

The Impact of Venture Capital on GEM Companies' Deviant Strategy

Huihui Zhang

School of Management, Jinan University, Guangzhou, China

Email: zhh15360@163.com

How to cite this paper: Zhang, H.H. (2018) The Impact of Venture Capital on GEM Companies' Deviant Strategy. *Open Journal of Accounting*, 7, 25-41.
<https://doi.org/10.4236/ojacct.2018.71003>

Received: November 13, 2017

Accepted: December 30, 2017

Published: January 2, 2018

Copyright © 2018 by author and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

From the perspective of resource-based theory, agency theory and signal transmission theory, this paper examines the impact of venture capital on the deviant strategy of enterprises by studying the data of GEM listed companies from 2009 to 2016. The study finds that there is a smaller deviant strategy in companies supported by venture capital than not supported. Through the further analysis of venture capital, this paper finds that the impact of specific characteristics of venture capital on corporate deviant strategy is more significant: private and state-owned background characteristics of venture capital, compared with foreign investment background characteristics of venture capital, the companies supported by the former two own smaller deviant strategy; the enterprise supported by venture capital of alliance investment characteristics, phased investment characteristics, late entry into the enterprise characteristics owned smaller deviant strategy.

Keywords

Venture Capital, Venture Capital Characteristics, Deviant Strategy

1. Introduction

The national strategy leads economic and political culture to take off, the industry strategy has arisen a generation of industrial revolution, and the enterprise strategy points forward to make it invincible. Enterprise strategy refers to a series of conventions and actions taken by enterprises to develop core competitiveness and gain competitive advantage [1]. Successful corporate strategy leads to excellent financial performance [2], leading to a smaller earnings management behavior [3] [4] [5] and higher accounting information quality. Each industry will gradually form a set of conventional strategic models in the development process [6] [7], and the Deviant Strategy is defined as the degree of enter-

prise strategy deviates from the conventional strategy of the industry [8]. The management literature indicates that the degree of deviant strategy of enterprises significantly influences the characteristics of enterprise accounting performance. On the one hand, consistent with conventional industry strategy to help enterprises avoid conflict with the existing system of laws and regulations, thus easier to obtain the resources required for survival development, reduce the uncertainty in the business process [6] [7] [8]; on the other hand, companies with conventional strategies often face more intense competition [9] [10], thereby reducing profit margins. Therefore, we can not determine the direction of deviant strategy to financial performance. However, existing research shows that the greater difference of deviant strategy between enterprises, the more likely extreme good or extreme failure results, namely deviant strategy degree will enhance the enterprise's financial performance volatility [8] [11] [12]. In other words, the deviant strategy can bring a large profit to the enterprise, and it can also bring a great loss to the enterprise, thus affecting the sustainable development of the enterprise. Therefore, to improve the effectiveness of the deviant strategy and reduce the risk losses caused by the deviant strategy, the deviant strategy must be properly controlled. Therefore, what influences the degree of deviant strategy becomes a proposition worth examining. This helps us understand the impact factors of corporate deviant strategy.

Venture Capital referred to as VC, the broad sense of venture capital refers to all with high risk, high potential return on investment; narrow sense of venture capital is based on high technology, production and operation of technology-intensive products investment. The existing literature shows that venture capital has a pivotal role in the growth of start-ups. Venture capital institutions can not only ease the business' capital "bottleneck" and constraints [13]; more importantly, venture capital institutions with its industry-wide long-term investment experience accumulated, to provide strategic consulting for start-up enterprises, provide strategic consulting, listing and financing and other value-added services and risk screening, internal control and other supervisory control [14] [15], thereby helping to reduce operational uncertainty and improve financial performance [14] [15] [16] and the perfection of corporate governance [17] [18] [19]. It is important to note that some scholars have tentatively analyzed the impact of venture capital intervention on the strategic choice of start-ups: some scholars believe that venture capital institutions use their reputation and network resources to promote the internationalization of strategic choice [13] [20] [21]. Other scholars' research results show that venture capital firms intervened to inhibit the international strategic choice of enterprises [22].

Relying on venture capital to macroeconomic policy control and industry development and forward-looking insight and other advantages [23], its involvement in start-ups will have a greater impact on the enterprises' strategic choice and guidance [21], and thus affect the deviant strategy. But how venture capital's intervention will affect business strategy differences, and what specific characteristics of venture capital affect the deviant strategy of enterprises, scholars still less

research. We will focus on these two aspects in this paper. This helps the capital market to have a clearer understanding of venture capital so that investors can understand the deviant strategy of the enterprises from the side and also provide reference for the enterprises in choosing whether to introduce venture capital and what type of venture capital should be introduced.

2. Theoretical Analysis and Research Hypothesis

2.1. Venture Capital Intervention

Venture capital can guide start-ups to choose the correct strategic plan and effectively control the deviant strategy. Venture capital institutions can provide value-added services and supervisory control to start-up enterprises based on their own experience and industry expertise, thus affecting the strategic choice and implementation of entrepreneurial enterprises. Gorman and Sahlman (1989) analyzed the survey data of 49 start-ups, showing that venture capital firms spend 80 hours a year on site guidance and 30-hour telephone visits for start-ups. In addition, VC also provides value-added services such as financial support, strategic consulting and personnel recruitment for start-ups, and comprehensively guides the formulation and implementation of the strategies of start-ups. Barry *et al.* (1990), in discussing the role of venture capital in the value creation of listed companies, found that venture capital would intervene in the board of directors of entrepreneurial enterprises, participate in internal business decision-making and other activities to achieve the supervision and management of enterprises, thus affecting the start-up enterprises strategic choice. On this basis, a large number of scholars believe that venture capital can bring the characteristics of value-added services and professional corporate governance [24] [25] [26] to support the growth and development of start-ups.

Venture capital to guide enterprises to develop a strategy to control the deviant strategy will not be too large, the starting point is: based on their own investment experience and industry development prospects to ensure that the strategic positioning of start-ups can support high growth, avoid uncertainty, thus achieving efficient investment performance. Therefore, venture capital institutions in the enterprise, will be based on changes in market environment and strategic elements, and actively play a guiding and nurturing functions to help entrepreneurs to develop appropriate strategies to effectively improve the effectiveness of corporate deviant strategy, and control the deviant strategy to the industries' low level.

Based on the theory of resource basic theory, agency theory and signal transmission theory, this paper argues that venture capital institutions control the deviant strategy of start-up enterprises through three mechanisms, namely value-added service provision mechanism, supervision and management mechanism and signal transmission mechanism.

2.1.1. Value-Added Service Provision Mechanism

According to the theoretical logic of the resource-based view, the sustainable

competitive advantage of the firm is derived from the heterogeneity and immobility resources that it possesses, and this resource has value, rareness, imperfect imitability and substitutability [27]. However, start-ups that have not been established for a long time often possess some resources with potential for growth but lack the internal organizational system, the trust relations in the market, social capital and economic capital for full access to competitive advantages, which are in the unfavorable conditions of new entrants [28]. The specialization and specialized value-added services brought by the involvement of venture capital can inject the superior resources into the start-up enterprises and help them to formulate and implement scientific and strategic measures. Specifically, the value-added services provided by the venture capital related to the venture enterprise strategy mainly include three kinds: 1) The guidance of strategic positioning. Venture capital institutions in a particular industry has accumulated a wealth of investment experience, then they have a profound prejudgment, the status quo and prospects of the industry, and accordingly for the start-up enterprises to provide technology, product and service development of cutting-edge information to help enterprises to develop appropriate products and markets [15] [29] [30] [31]. 2) The addition of strategic elements. Venture capital institutions in the long-term investment process has accumulated a wide range of online resources, and accordingly help start-ups find the appropriate senior management team members and functional managers to help start-ups to establish contact to suppliers, customers, partners and other key players [32] [33] [34]. 3) Assistance in strategic implementation. Venture capital firms have accumulated industry expertise in specific areas and help companies develop scientific operational strategies to facilitate the efficient implementation of corporate strategies [31] [35]. Based on the industry, by guiding the strategic positioning, supplementing the strategic elements and assisting the strategic implementation, venture capital avoids enterprises being too conservative and over-aggressive in their strategic decisions and controlling the deviant strategy to a more scientific and rational level.

2.1.2. Supervision and Management Mechanism

According to the agency theory, after the formation of the principal-agent relationship, due to the existence of information asymmetry and the difference between the two sides' demand and the target, the information superiority will choose the behavior and strategy based on the maximization of its own effect, which may lead to moral hazard and adverse selection. After venture capital involved in starting a business, a kind of principal-agent relationship is formed. On the one hand, entrepreneurs may use the information advantage to develop strategic decisions that are conducive to maximizing their own interests. On the other hand, the concept and decision-making ability of entrepreneurs may restrict the choice of the correct strategic direction, and thus seriously affect the growth of enterprises and venture capital institutions interests. Through close monitoring and incentives, venture capital firms can mitigate this agency risk to a certain extent [36] [37] [38]. In general, venture capital institutions through

the following path to achieve the entrepreneurial enterprise strategy monitoring: 1) corporate governance participation. Venture capital institutions usually receive board seats for start-ups, participate in the development of major strategic decisions by the board of directors, and supervise the work of the executive team [32] [39] [40]. 2) the incentive and restraint of the contract. Venture capital institutions participate in the making of major decisions of start-ups according to the terms of the investment contract, such as voting rights, one-vote veto, VAM, etc., which affect their strategic choices and implementation [41]. 3) supervision and evaluation of strategic implementation. Venture capital firms regularly evaluate the strategic performance and performance of start-up companies, ensuring that companies are able to develop in accordance with established strategic objectives and content, and on the other hand, to make timely strategic adjustments to meet the rapidly changing market environment [42].

2.1.3. Signal Transmission Mechanism

According to the theory of signal transmission, when there is information asymmetry, individuals with information superiority in the market will pass information to the individual of information disadvantage through signal transmission mechanism, so as to realize effective market equilibrium [43]. Emerging start-ups often lack a lot of money and manpower to promote themselves, it is difficult to obtain external financing and cooperation. With the involvement of venture capital, venture capital institutions can use their reputation and status in the industry to influence the signal quality of start-up enterprises, thus affecting the strategic choice and implementation of enterprises. Venture capital can influence the strategic choice of entrepreneurial enterprises through the transmission mechanism of enterprise information. The involvement of venture capital institutions sends the signal of higher quality of start-up enterprises to the market. On the one hand, it helps to exert influence. As an intermediary, it can reduce information asymmetry between start-up enterprises, external investors and trading partners, and facilitate start-up enterprises to obtain follow-up financing. On the other hand, it helps reduce the screening costs of both parties involved in trading and enhance the efficiency of the selection partners. For example, Lindsey (2008) [44] argues that the signal transmission mechanism involved in venture capital facilitates the strategic alliance between start-ups. Strategic alliance effectively strengthens the exchange of information and becomes a virtuous cycle mechanism, making the enterprises more efficient in investment strategies and competitive strategies with less deviant strategy.

In summary, venture capital has achieved its impact on deviant strategy in the screening and counseling of enterprises, thus we put forward the hypothesis H1:

H1: Venture-backed firms have less deviant strategy than no venture-backed firms.

2.2. The Characteristics of Venture Capital

Because of venture capitals' different qualifications, they provide value-added

services to enterprises, play a supervisory role and the role of information transmission is not the same, so its impact on the degree of deviant strategy is not the same, which we propose H2:

H2: Venture capital characteristics affect the deviant strategy of enterprises.

What kind of venture capital plays a larger role in controlling corporate strategy? In this paper, the characteristics of venture capital are divided into two categories, one is its own attribute characteristics, and the other is its investment period characteristics.

2.2.1. Venture Capital Background

According to the fund background, venture capital can be divided into government background venture capital, private background venture capital and foreign background. First, they can make better use of the links between key players such as suppliers, customers and partners in the process of value-added service provision, and reduce the deviant strategy in the business strategy. Second, the government background and private background of the venture to participate in corporate strategic decision-making will be more inclined to determine the risk and benefit based on industry standards, which strictly control the expansion of deviant strategy. Finally, they are more aware of the domestic capital market and the domestic industry situation, and they can better interact with the capital market and the entire industry in the information transmission, so as to know ourselves, to prevent extreme strategic decisions. On the other hand, foreign-funded enterprises have more diversified resources, and the reference standard is more likely to be their own national standards. Therefore, it is more prone to extreme phenomena in the process of participating in the strategic decision making of foreign-funded enterprises, forming a larger strategic difference. So we propose hypothesis H2a:

H2a: Companies backed by venture capital of private and state-owned background, compared with companies backed by venture capital of foreign investment background, the former have less strategic difference.

2.2.2. Union Investment

In this paper, two or more venture capital investments in the same enterprise are called union investment. These institutions often come from different industry sectors and have different resource and capacity structures. First of all, From a resource perspective, alliance venture capital institutions tend to come from different industries and have different structures of resources and capabilities. They provide a variety of complementary resources and capabilities when providing value-added to start-ups, and conclude such Investment alliances help start-ups gain access to critical resources and capabilities to get to new markets faster [45], thereby reducing corporate deviant strategy and achieving more stable performance. Second, from the perspective of venture capital supervision and management, the Union venture capital can play a better group decision-making function, to avoid extreme decision-making. Moreover, the strategic implemen-

tation and operational performance of start-up enterprises need to meet the criteria of periodic evaluation by multiple alliance venture capital institutions, which forms a more stringent management mechanism for preventing enterprises from deviating from the strategy and causing excessive deviant strategy. Finally, from the perspective of easing information asymmetry, the different resources and capabilities of alliance venture capital in different industry sectors will enable enterprises to reach more comprehensive information, and capital markets also identify companies with Union capital investments as higher quality businesses [46], so capital markets are more likely to support start-up companies to obtain follow-up finances and financially reduce corporate deviant strategy. In summary, we propose to assume that H2b:

H2b: Companies backed by Union venture capital has less deviant strategy.

2.2.3. Investment Stage

From the perspective of value-added services, late-stage venture capital investment has a more skilled listing counseling experience, so it can guide companies in strict accordance with the listing standards, and recommend the resources and network that help enterprises to list, and control the deviant strategy of enterprises within a reasonable range. From the point of view of supervisory management, The CSRC has very high requirements on the compliance and performance of start-ups in the first three years of listing. Venture capitalists now need to provide more stringent compliance guidance and strategic guidance. In summary, we propose that H2c:

H2c: Companies backed by late-stage venture capital have less deviant strategy.

2.2.4. Staged Investment

From a regulatory perspective, as the phased injection of capital allows venture capitalists having sufficient time to gather relevant information about the business and to monitor the firm's growth after the first phase of investment, the business outlook can be effectively reassessed. For any revaluation, VCs have the right to give up or continue to hold the project. If VCs choose to invest additional funds, it means that the indicators of the enterprise meet the requirements, the strategy differences are low, the performance is stable, and the listing prospect is good. Therefore, the phased investment is an important way to reduce the cost of principal-agent and reduce the risk of investment [47], which can effectively reduce the strategic difference. From the information transmission mechanism, additional investment in venture capital, to the capital market to pass the development of high-quality entrepreneurial enterprises signal is conducive to the subsequent entry of other resources, then resource stability is conducive to reducing corporate deviant strategy. Thus we assume that H2d:

H2d: Companies backed by phased investment venture capital have less deviant strategy.

3. Research Design

3.1. The Sample Selection and Data Collection

Based on the researches of domestic and foreign scholars, combined with the unique economic environment and system background of China, this paper takes the 2009-2016 data of China GEM listed companies as sample, which obtains a total of 2628 observations. This paper focuses on venture capital and its characteristics' impact on corporate strategy differences. The data for venture capital comes from "Prospectus for Listed Companies", Wind Database, China Venture website and Global Enterprise Library website. R & D investment data from the Wind database, other financial data from the CSMAR database. This article uses stata12 for data processing.

3.2. The Model Building

Model 1:

$$ds = \beta_0 + \beta_1 VC + \beta_2 hightech + \beta_3 bshare + \beta_4 boards + \beta_5 ROA + \beta_6 LEV + \beta_7 growth + \beta_8 size + \beta_9 industry + \beta_{10} year + \varepsilon$$

Model 1 examines the impact of risk-free investment support on corporate strategy differences.

Model 2:

$$ds = \beta_0 + \beta_1 vcnature0 + \beta_2 vcnature1 + \beta_3 unite + \beta_4 hightech + \beta_5 bshare + \beta_6 boards + \beta_7 ROA + \beta_8 growth + \beta_9 LEV + \beta_{10} size + \beta_{11} industry + \beta_{12} year + \varepsilon$$

Model 2 is used to examine the impact of venture capital with different attribute characteristics on corporate deviant strategy.

Model 3:

$$ds = \beta_0 + \beta_1 investage + \beta_2 ifstage + \beta_3 hightech + \beta_4 bshare + \beta_5 boards + \beta_6 ROA + \beta_7 LEV + \beta_8 growth + \beta_9 size + \beta_{10} industry + \beta_{11} year + \varepsilon$$

Model 3 is used to examine the impact of venture capital investments with different investment characteristics on corporate strategy differences.

3.3. The Definition of Variables

1) Deviant strategy

Deviant strategy refers to the extent to which corporate strategy deviates from industry concentration or mainstream trends. This paper draws on the practices of scholars such as Finkelstein and Hambrick (1990) [11], Geletkanycz and Hambrick (1997) [9], Tang *et al.* (2011) [8] and Ye Kangtao *et al.* (2014) [48] to measure the deviant strategy: Market (cost of sales/revenue), research and development investment (net value of intangible assets/revenue), degree of fixed assets to update (net value of fixed assets/original value of fixed assets), capital intensity (fixed assets/the number of employees), pay for the management (management cost/revenue), enterprise financial leverage ((Short-term loans + long-term loans + bonds payable)/owner's equity). The specific calculation method

is as follows: Firstly, six index values of each enterprise are calculated year by year; secondly, the difference between the six index values of each enterprise and the average of the current industry is calculated, and the difference is divided by the standard deviation to standardize absolute value, and thus get each enterprise in six indicators deviate from the average level of industry absolute degree; Finally, calculate the average of each of the six standardization indicators, that is, the overall corporate strategy deviation from the industry average level of degree of DS. The larger the DS value, the greater the strategic difference that the enterprise deviated from the industry concentration or the mainstream trend.

2) The confirmation of venture capital institutions

First, if the words “venture capital” and “venture capital investment” appear in the names of the shareholders of the company, check its main business, if it carries out “venture capital” and “venture capital” activities, such shareholders will be identified as venture capital; Second, if the above name does not appear in the name of the shareholder, it will be judged whether it is a venture capital or not according to the statistics of VC/PE in the Wind database; Third, if the company Wind database does not count the shareholders, then search prospectus and equity changes in its shareholders in the introduction, if its main business is “venture capital business”, then identify it as venture capital; Fourthly, for the remaining shareholders of the Company, check its main businesses through the China Venture website and the global corporate library website, and if the main business of the Company is to conduct “venture capital business”, they are deemed as venture capital.

For two or more VCs in an enterprise, we determine the main VCs for regression analysis according to the measurement method of Dang [49]: i) Among the same rounds, the investment amount is the highest; ii) The highest proportion of shareholdings; iii) The largest amount of management investment.

3) Attribute characteristics of venture capital

a) Background: virtual variables, the foreign capital background is assigned 0, the state-owned background is assigned 1, and the private background is assigned to 2. b) Union investment: virtual variables, if two or more VCs invest in the same enterprise on the same day to take 1, otherwise to take 0.

4) Investment characteristics of venture capital

a) Whether the phased: dummy variables, to measure whether the venture capital investment in stages, is to take 1, not to 0.

b) Entry period: entry period = (year of venture capital entry – year of establishment)/(year of IPO of enterprise – year of establishment), the larger the value, the later the venture capital enters the enterprise.

5) Control variables

The control variables refer to the literature on the study of deviant strategy and we control equity checks and balances, board structure, profitability, growth, size, gearing, industry type, and annual dummy variables. According to the method of China Securities 2012 industry classification and the classification of high-tech industries by Luo [50], Li [51] and Dong [21], codes C26, C27, C39,

C40 and I65 are high Technology industry.

The above variable definitions are also shown in **Table 1**.

4. Empirical Results Analysis

4.1. Descriptive Statistics

Table 2 shows the descriptive statistics of the variables in the study sample. It can be seen: 1) Overall, the sample companies have an average of 0.7 deviant strategy and a standard deviation of 0.34, with little difference between companies. 2) Among the 2628 sample companies, 1282 of them have venture capital shareholders, accounting for 48.8%. 3) The enterprises backed by venture capital investment have lower strategic difference at an average of 2.7 percentage points,

Table 1. Definition of variables.

Variable	Code	Variable definition (explanation)
Dependent Variable		
Enterprise strategic difference	DS	The deviation degree between enterprise strategy and industry concentration or mainstream trend. It is continuous variable, and the greater the value is, the greater the difference is.
Independent Variable		
Whether venture capital involvement in business	VC	Whether there is a venture capital investment when the enterprise IPO, is to take 1, not to take 0
Background of venture capital	VCnature	Venture capitalization for foreign background assignment 0, for the state-owned background assignment 1, private background assignment for 2
Venture capital alliance investment	Unite	When two or more venture capitalists invest the same enterprise on the same day, take 1, otherwise 0
Venture capital investment stage	Investage	(Venture capital into the year - the year the company was founded)/(the year of the IPO - the year the business was founded), the larger the later into the business
Whether venture capital invested in stages	Ifstage	Whether venture capital investment is phased, is to take 1, no 0
Controlled Variable		
Whether high-tech industry	Hightech	According to the method of China Securities 2012 industry classification and the classification of high-tech industries by Luo Ting <i>et al.</i> (2009), Li Li (2015) and Dong Jing (2017), codes C26, C27, C39, C40 and I65 are high Technology industry.
Equity balance	Bshare	The sum of the largest shareholder of the company holding shares/second to ten major shareholders
Board structure	boards	Proportion of independent directors in the board of directors
Enterprise size	Size	The book value of assets at the end of the year is taken as logarithm
Enterprise characteristic	Profitability	ROA
	debt paying ability	Lev
	development capacity	Growth
	Year	Year
	Industry	Industry
		Net interest rate of total assets = net profit/total assets
		Asset liability ratio = Total Liabilities/total assets
		Current year main business income/last year main business income - 1
		Dummy variables for 2009-2016
		The manufacturing industry is subdivided into one digit after the China Securities Regulatory Commission's industry-coded letters. Other industries are no longer subdivided. A total of 27 industry dummy variables were formed.

Table 2. Descriptive statistics results of main variables.

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>Max</i>	<i>Min</i>	<i>p50</i>	<i>sd</i>
<i>Ds</i>	2628	0.69947	3.421	0.077697	0.6233	0.34361
<i>VC</i>	2628	0.48782	1	0	0	0.49995
<i>vcnature</i>	1188	1.55135	2	0	2	0.60597
<i>unite</i>	1282	0.27925	1	0	0	0.44881
<i>investage</i>	1170	0.68467	0.99026	0	0.74615	0.22291
<i>ifstage</i>	1282	0.071763	1	0	0	0.2582
<i>hightech</i>	2628	0.4433	1	0	0	0.49687
<i>boards</i>	2628	0.37927	0.6	0.25	0.36364	0.055163
<i>bshare</i>	2628	1.3986	18.41	0.17508	0.97368	1.3747
<i>size</i>	2628	20.987	24.447	18.679	20.897	0.75088
<i>roa</i>	2628	0.05756	0.46741	-0.6282	0.054846	0.050151
<i>growth</i>	2628	0.27442	6.6845	-0.79087	0.20473	0.44168
<i>lev</i>	2628	0.25455	0.84253	0.011054	0.22537	0.15846

with a significant difference of 10%. (Off-balance sheet data, mean T-test) 4) The proportion of enterprises with foreign-funded venture capital background was 6% (71 observations), that of state-owned venture capital enterprises was 32.9% (391 observations), and that of private ventures was 61.1% (726 observations). 5) The ratio of two or more venture capital shareholders to affiliate investment is 27.9%. 6) The invest stage of venture capital is 0.68 at an average, that is, venture capital get into the enterprise at middle and late stage. 7) Venture capital for phased investment accounted for 7%.

4.2. Multiple Regression Analysis

Table 3 shows the results of multivariate linear regression with enterprise strategy differences as the dependent variable. Model 1 is used to examine the impact of VC investment on corporate deviant strategy. In order to further analyze what characteristics of venture capital impact on corporate deviant strategy, this paper further examines the impact of venture capital with different attributes on corporate strategy differences using Model 2, and examines the impact of venture capital with different investment characteristics on corporate strategy differences using Model 3.

According to the empirical results of Model 1 in **Table 3**, we can see that there is a significant negative correlation between the venture capital intervention and the corporate strategic difference, which verifies the hypothesis 1 proposed in this paper. That is, venture capital intervention in start-up enterprises can well curb corporate deviant strategy and prevent and reduce the risks and losses that strategic decisions deviate from the excessive industry standards. From the empirical results of Model 2, it can be seen that venture capital in private-owned and state-owned is significantly and negatively correlated with the corporate

Table 3. Venture capital and business deviant strategy analysis of regression.

	(1)	(2)	(3)
	ds	ds	ds
<i>VC</i>	-0.0316** (0.0185)		
<i>Vcnature1</i>		-0.1968*** (0.0000)	
<i>Vcnature2</i>		-0.2439*** (0.0000)	
<i>unite</i>		-0.0449* (0.0672)	
<i>investage</i>			-0.2428*** (0.0000)
<i>ifstage</i>			-0.1186*** (0.0043)
<i>hightech</i>	0.1243*** (0.0000)	0.2142*** (0.0000)	0.2190*** (0.0000)
<i>boards</i>	-0.2722** (0.0276)	-0.4985** (0.0150)	-0.3314 (0.1141)
<i>bshare</i>	-0.0088* (0.0745)	-0.0126* (0.0860)	-0.0186** (0.0269)
<i>size</i>	0.0388*** (0.0003)	0.0578*** (0.0006)	0.0611*** (0.0004)
<i>roa</i>	-0.7804*** (0.0000)	-0.7440*** (0.0017)	-0.7483*** (0.0017)
<i>growth</i>	-0.0551*** (0.0006)	-0.0996*** (0.0002)	-0.0792*** (0.0026)
<i>lev</i>	0.2028*** (0.0000)	0.1355* (0.0809)	0.0936 (0.2375)
<i>industry</i>		Control	
<i>year</i>		Control	
<i>_cons</i>	0.1811 (0.4349)	-0.0095 (0.9791)	-0.1755 (0.6413)
<i>N</i>	2628	1188	1170
<i>adj. R-sq</i>	0.050	0.103	0.086

p-values in parentheses = “*p < 0.1, **p < 0.05, ***p < 0.01”

deviant strategy supported by the former two compared with the venture capital with foreign investment background, which confirms the hypothesis 2a-1 proposed in this paper. Venture capital with private and state-owned backgrounds can better control corporate deviant strategy, which reflects the superiority of value-added services, supervision and management and signal transmission.

Union venture capital has significant negative correlation with corporate deviant strategy, which verifies the proposed Hypothesis 2a-2, that enterprises supported by union investment can better exert the advantages of group decision-making and avoid major deviations in the process of strategic decision-making so as to control their deviant strategy. According to the empirical results of Model 3, the venture capital that enters the business later is significantly and negatively related to the strategic difference of its supporting enterprises, which verifies H2b-1, that is, the venture capital into the enterprise in the later period, provides a more professional listing experience and compliance guidance so as to control corporate strategy more effectively. The venture capital of phased investment is significantly and negatively related to the strategic difference of its supporting enterprises, which verifies the hypothesis H2b-2, which means that additional investment is more conducive to the supervision and management of enterprises, and can control the deviant strategy more effectively.

5. Conclusion and Inspiration

From the perspective of resource-based theory, agency theory and signal transmission theory, this paper examines the impact of venture capital on the deviant strategy of enterprises by studying the data of GEM listed companies from 2009 to 2016. The study finds that there is a smaller deviant strategy in companies supported by venture capital than not supported, which shows that venture capital helps to curb deviant strategy and control deviant strategy to a lower level. Through the further analysis of venture capital, this paper finds that the venture capital with specific characteristics has more significant impact on the strategic difference of enterprises: private and state-owned background characteristics of venture capital, compared with foreign investment background characteristics of venture capital, the companies supported by the former two own smaller deviant strategy. The enterprise supported by the venture capital of alliance investment characteristics, the phased investment characteristics, late entry into the enterprise characteristics owned smaller deviant strategy.

The conclusions of the above research have the following meanings: Firstly, it helps enterprises to raise awareness of whether venture capital should be introduced, what kind of venture capital should be introduced, and how to introduce venture capital so as to prevent and reduce deviant strategy, and to prevent performance instability caused by too much deviant strategy; Second, it helps capital markets recognize the deviant strategy brought by venture capitalists as an external investor, and help the capital market choose the right investment.

For start-ups, if they do not know how to plan their future strategic direction in complicated market environment or can not judge which strategies can help them to gain the forefront and steady development, to gain competitive advantages and sustainable management advantages in the industry, then it can choose to introduce venture capital. In the screening of venture capital investment, the start-ups can focus on the introduction of private-owned or state-owned venture

capital investment, alliance venture capital investment, phased venture capital investment or late entry venture capital investment. For investors, if he prefers a stable return, he can choose to invest in the companies which backed by private-owned or state-owned background venture capital, alliance venture capital, phased venture capital or late entry venture capital.

The deficiencies of this paper are as follows: 1) The impact of deviant strategy on the economic consequences other than corporate performance has not been ascertained; 2) In addition to venture capital, the impact of governance structures within enterprises on deviant strategy remains to be studied.

References

- [1] Hitt, M.A., Duane, I.R., Hoskisson, R.E., Lv, W., *et al.* (2012) Strategic Management Competition and Globalization (Concept). Machinery Industry Press, Beijing, 3, I-25.
- [2] Buzzell, R.D. and Gale, B.T. (1987) PIMS Principle: Linking Strategy to Performance. Simon and Schuster, New York.
- [3] Kinney Jr., W.R. and McDaniel, L.S. (1989) Characteristics of Firms Correcting Previously Reported Quarterly Earnings. *Journal of Accounting & Economics*, **11**, 71-93. [https://doi.org/10.1016/0165-4101\(89\)90014-1](https://doi.org/10.1016/0165-4101(89)90014-1)
- [4] Keating, A.S. and Zimmerman, J.L. (1999) Depreciation-Policy Changes: Tax, Earnings Management, and Investment Opportunity Incentives. *Journal of Accounting & Economics*, **28**, 359-389. [https://doi.org/10.1016/S0165-4101\(00\)00004-5](https://doi.org/10.1016/S0165-4101(00)00004-5)
- [5] Doyle, J.T., Ge, W. and Mcvay, S. (2007) Accruals Quality and Internal Control over Financial Reporting. *Accounting Review*, **82**, 1141-1170. <https://doi.org/10.2308/accr.2007.82.5.1141>
- [6] Meyer, J.W. and Rowan, B. (1977) Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, **83**, 340-363. <https://doi.org/10.1086/226550>
- [7] Dimaggio, P.J. and Powell, W.W. (1983) American Sociological Review. *American Sociological Review*, **29**, 35-40.
- [8] Tang, J.Y., Crossan, M. and Glenn, R.W. (2011) Dominant CEO, Deviant Strategy, and Extreme Performance: The Moderating Role of a Powerful Board. *Journal of Management Studies*, **11**, 153-178.
- [9] Geletkanycz, M.A. and Hambrick, D.C. (1997) The External Ties of Top Executives: Implications for Strategic Choice and Performance. *Administrative Science Quarterly*, **42**, 654-681. <https://doi.org/10.2307/2393653>
- [10] Deephouse, D.L. (1999) To Be Different, or to Be the Same? It's a Question (and Theory) of Strategic Balance. *Strategic Management Journal*, **20**, 147-166. [https://doi.org/10.1002/\(SICI\)1097-0266\(199902\)20:2<147::AID-SMJ11>3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<147::AID-SMJ11>3.0.CO;2-Q)
- [11] Finkelstein, S. and Hambrick, D.C. (1990) Top-Management-Team Tenure and Organizational Outcomes: The Moderating Role of Managerial Discretion. *Administrative Science Quarterly*, **35**, 484-503. <https://doi.org/10.2307/2393314>
- [12] Hiller, N.J. and Hambrick, D.C. (2005) Conceptualizing Executive Hubris: The Role of (Hyper-) Core Self-Evaluations in Strategic Decision-Making. *Strategic Management Journal*, **26**, 297-319. <https://doi.org/10.1002/smj.455>
- [13] Lutz, E. and George, G. (2012) Venture Capitalists' Role in New Venture Internationalization. *The Journal of Private Equity*, **16**, 26-41.

- <https://doi.org/10.3905/jpe.2012.16.1.026>
- [14] Barry, C.B., Muscarella, C.J., Peavy III, J.W. and Vetsuypens, M.R. (1990) The Role of Venture Capital in the Creation of Public Companies: Evidence from the Going-Public Process. *Journal of Financial Economics*, **27**, 447-471. [https://doi.org/10.1016/0304-405X\(90\)90064-7](https://doi.org/10.1016/0304-405X(90)90064-7)
- [15] Park, H.D. and Steensma, H.K. (2012) When Does Corporate Venture Capital Add Value for New Ventures? *Strategic Management Journal*, **33**, 1-22. <https://doi.org/10.1002/smj.937>
- [16] Chen, G.M., Yu, X. and Kou, X.H. (2011) The Underpricing of Venture Capital Backed IPOs: Evidence from Chinese Firms Listed on Different Stock Markets. *Economic Research Journal*, **5**, 74-85.
- [17] Hellmann, T. and Puri, M. (2002) Venture Capital and the Professionalization of Start-Up Firms: Empirical Evidence. *The Journal of Finance*, **57**, 169-197. <https://doi.org/10.1111/1540-6261.00419>
- [18] Zhang, X. and Liao, L. (2011) VCs' Backgrounds, IPO Underpricing and Post-IPO Performance. *Economic Research Journal*, **2**, 118-132.
- [19] Yuan, R.L., Wen, W., Wang, L., *et al.* (2014) Venture Capital and Governance of IPO Companies' Board: An Empirical Analysis Based on Propensity Score Matching Method. *China Soft Science*, No. 5, 118-128.
- [20] Makela, M.M. and Maula, M.V.J. (2005) Cross-Border Venture Capital and New Venture Internationalization: An Isomorphism Perspective. *Venture Capital: An International Journal of Entrepreneurial Finance*, **7**, 227-257. <https://doi.org/10.1080/13691060500258877>
- [21] Dong, J., Wang, L. and Wu, Y. (2017) Venture Capital's Intervention and Internationalization of Start-Up Enterprises—The Empirical Study of High-Tech Listed Companies in China. *Study of Finance and Economics*, **43**, 120-132.
- [22] Carpenter, M.A., Pollock, T.G. and Leary, M.M. (2003) Testing a Model of Reasoned Risk-Taking: Governance, the Experience of Principals and Agents, and Global Strategy in High-Technology IPO Firms. *Strategic Management Journal*, **24**, 803-820. <https://doi.org/10.1002/smj.338>
- [23] Ji, Y.S. and Sun, H.M. (2012) Research on Venture Capital Strategy to Promote the Development of Strategic Emerging Industries. *Tax Economics & Economics*, No. 1, 1-8.
- [24] Fried, V.H. and Hisrich, R.D. (1995) The Venture Capitalist: A Relationship Investor. *California Management Review*, **37**, 101-113. <https://doi.org/10.2307/41165791>
- [25] Wu, C.F., Wu, S.N. and Liu, W. (2012) Study on the Motivation of Intervention and Withdrawal of Venture Capital in the Growth Enterprise Market of China. *Economic Management*, No. 10, 139-149.
- [26] Humphery-Jenner, M. and Suchard, J.A. (2013) Foreign VCs and Venture Success: Evidence from China. *Journal of Corporate Finance*, **21**, 16-35. <https://doi.org/10.1016/j.jcorpfin.2013.01.003>
- [27] Barney, J. (1991) Firm Resources and Sustained Competitive Advantage. *Journal of Management*, **17**, 99-120. <https://doi.org/10.1177/014920639101700108>
- [28] Stinchcombe, A.L. (1965) Social Structure and Organizations. *Advances in Strategic Management*, **17**, 229-259.
- [29] Gorman, M. and Sahlman, W.A. (1989) What Do Venture Capitalists Do? *Journal of Business Venturing*, **4**, 231-248. [https://doi.org/10.1016/0883-9026\(89\)90014-1](https://doi.org/10.1016/0883-9026(89)90014-1)

- [30] Busenitz, L.W., Fiet, J.O. and Moesel, D.D. (2004) Reconsidering the Venture Capitalists' "Value Added" Proposition: An Interorganizational Learning Perspective. *Journal of Business Venturing*, **19**, 787-807. <https://doi.org/10.1016/j.jbusvent.2003.06.005>
- [31] Vanacker, T., Collewaert, V. and Paeleman, I. (2013) The Relationship between Slack Resources and the Performance of Entrepreneurial Firms: The Role of Venture Capital and Angel Investors. *Journal of Management Studies*, **50**, 1070-1096. <https://doi.org/10.1111/joms.12026>
- [32] Macmillan, I.C., Kulow, D.M. and Khoylian, R. (1989) Venture Capitalists' Involvement in Their Investments: Extent and Performance. *Journal of Business Venturing*, **4**, 27-47. [https://doi.org/10.1016/0883-9026\(89\)90032-3](https://doi.org/10.1016/0883-9026(89)90032-3)
- [33] Steier, L. and Greenwood, R. (1995) Venture Capitalist Relationships in the Deal Structuring and Post-Investment Stages of New Firm Creation. *Journal of Management Studies*, **32**, 337-357. <https://doi.org/10.1111/j.1467-6486.1995.tb00779.x>
- [34] Hsu, D.H. (2006) Venture Capitalists and Cooperative Start-Up Commercialization Strategy. *Management Science*, **52**, 204-219. <https://doi.org/10.1287/mnsc.1050.0480>
- [35] Timmons, J.A. and Bygrave, W.D. (1986) Venture Capital's Role in Financing Innovation for Economic Growth. *Journal of Business Venturing*, **1**, 161-176. [https://doi.org/10.1016/0883-9026\(86\)90012-1](https://doi.org/10.1016/0883-9026(86)90012-1)
- [36] Jensen, M.C. and Meckling, W.H. (1976) Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, **3**, 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- [37] Eisenhardt, K.M. (1989) Agency Theory: An Assessment and Review. *Academy of Management Review*, **14**, 57-74.
- [38] Admati, A.R. and Pfleiderer, P. (1994) Robust Financial Contracting and the Role of Venture Capitalists. *The Journal of Finance*, **49**, 371-402. <https://doi.org/10.1111/j.1540-6261.1994.tb05146.x>
- [39] Rosenstein, J., Bruno, A.V., Bygrave, W.D., *et al.* (1993) The CEO, Venture Capitalists, and the Board. *Journal of Business Venturing*, **8**, 99-113. [https://doi.org/10.1016/0883-9026\(93\)90014-V](https://doi.org/10.1016/0883-9026(93)90014-V)
- [40] Wu, Q.Z. (2009) An Approach to Venture Capital in Supporting Independent Innovation of High-tech Industry. *Management World*, No. 7, 174-175.
- [41] Lerner, J. (1995) Venture Capitalists and the Oversight of Private Firms. *The Journal of Finance*, **50**, 301-318. <https://doi.org/10.1111/j.1540-6261.1995.tb05175.x>
- [42] Gompers, P.A. (1995) Optimal Investment, Monitoring, and the Staging of Venture Capital. *The Journal of Finance*, **50**, 1461-1489. <https://doi.org/10.1111/j.1540-6261.1995.tb05185.x>
- [43] Penrose, J.M. (1974) Behavioral Objectives: Recognition and Preparation. *Journal of Business Communication*, **11**, 29-36. <https://doi.org/10.1177/002194367401100305>
- [44] Lindsey, L. (2008) Blurring Firm Boundaries: The Role of Venture Capital in Strategic Alliances. *The Journal of Finance*, **63**, 1137-1168. <https://doi.org/10.1111/j.1540-6261.2008.01354.x>
- [45] Chen, M.L. (2015) Union Structure of Venture Capital, Reputation and Success Rate of Venture Projects—An Empirical Study Based on Chinese Venture Companies. *Journal of Yunnan University of Finance and Economics*, No. 3, 128-139.
- [46] Megginson, W.L. and Weiss, K.A. (1991) Venture Capitalist Certification in Initial Public Offerings. *The Journal of Finance*, **46**, 879-903. <https://doi.org/10.1111/j.1540-6261.1991.tb03770.x>

- [47] Wu, C.F., Wu, S.N. and Liu, W. (2014) Studies on the Preference and Methods of Venture Capital Involved in Starting a Business—Based on the Empirical Data of China's GEM Listed Companies. *Nankai Management Review*, **17**, 151-160.
- [48] Ye, K.T., Zhang, S.S. and Zhang, Y.X. (2014) Strategic Deviance and the Value Relevance of Financial Information. *Accounting Research*, No. 5, 44-51.
- [49] Dang, X.H., Dong, J.W. and Chen, R. (2011) Study on the Impact of Venture Capital Institutions' Network Location on Their Exit. *Soft Science in China*, No. 6, 156-166.
- [50] Luo, T., Zhu, Q. and Li, D. (2009) Analysis of the Relationship between R & D Investment and Company Value. *Financial Research*, No. 6, 100-110.
- [51] Li, L., Gao, H.L. and Chen, J.H. (2015) Signal Game Analysis of Credit Financing for High-Tech Enterprises in China. *Economic Research*, **50**, 162-174.