

# The Effect of Preferred Return of Venture Capital Fund on VCs' Accredited Director Assignment

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**Abstract:** Preferred return as key component of compensation contract for Venture Capitalists (VCs), have significant impact on compensation return for VCs. This paper collected the investment announcements issued by listed companies when they were investing in Venture Capital (VC) funds as limited partners from 2010 to 2018, to construct a data set of preferred return of VC funds. Samples were built based on portfolio companies to study the impact of preferred return on the post-investment management behavior of VCs. Results showed that the higher the preferred return of VC fund, the higher the probability of VCs assigning accredited directors to the invested companies; off-site investment behavior has opposite effect on above trends, while "CEO duality" enhances the probability. This paper provides theoretic evidence for the effect of VCs' compensation contract clause. The conclusion of this study has certain guiding significance for VC fund compensation contract establishment, VCs' post-investment management and VC capital selection.

**Keywords:** venture capitalists; compensation contract; preferred return; accredited director assignment

**JEL Classification:** G24; G32

## 1. Introduction

The management fee and carried interest of Venture Capital (VC) funds are the most significant sources of financial income for Venture Capitalists (VCs) as fund managers (Gompers & Lerner, 1999; Yasuda & Metrick, 2010), and preferred return is the key factor that determines the financial return of VCs. As widely used in practice, preferred return refers to the minimum return for VCs must achieve before getting carried interest (Sorensen et al., 2014; Buchner & Wagner, 2017; Finnerty & Park, 2018), which was defined by the VC institution (i.e., general partner, GP) and its investors (i.e., limited partner, or LP) when the VC fund was established. However, only few studies have investigated the effect of preferred return on investment preferences of VCs (Humphery-Jenner, 2012; Buzzacchi et al., 2015), especially rare for theoretical and empirical studies on the function of this compensation clause. Post-investment management, as a key stage for VCs to cope with the uncertainty of enterprise growth and the risk of asymmetric information, plays an irreplaceable role in improving enterprise performance and fund investment return (Dong et al., 2017). This raises an important topic to be explored: What influence does preferred return have on the post-investment management behavior?

Although there are many post-investment management methods for VCs, the assignment of accredited directors to portfolio companies has been widely concerned by many scholars (Rossenstein et al., 1993; Chen et al., 2017; Amornsiripanitch et al., 2019; Ewens & Malenko, 2020). As the board of directors is the most critical decision-making and monitoring organization in a company, if VCs occupy a seat on the board of directors of portfolio company, then they can involve in the management of the company directly, that's why it attracts extensive attention among major post-investment activities. However, in practice, most VCs manage at least one fund and each fund usually invested in multiple companies, it will be costly for VC institution to assign accredited director to every company. (Lerner, 1995). Therefore, assigning accredited directors depends on the balance between the benefits and costs brought by this action. For VCs, the VC fund preferred return can result in changes in the final return expected to be earned after accredited director assignment. According to existing studies, carried interest accounts for more than one-third of the compensation return of VCs (Finnerty & Park, 2018), and VCs can only extract carried interest if the fund return meet the preferred return specified in the compensation contract. It can be concluded that the higher the preferred return, the harder it is for VCs to get the total financial return.

If VCs are present on the board of directors of portfolio companies, then they can not only directly participate in the formulation of corporate development strategies and business decisions, but also supervise the management behavior of the companies (Rosenstein et al., 1993; Lerner, 1995; Bruton et al., 1997; Bonn, 2009), and ensure the good operation of the companies, which are conducive to improve the exit return of VC funds. Which leads to that assignment of accredited directors to portfolio will increase the possibility of higher return for VCs. In addition to this, writer introduced two scenarios: off-site investment and "CEO duality". Studies have shown that off-site investment leads to higher costs of director assignment (Lerner, 1995), which weakens the incentive of VCs to assign accredited director to firms. Meanwhile, "CEO duality" will make the portfolio companies face the threat of value reduction (Fooladi & Shukor, 2012; Liu, 2020; Zhang, 2018), and external supervision can help to avoid the opportunistic behavior of "CEO duality" to a certain extent, thus it will reinforce the incentive of VCs to assign accredited directors to portfolio companies.

Based on above analysis, the primary hypotheses to be certified in this article listed as below: First, whether preferred return has a facilitating effect on VCs' assignment of accredited directors to portfolio companies? Second, will off-site investment negatively adjust the relationship between preferred return and accredited director assignment, and "CEO duality" enhance the probability?

The main contribution of this paper as following two aspects. On the one hand, the relationship between VC fund preferred return and VCs' post-investment management behavior was found. Previous theoretical studies about preferred return mainly focus on the relationship between preferred return and VCs expected salary return as well as investment preferences. According to Humphery-Jenner (2012), the higher preferred return will lead VCs to become passive after experienced the initial investment failure, and give up follow-up investment. Other scholars believe that the compensation structure with higher preferred return will motivate VCs to choose high-risk investment projects, in order to increase the

return of the fund through risky investment (Buchner & Wagner, 2017; Buzzacchi et al., 2015). This study links preferred return to post-investment management behavior and finds a significant positive relationship between preferred return and accredited director assignment. On the other hand, this study enriches the theoretical research on the post-investment management behavior of accredited director assignment. The existing researches about accredited director assignment from VCs can be divided into the following categories: 1) Discussing the impact of VCs accredited directors on portfolio companies' innovation (Chen et al., 2017). 2) Analyzing the determinants of VCs' seats on companies' boards (Amornsiripanitch et al., 2019). 3) Analyzing the role of VCs in the board of directors of portfolio companies, such as employing their own network to recruit managers and external board members for the companies (Amornsiripanitch et al., 2019), or playing advisory and resource-provider role (Ewens & Malenko, 2020). The findings of this paper indicate that the compensation contract affects the probability of VCs to assign accredited directors to portfolio companies.

## **2. Methodology, Model Settings and Data Description**

### *2.1. Samples and Data Sources*

The data of this paper comes from multiple databases, and the details are as follows. The fund-level data retrieval procedures: Firstly, search the Private Equity Database (PEDATA) for VC funds with listed companies as LPs and related investment events from 2010 to 2018. Total 327 funds and 1,885 investment events were obtained by excluding the events where the names of portfolio companies weren't announced. Secondly, writer obtained the terms of Limited Partnership Agreements (LPAs) of VC funds through the investment announcements issued by listed companies when investing in VC funds, to solve the problem of obtaining data on preferred return. Search through the CNINFO website for investment announcements issued by listed companies when they were investing in VC funds as LPs, and obtained the announcements text of 130 VC funds in total. Thirdly, the preferred return information of VC funds was obtained through the terms of LPAs in the texts, the announcements with incomplete information were removed, and the preferred return data of 104 VC funds and corresponding 364 investment events were finally determined.

The data of accredited director assignment from VCs were further compiled manually by the following steps. First, the director change records of portfolio company after receiving investment from VC funds were inquired in the Tianyancha website; and then, if the enterprise had new director, following two methods were adopted to determine whether he/she is accredited director from VCs: 1), search the name of the new director in the change record in the PEDATA, and determine whether the director is related to the VCs based on the tenure history provided in the database; If the information about the director is not included in the database, then the director's employment history will be searched on the Tianyancha website to determine whether the director is accredited director from the VCs; 2), if the information of the director couldn't be found on neither the PEDATA or Tianyancha website, then the keyword search method will be applied by searching the name of the

director and VCs on Baidu website, and judge whether there is interest correlation between them according to the search results.

The information of VC funds, VC institutions and LPs was obtained from the PEDATA, and other information related to the portfolio companies was collected through the PEDATA and the Tianyancha website.

## 2.2. Definition of Variables

### 1. Preferred Return,

The data collection of VC fund preferred return is an obstacle in the empirical research, mainly due to that LPAs for VC funds are usually not public, and the major commercial databases which popularly used do not contain the information as well. This paper obtained the preferred return data by the investment announcements issued by listed companies when they were investing in VC funds, and defined the variable of the preferred return in two ways: First, an index *preferred1* was defined with the integer of the result by multiplying actual percentage of VC fund preferred return rate with 100. Second, in order to avoid empirical results bias caused by too high or too low the index value, this paper only used samples with preferred return rate of 0% and 8% and defined a dummy variable *preferred2*. When the preferred return rate is 8%, the indicator of *preferred2* is 1 and 0 otherwise.

### 2. Assignment of Accredited Director,

This paper referred to Chen et al. (2017) and created a dummy variable *board* to measure the assignment of accredited director by VCs. The indicator takes 1 if the portfolio company has at least one VC institution that invested in it joined its board of directors after received investment from VC funds, otherwise it takes 0.

### 3. Off-site investment and “CEO duality”,

The first adjustment variable is to define whether VCs and the portfolio companies locate in the same city, which was represented by the virtual variable *Off\_site*. If the VC institution and the portfolio company do not locate in the same city, then the value will be taken as 1 and 0 otherwise. The second adjustment variable is to define whether the portfolio company is under the situation of “CEO duality”, which was represented by *ceo\_duality*. If the CEO of the portfolio company also holds the position of chairman, then the value is 1, otherwise it is 0.

### 4. Control variables.

Based on the research of Gompers and Lerner (1996) and Amornsiripanitch et al. (2019), with considering of the data availability, this paper introduced control variables in the regression to control the other factors that may influence the results. The variables are defined and calculated as shown in the following table.

Besides the control variables listed in the table above, the dummy variables of the year when the VC fund investment happened and the province where the portfolio company is located were also added to the model to control for time and area effects that may influence the results.

**Table 1.** Definitions and measures of control variables

Variables' Name	Variables	Definitions and measures
Size of Funds	<i>size_fund</i>	Actual total amount of fundraising completed by VC funds (billion yuan)
co-investment or not	<i>syn</i>	If the VC fund co-invests with other VC funds, this variable is defined as 1 and 0 otherwise
GPs' reputation	<i>repu_gp</i>	The cumulative number of GP exits via IPO
GPs' management experience	<i>funds</i>	The cumulative amount of funds managed by GP
Number of outside directors	<i>out_boards</i>	The number of outside board members when the company receives VC investment
Age of the company	<i>age_company</i>	The age at which the company received VC funding
High-tech company or not	<i>high_tec</i>	If the industry in which the company is located belongs to the "key high-tech field supported by the state" as stipulated in the Measures for the Identification and Administration of High-tech Enterprises, the variable is set as 1 and 0 otherwise
Early-stage company or not	<i>early_stage</i>	1 if the sample company was in the start-up or growth stage when it received venture capital, 0 otherwise

### 2.3. Basic Model

The first topic in this paper focused on the effect of preferred return of VC fund on accredited director assignment from VCs. As the explanatory variable is about whether VCs assign accredited director or not, which is a dummy variable, the Logit model in the binary discrete choice model was adopted, as shown in equation (1).

$$\text{logit}(\text{board}) = \beta_0 + \beta_1 \text{preferred} + \sum \lambda_i \times \text{control}_i + \text{year} + \text{area} + \varepsilon \quad (1)$$

The second focus was on the moderating role of off-site investment and "CEO duality" in the relationship between VC fund preferred return and VCs accredited director assignment, drawing on the previous research (Wen et al., 2005), the following model of regulation effect testing was proposed:

$$\text{logit}(\text{board}) = \beta_0 + \beta_1 \text{preferred} + \beta_2 \text{off\_site} + \beta_3 \text{preferred} \times \text{off\_site} + \sum \lambda_i \times \text{control}_i + \text{year} + \text{area} + \varepsilon \quad (2)$$

$$\text{logit}(\text{board}) = \beta_0 + \beta_1 \text{preferred} + \beta_2 \text{ceo\_duality} + \beta_3 \text{preferred} \times \text{ceo\_duality} + \sum \lambda_i \times \text{control}_i + \text{year} + \text{area} + \varepsilon \quad (3)$$

where, *preferred* represents the preferred return of VC fund; and it's divided into *preferred1* and *preferred2* in regression respectively, which represent the preferred return value of VC fund and whether the preferred return exists. The variable *board* indicates whether the VCs assigned accredited director to the portfolio company or not; *control<sub>i</sub>* represent a series of control variables, *year* represents the year in which the sample company received VC investment, and *area* represents the province the company is located.

### 3. Regression Results and Empirical Analysis

#### 3.1. Descriptive Statistical Analysis

Table 2 shows the descriptive statistics of the main variables. It's showed in the Panel A that the mean value of *preferred1* is 4.786, the standard deviation is 4.150, the minimum value is 0, the maximum value is 20, which indicate that the difference among the preferred return values of sample companies is significant. The average index values of the *Off\_site* investment and the *ceo\_duality* are 0.514 and 0.266 respectively, indicate that around half of the VC funds invested off-site companies, and approximately 26.6% of the portfolio companies have CEOs holding position as chairman.

**Table 2.** Statistical description of variables

Variables	Obs	Mean	Std. Dev.	Min	Max
Panel A: All the samples					
<i>preferred1</i>	364	4.786	4.150	0	20
<i>preferred2</i>	266	0.474	0.500	0	1
<i>board</i>	364	0.475	0.500	0	1
<i>Off_site</i>	364	0.514	0.500	0	1
<i>ceo_duality</i>	364	0.266	0.443	0	1
<i>size_fund</i>	364	6.979	8.295	0.100	32.100
<i>syn</i>	364	0.187	0.390	0	1
<i>repu_gp</i>	364	0.585	4.762	0	87
<i>funds</i>	364	5.470	16.065	0	265
<i>out_boards</i>	364	2.931	1.951	1	9
<i>age_company</i>	364	5.393	4.629	0	22
<i>high_tec</i>	364	0.821	0.384	0	1
<i>early_stage</i>	364	0.396	0.490	0	1
Panel B: <i>preferred1</i> ≠0					
<i>board</i>	224	0.571	0.496	0	1
<i>same_area</i>	224	0.451	0.501	0	1
<i>ceo_duality</i>	224	0.299	0.459	0	1
<i>size_fund</i>	224	7.112	7.929	0.3	28
<i>syn</i>	224	0.165	0.372	0	1
<i>repu_gp</i>	224	0.710	5.907	0	87
<i>funds</i>	224	6.214	19.694	0	265
<i>out_boards</i>	224	2.772	1.945	1	9
<i>age_company</i>	224	5.665	4.845	0	22
<i>high_tec</i>	224	0.835	0.372	0	1
<i>early_stage</i>	224	0.330	0.471	0	1
Panel C: <i>preferred 1</i> =0					
<i>board</i>	140	0.321	0.469	0	1
<i>same_area</i>	140	0.614	0.489	0	1
<i>ceo_duality</i>	140	0.214	0.412	0	1
<i>size_fund</i>	140	6.766	8.875	0.1	32.1
<i>syn</i>	140	0.221	0.417	0	1
<i>repu_gp</i>	140	0.386	1.782	0	13
<i>funds</i>	140	4.279	7.030	0	40
<i>out_boards</i>	140	3.186	1.940	1	8
<i>age_company</i>	140	4.957	4.241	0	17
<i>high_tec</i>	140	0.800	0.401	0	1
<i>early_stage</i>	140	0.500	0.502	0	1

Comparing the results of Panel B and Panel C, it is showed that the sample companies invested by VC funds with preferred return have higher mean value (0.571) and variance (0.496) for accredited director assignment, which indicates that VCs are more likely to assign accredited directors to portfolio companies under the restriction of preferred return.

### 3.2. Baseline Regression Analysis

#### 1. The effect of preferred return on the VCs accredited director assignment,

Columns (1) and (2) of Table 3 report the test results of the effect of preferred return on the VCs accredited director assignment, and column (1) examines the effect of preferred return level on the accredited director, with a regression coefficient of 0.152, which is positive and significant at the 1% level, indicates that the higher the preferred return, the higher the probability for the VCs to assign accredited director to the portfolio company. Column (2) showed the results of the impact of existence of preferred return on the director assignment, which are based on the samples with preferred return rate as 0% and 8%. The regression results show that the coefficient of *preferred2* is 1.086, which is positive and significant at the 1% level, indicating that VC funds with preferred return are more likely to have accredited director assigned to portfolio company. The above conclusion proves that VCs are willing to expend more effort and bear higher costs to assign accredited directors to portfolio companies under the motivation of preferred return.

#### 2. Analysis of Moderating Effect,

Columns (3) and (4) of Table 3 report the moderating effect of off-site investment on the relationship between preferred return and accredited director assignment from VCs, and the coefficient of cross-multiplier is an important indicator of the moderating effect. Column (3) shows that the cross-multiplication coefficient of *hurdle1* and the moderating variable is significantly negative at the 5% level, and column (4) shows that the cross-multiplication coefficient of *preferred2* and the off-site investment variable is -1.676, which is significant at the 5% level as well. Above results indicate that if VCs and portfolio companies are not located in the same area, which will reduce the probability for manage institution of VC fund with preferred return to assign accredited director to company, thus, off-site investment negatively moderates the relationship between preferred return and accredited director assignment, mainly due to geographical non-contiguity which will make it costlier for VCs to assign director.

Columns (5) and (6) of Table 3 report the moderating effect of "CEO duality" on the relationship between the preferred return and the accredited director assignment. From the results, the coefficients of *preferred1 × ceo\_duality* and *preferred2 × ceo\_duality* are 0.296 and 3.926 respectively, both are positive and significant at the 5% level, indicating the phenomenon of "CEO duality" existed in portfolio company will increase the probability that VCs with high preferred return restriction assign accredited director to portfolio company. According to the previous analysis, as the value of portfolio companies will directly affect the

return of VC funds, which determines whether VCs can obtain the carried interest, thus, the preferred return of VC funds will make VCs more sensitive to the growth and performance

**Table 3.** Baseline regression results

	(1)	(2)	(3)	(4)	(5)	(6)
<i>preferred1</i>	0.152*** (4.12)		0.033 (0.61)		0.124*** (3.10)	
<i>preferred2</i>		1.086*** (3.03)		-0.021 (-0.04)		0.545 (1.24)
<i>board</i>						
<i>Off_site</i>			-0.478 (1.08)	-0.626 (1.18)		
<i>ceo_duality</i>					1.806*** (3.24)	1.502** (2.49)
<i>preferred1 × Off_site</i>			-0.179** (2.45)			
<i>preferred1 × ceo_duality</i>					0.296** (2.25)	
<i>preferred2 × Off_site</i>				-1.676** (2.30)		
<i>preferred2 × ceo_duality</i>						3.924** (2.52)
<i>size_fund</i>	0.008 (0.45)	0.003 (0.12)	0.012 (0.60)	0.012 (0.51)	0.015 (0.77)	0.010 (0.37)
<i>syn</i>	0.725** (2.05)	1.110*** (2.62)	0.632 (1.63)	1.131** (2.42)	0.515 (1.42)	0.948** (2.01)
<i>repu_gp</i>	0.060** (2.27)	-0.306* (-1.71)	0.065** (2.24)	-0.225* (-1.67)	0.041* (1.73)	-0.326* (-1.75)
<i>funds</i>	-0.014** (-2.13)	-0.005 (-0.71)	-0.014 (-1.17)	-0.003 (-0.36)	-0.010 (-1.62)	0.001 (0.15)
<i>out_boards</i>	-0.169** (-2.05)	-0.241** (-2.13)	-0.183** (-2.12)	-0.261** (-2.12)	-0.137* (-1.67)	-0.170 (-1.53)
<i>age_company</i>	0.000 (0.01)	0.003 (0.07)	0.000 (0.01)	-0.003 (-0.07)	0.008 (0.22)	-0.001 (-0.02)
<i>high_tec</i>	1.561*** (3.59)	1.706*** (2.85)	1.536*** (3.35)	1.577** (2.43)	1.743*** (3.23)	1.911*** (3.09)
<i>early_stage</i>	0.697** (2.38)	1.171*** (3.46)	0.574* (1.91)	1.132*** (3.14)	0.586* (1.77)	1.307*** (3.21)
year fixed effect	YES	YES	YES	YES	YES	YES
area fixed effect	YES	YES	YES	YES	YES	YES
Constant	0.745 (0.59)	-0.793 (-0.53)	0.562 (0.46)	-0.555 (-0.34)	1.631 (1.31)	-1.652 (-1.11)
N	364	266	364	266	364	266
R <sup>2</sup>	0.246	0.326	0.303	0.383	0.382	0.474

Note: \*, \*\*, \*\*\* are significant at the level of 10%, 5% and 1% respectively; in parentheses, there is the value of t statistic. Table 4 and 5 are the same.

of portfolio companies. As the “CEO duality” may lead to improper intervention by the management of company, which could cause decline of companies’ value, in which case the accredited director from VCs is assigned to the company to achieve higher return.



### 3.3. Robustness Test

#### 1. Excluding the impact of carried interest on baseline results,

The carried interest is an important component of VC institutions' compensation. This compensation mechanism is incentive-based, designed to reward VCs' fund management skills and align the interests between LPs and VCs more closely (Buchner & Wagner, 2017). The higher the carried interest rate, the VCs would be able to obtain larger share of the fund's profits. A common VC compensation structure in the industry is with 20% carried interest rate, but in practice, the carried interest rate may be higher or lower. Existing literature has addressed whether fund compensation contracts reward fund managers for risk-taking post-investment action or management skills enhancement (Buchner & Wagner, 2017), from which it can be speculated that changes in carried interest may directly affect fund managers' investment management behavior. Based on above, this paper didn't consider the effect of carried interest in the baseline regression, which may lead to biased regression: whether the carried interest is affecting the behavior of accredited director assignment instead of the preferred return. In order to exclude the possible interference caused by this factor, this paper selected the companies invested by VC funds with fixed carried interest rate of 20% as samples, repeated the regression in Table 3, and the regression results are shown in Table 4, which still support previous conclusions.

**Table 4.** Subsample regression results of VC fund with carried interest rate of 20%

	(1)	(2)	(3)	(4)	(5)	(6)
<i>preferred1</i>	0.149*** (3.76)		0.014 (0.24)		0.106** (2.20)	
<i>preferred2</i>		1.025*** (2.70)		-0.326 (-0.47)		0.549 (1.07)
<i>board</i>						
<i>Off_site</i>			-0.200** (2.52)	-0.361 (0.61)		
<i>ceo_duality</i>					1.745*** (3.03)	1.933*** (2.86)
<i>preferred1</i> × <i>Off_site</i>			-0.200** (2.52)			
<i>preferred1</i> × <i>ceo_duality</i>					0.313** (2.36)	
<i>preferred2</i> × <i>Off_site</i>				-1.941** (2.33)		
<i>preferred2</i> × <i>ceo_duality</i>						3.686*** (2.64)
<i>Control variables</i>	YES	YES	YES	YES	YES	YES
<i>year fixed effect</i>	YES	YES	YES	YES	YES	YES
<i>area fixed effect</i>	YES	YES	YES	YES	YES	YES
Constant	1.211 (0.94)	-0.798 (-0.52)	1.020 (0.78)	-0.506 (-0.31)	2.051 (1.60)	-1.747 (-1.16)
N	300	227	300	227	300	227
R <sup>2</sup>	0.253	0.333	0.317	0.389	0.406	0.507

## 2. Excluding the impact of management fee on baseline results,

The management fee of VC funds is another important component of VCs compensation. Unlike carried interest, management fee is a fixed part of VCs' income, and the payment criteria are determined in the compensation agreement signed at the fund's inception. Existing researches show that most VC fund management fee account for between one-third and two-third of VCs' total compensation return (Yasuda & Metrick, 2010; Finnerty & Park, 2018). If higher management fee is agreed upon, the VCs expect to receive higher risk-free compensation return. By extension, another thought is that when the agreed management fee is low, VCs expect to receive lower return on risk-free compensation, and obtaining higher financial income can only rely on higher performance sharing. In other words, lower management fee may cause VCs to work harder to enhance the investment return of VC funds by investing more energy and cost in fund management. Based on the above discussion, the level of management fees may also affect the baseline regression results of this paper. In order to avoid the bias caused by the management fee to the baseline result, this paper excluded the samples with too low management fee for robustness test. Considering that the important factor affecting VC fund management fee is the agreed management fee rate, which is usually 2%, thus, this section excluded the samples of companies invested by VC funds with management fees below 2% and repeated the regression in Table 3 in the remaining samples. The regression results are shown in Table 5. Through the results of the report, it's showed that the conclusions of this paper are still valid.

**Table 5.** Subsample regression results of VC fund with management fee rate above 2%

	(1)	(2)	(3)	(4)	(5)	(6)
<i>preferred1</i>	0.152*** (3.98)		0.020 (0.34)		0.116*** (2.80)	
<i>preferred2</i>		1.086*** (2.96)		-0.126 (-0.22)		0.428 (0.95)
<i>board</i>						
<i>Off_site</i>			-0.541 (1.18)	-0.723 (1.30)		
<i>ceo_duality</i>					1.580*** (2.90)	1.164** (2.05)
<i>preferred1</i> × <i>Off_site</i>			-0.190** (2.51)			
<i>preferred1</i> × <i>ceo_duality</i>					0.318** (2.39)	
<i>preferred2</i> × <i>Off_site</i>				-1.803** (2.42)		
<i>preferred2</i> × <i>ceo_duality</i>						4.478*** (2.63)
<i>Control variables</i>	YES	YES	YES	YES	YES	YES
year fixed effect	YES	YES	YES	YES	YES	YES
area fixed effect	YES	YES	YES	YES	YES	YES
Constant	0.811 (0.64)	-0.465 (-0.30)	0.658 (0.53)	-0.131 (-0.07)	1.680 (1.33)	-1.443 (-0.94)
N	353	256	353	256	353	256
R <sup>2</sup>	0.248	0.332	0.314	0.398	0.377	0.476

#### 4. Discussion and Conclusion

This paper discussed the relationship between VC fund preferred return and VCs accredited director assignment, by collecting data on preferred return through investment announcements made by listed companies when they were investing in VC funds, taking companies invested by VC funds whose limited partners included listed companies from 2010-2018 as samples.

The results show that, the management institutions of VC funds with preferred return (higher preferred returns) are more likely to assign accredited directors to portfolio companies than VCs without preferred return (low preferred returns) constraint. Other than that, the paper introduces two scenarios: off-site investment and “CEO duality”, and examined the moderating effects of above variables on the relationship between preferred return and accredited director assignment respectively. It is found that the negative effect of off-site investment on the relationship between preferred return and accredited director assignment, and “CEO duality” moderates the relationship positively.

The policy implications of this paper listed as follows: 1), for fund investors, it is important to realize that the preferred return in compensation contract has an incentive effect on the post-investment management behavior of VCs. When formulating the compensation system of VCs, the funds’ investors and VCs should consider not only the incentive effect of management fee and carried interest to VCs, but also should make proper use of the compensation mechanism of preferred return. By setting the preferred return, VCs are encouraged to form interest association with VC fund investors, and work harder to improve the investment return of VC funds. 2), for VCs, they should recognize that by assigning directors, they can participate directly in the management of companies and have in-depth communication with the portfolio companies, take the advantages of their own industry knowledge, investment experience and others, VCs could play a greater role. Therefore, when facing the pressure of large return requirement, VCs should try to obtain the membership of the board of directors of the portfolio companies. 3), for companies, when choosing or accepting VC funds investment, they should pay attention not only to the agreement signed by VCs and themselves, but also to the compensation contract of the funds, and select funds with higher requirement for VC investment return.

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