***	0.059	0.053	0.254***
YEAR	0.013	-0.027	-0.019	0.019
D-W				
F value	5.750***	4.565***	4.477***	5.260***
MAX VIF	1.038	1.041	1.038	1.041
Adjust the R	0.068	0.064	0.051	0.075
model	model5	model6	model7	model8
dependent variable	ROA	TQ	ED	
OS				-0.120*
ED	0.120**	0.103*		
SIZE	0.099*	0.142**	0.072	0.065
LEV	-0.088	-0.199**	-0.009	-0.005
GROWTH	0.253***	0.047	0.057	0.063
YEAR	-0.003	-0.032	0.125**	0.118*
D-W	1.149	1.346		
F value	5.456***	4.185***	1.489*	1.956*
MAX VIF	1.042	1.042	1.038	1.041
Adjust the R	0.079	0.058	0.007	0.018

There are obvious positive correlation between enterprises' diversification strategy and the short-term performance ROA, long-term performance Tobin's Q. Assuming that H2a and H2b verification passed. Entrepreneurial enterprises adopting related diversification strategy is helpful for improving their performance. The reason is that entrepreneurial enterprises' adopting of diversification strategy can make full use of its own residual resources and enable reputation, trademark, management skills and technical knowledge, etc to transfer among different industries and different products at lower costs, improve the efficiency by saving the cost, generate synergy effect and promote the enterprise's performance and market value.

Ownership concentration has an obvious negative impact on the diversification strategy, supposing the H3 verification passed. The implementation of diversification strategy in entrepreneurial enterprises is limited by the enterprise's ownership allocation mode. During the strategic decision-making process of entrepreneurial enterprises, there exist conflicts between the founders with technical background and the management layer who are professionally engaged in management activities. Because their attitudes are different on the diversified development, thus, the decision-making positions of them directly influence whether the diversification strategy can be implemented. The promotion of ownership concentration allows enterprise founders with technical backgrounds to have a stronger control over the company. Because enterprise founders resist the diversification strategy, enterprises' selection tendency of the related diversification strategy is declined.

### Medium Variable Analysis

#### Model establishment

In order to test whether the diversification strategy of enterprises has the medium function in the process in which the ownership concentration and executives team's characteristics influence the performance, this research used the returns ratio of total assets(ROA) and the Tobin's Q (TQ) as the dependent variables, ownership concentration(OS) and executive team's characteristics(EC)as the independent variables and the diversification strategy(ED) and the medium variable to establish the regression model. The specific research model is as follows:

$$ROA_{t+1} = c_{11}OS_t + e_{11}SIZE_t + e_{12}LEV_t + e_{13}GROWTH_t + e_{14}YEAR_t \tag{model 9}$$

$$ED_t = c_{21}OS_t + e_{21}SIZE_t + e_{22}LEV_t + e_{23}GROWTH_t + e_{24}YEAR_t \tag{model 10}$$

$$ROA_{t+1} = c'_{31}OS_t + b_{31}ED_t + e_{31}SIZE_t + e_{32}LEV_t + e_{33}GROWTH_t + e_{34}YEAR_t \tag{model 11}$$

$$TQ_{t+1} = c_{41}OS_t + e_{41}SIZE_t + e_{42}LEV_t + e_{43}GROWTH_t + e_{44}YEAR_t \tag{model 12}$$

$$TQ_{t+1} = c'_{51}OS_t + b_{51}ED_t + e_{51}SIZE_t + e_{52}LEV_t + e_{53}GROWTH_t + e_{54}YEAR_t \tag{model 13}$$

**Table 5.** Model Parameter Estimation of the Medium Role of Diversification Strategy in the Process of Ownership Concentration Influencing Enterprise Performance

Model	Model 9	Model 10	Model 11	Model 12	Model 13
dependent variable	ROA	ED	ROA	TQ	TQ
OS	0.106 <sup>*</sup>	-0.080 <sup>*</sup>	0.122 <sup>**</sup>	-0.130 <sup>**</sup>	-0.119 <sup>**</sup>
ED			0.135 <sup>**</sup>		0.089
SIZE	0.114 <sup>*</sup>	0.065	0.105 <sup>*</sup>	0.141 <sup>**</sup>	0.136 <sup>**</sup>
LEV	-0.093	-0.005	-0.092	-0.195 <sup>***</sup>	-0.195 <sup>***</sup>
GROWTH	0.254 <sup>***</sup>	0.063	0.245 <sup>***</sup>	0.059	0.054
YEAR	0.019	0.118 <sup>*</sup>	0.003	-0.027	-0.037
D-W	1.072	1.267	1.133	1.325	1.326
F value	5.260 <sup>***</sup>	1.956 <sup>*</sup>	5.292 <sup>***</sup>	4.565 <sup>***</sup>	4.175 <sup>***</sup>
MAX VIF	1.041	1.041	1.045	1.041	1.045
Adjust the R square	0.075	0.037	0.090	0.064	0.068

### Regression result and analysis

In model 9 and model 10, the ownership concentration (OS) coefficient is notable. In model 11, the enterprise diversification strategy(ED) coefficient is notable and the ownership concentration (OS) coefficient is not notable. So, the enterprise's diversification strategy (ED) plays part of the medium role between ownership concentration (OS) and returns of the total assets (ROA). Supposing the H4a verification passed. The medium role of the related diversification strategy in the process in which ownership concentration influences the financial performance provides an effective path for entrepreneurial enterprises to promote their financial performance. Entrepreneurial enterprises can promote the implementation of related diversification strategy by carrying out the decentralized ownership allocation mode. By thee effective configuration of resources in relevant industries and products, enterprises' performance promotion is realized.

In model 10 and model 12, the ownership concentration (OS) coefficient is notable. In model 13, the diversification strategy (ED) coefficient is not notable. Now, it can't be determined directly that the medium effect is not obvious. SOBLE test needs to be performed to see whether there is medium effect. By calculation, the Z value is -1.165. SOBLE thinks that when the absolute value of Z value is smaller than 1.96, the medium effect doesn't exist. So, according to the SOBLE theory. This study argues that the diversification strategy (ED) does not play a medium role between ownership concentration (OS) and Tobin Q (TQ). Supposing the H4b didn't pass. As for why the medium role of the related diversification strategy in the process in which ownership concentration influences the performance didn't pass the verification, this paper thinks that the main reason is the time lag of market performance. Compared with the financial performance, market performance has time lag. The formulation and implementation of diversification strategy requires a long period of time until its economic consequences are reflected in market performance. Especially for entrepreneurial enterprises, the implementation process of strategies is in the groping stage, the time taken in this cycle will be longer than that of traditional enterprises. So, the effect of implementing diversification strategy on the promotion of enterprises' market performance takes longer time to show than in traditional enterprises. Since the time span chosen in this paper is short and the effect of the implementation of related diversification strategy in entrepreneurial enterprises on their market value is not manifested, thus, the medium role of related diversification strategy in the process in which the ownership concentration influences the performance didn't pass the verification.

### Regulating Variables Analysis

In this paper, regression models with product term are used. Hierarchical regression analysis was used to verify the regulating effects. The hierarchical analysis regression results of the regulating function are shown in [Table 6-8](#).

**Table 6.** Parameter Estimation of the Regulating Function of Ownership Concentration and Diversification Strategy

Model	Model 14	Model 15	Model 16
dependent variable		ED	
SIZE	0.072	0.067	0.062
LEV	-0.009	-0.007	-0.009
GROWTH	0.057	0.058	0.058
YEAR	0.125**	0.118*	0.119*
OS		-0.118*	-0.119**
NR		-0.034	-0.040
OS*NR			0.044
D-W			1.532
F value	1.489	1.676	1.503
MAX VIF	1.038	1.061	1.061
Adjust R	0.007	0.015	0.013

**Table 7.** Parameter Estimation of Enterprises' Diversification Strategy's Regulating Function and the Financial Performance (ROA)

Model	Model 17	Model 18	Model 19
dependent variable		ROA	
SIZE	0.108*	0.113*	0.110*
LEV	-0.089	-0.102*	-0.102*
GROWTH	0.259***	0.224***	0.224***
YEAR	0.013	-0.006	-0.006
ED		0.112*	0.114*
NR		-0.214***	-0.210***
ED*NR			0.062*
D-W			1.457
F value	5.750***	6.951***	7.974***
MAX VIF	1.038	1.060	1.060
Adjust R	0.068	0.120	0.138

**Table 8.** Parameter Estimation of the Regulating Function of Enterprises' Diversification Strategy and Enterprise Performance (TQ)

Model	Model 20	Model 21	Model 22
dependent variable		TQ	
SIZE	0.149**	0.151**	0.149**
LEV	-0.200***	-0.209**	-0.209**
GROWTH	0.053	0.028	0.028
YEAR	-0.019	-0.034	-0.034
ED		0.098*	0.099*
NR		-0.143**	-0.141**
ED*NR			0.022
D-W			1.555
F value	4.477***	4.483***	3.844***
MAX VIF	1.038	1.060	1.060
Adjust R	0.051	0.074	0.071

In the hierarchical regression analysis, the VIF maximums of model 14 and model 22 are both less than 10. There is no multicollinearity problem. D-W values are near 2, which means there is no autocorrelation problem. In model 16, the product term coefficient of ownership concentration (OS) and media governance (NR) didn't pass the significance test, which means there is no interaction between them. The R square change value did not reach a significant level, either. Assuming the H5a verification didn't pass. This paper thinks that the reason that negative media reports don't play the regulating role in the process in which ownership concentration influences entrepreneurial enterprises' related diversification strategy is the decision rigidity of decision makers of entrepreneurial enterprises. There is a transition from internal governance to external governance in the development process of enterprises. Since entrepreneurial enterprises are in their fast growing stage, the formulation of enterprise's strategic direction relies more on internal factors, such as the major shareholder's and the management layer's master and anticipation of the production management situation. At this time, media governance plays a smaller role (Kor, 2003). Besides, the entrepreneur trait theory thinks that entrepreneurs have risk tendencies and the persistence features (Gartner, 1989; Zhao Wenhong, 2002). When the ownership concentration is higher, the strategic decisions of entrepreneurial enterprise depends mainly on the founders who

master most of the ownership, while the founders are not easily influenced by external factors like the media due to the role of entrepreneurs features.

In model 19, the product term coefficient of diversification strategy of enterprises(ED) and media governance (NR) passed the significance test on 0.1 level, which means there is an interaction between these two. The adjusted R value also reached the significant level, which indicates that media governance (NR) plays a regulating role in the relationship between the diversification strategy of enterprises(ED) and the enterprise's financial performance (ROA). Supposing that the H5b verification passed. In model 22, the product term coefficient of diversification strategy of enterprises (ED) and media governance (NR) didn't pass the significance test. Media's negative reports plays the negative regulating role in the process in which the related diversification strategy influence the financial performance. They don't play the regulating role in the process in which the related diversification strategy influence the market performance. In this paper, it's believed that such phenomenon is generated under the influence of the public's "Herd Effect". The theory of behavioral economics argues for the existence of rational paradox in economic activities. In the case of highly asymmetric information, rational behaviors of single people according to the limited information to make decisions often result in irrational behaviors in the group, namely the so-called "Herd Effect" (Wu Fulong Zeng Yong Tang Xiaowo, 2004). In the short term, since consumers' information comes mainly from media reports, when the media have negative reports on the enterprise's diversification, consumers' cognition of the diversification strategy is limited to its flaws. In this case, there is deviation in consumers' anticipation of entrepreneurial enterprises' development and group irrational consumption is generated. Thus, the financial performance of entrepreneurial enterprises will suffer from loss. But, in the long run, consumers' behaviors tend to be rational, the public's related information storage of the diversification strategy is enhanced and consumption behaviors return to rational. Hence, in the long run, negative media reports will not affect the performance improvement brought by the diversification development strategy.

## CONCLUSION

This paper chose the IT listed companies in the Shenzhen Stock Exchange growth enterprise market from 2012 to 2015 and the small and medium-sized enterprise board from 2011 to 2015 as the research samples to study the influence of ownership on entrepreneurial enterprises' financial performance and market performance. Furthermore, the medium role of the related diversification strategy and the regulating function of media's negative reports were studied. The following conclusions were obtained: (1) The ownership concentration of entrepreneurial enterprise has a two-way influence relationship with their performance. The promotion of ownership concentration can improve the financial performance of the enterprise in the short term, but it will damage the market performance in the long run. (2) The related diversification strategy has a positive effect on the promotion of entrepreneurial enterprises' performance, which can not only improve the short-term financial performance, but also enhance the long-term market value. (3) The improvement of ownership concentration can inhibit the development of the related diversification strategy of entrepreneurial enterprises. (4) It is an effective way to improve the financial performance of entrepreneurial enterprises by reducing ownership concentration and promoting the development of the related diversification strategy accordingly. But, it influence on the market performance is not obvious. (5) Media's negative reports will influence enterprises to implement the diversification strategy in a short term and it have adverse effect on the enterprise's financial performance. But its influence on the enterprise's long-term value is limited.

The research results of this paper have guiding significance for the adjustment of the equity of entrepreneurial enterprises and the implementation of the related diversification strategy. First, this paper found out that the ownership of China's GEM listed companies is over concentrated. In the samples of this study, the shareholding percentage of the top ten shareholders is as high as 66.1%, while the proportion of shareholders in the management is only about 43.5%. Such centralized ownership distribution mode will bring performance promotion to the enterprise in a short term. But, with the development and growth of entrepreneurial enterprises, the disadvantages of the centralized ownership allocation mode will gradually become prominent. The ownership allocation mode needs to go through a transition process from centralization to scattering. To carry out equity reform and to implement diversified equity allocation modes is an important way for entrepreneurial enterprises to achieve long-term development. Secondly, the related diversified development is an effective way for entrepreneurial enterprises to realize great-leap-forward development. The diversified development of related products or related business can not only promote the improvement of short-term financial performance, but also increase the long-term market value of enterprises. Therefore, enterprises should abandon the hesitant attitude towards diversified development and achieve the transition from single development to diversified development. China's GEM listed companies have a low degree of diversification. In this paper, we use the Herfindal index to measure the degree of diversification of enterprises. The research shows that the average value of diversification strategy index is only 0.111. Entrepreneurial enterprises should pace up the diversification process. But it is worth noting that the resources of entrepreneurial enterprises are limited. So, the development of the diversification strategy must ensure

a correct positioning, ensure certain connection between the newly-added businesses and the main businesses, remain the relevance and homogeneity between the diversified products and the original main products so as to further make better use of the original core competitiveness of the enterprise. In the end, as an important second party, media has an important influence on the decision-making process and the implementation effect of enterprises' diversification strategy. Thus, entrepreneurial enterprises should establish the early warning mechanism for media reports for monitoring and early warning of the media's reports, establish the contingency plan to cope with media's negative reports, discover the negative reports concerning the enterprise and actively respond to them, compress the space of negative reports' spreading as much as possible, improve the response speed to negative reports to reduce the negative impact. At the same time, establish the internal media and communication management mechanism; when the enterprise is in negative reports, manage and release the important information related to the negative reports. On the other hand, improve the media platforms for enterprises to communicate with the outside world, such as micro-blog, official website, etc. Release the correct information through these platforms timely and communicate with the public in time so as to achieve the role of public opinion guidance.

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