OWNERSHIP, BOARD STRUCTURE, AND CORPORATE PERFORMANCE: EVIDENCE OF FRENCH VC-BACKED FIRMS

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Abstract

The purpose of this paper is to examine the effect of ownership structure and board structure on performance in VC-backed firms. Using 106 French VC-backed firms, our methodology in this paper is to estimate four equations. A regression analysis is then used to study the impact of ownership structure and board structure on performance and also to analyze whether ownership structure (ownership concentration, director ownership, venture capital ownership and employee ownership) and board variables (size, outside directors, COE-chairman duality, proportion of VC directors, proportion of employee directors and board meeting frequency) are significant determinants of VC-backed firm performance. Results indicate a strong positive relation between ownership concentration and performance and between director ownership and performance measured by ROE. And strong negative relation between ownership concentration and performance and between director ownership and performance measured by ROA. No strong relation was found between venture-capital ownership, employee ownership and firm performance.
Results show also a strong negative relation between board size and performance measured by ROE and positive relation between board size and performance measured by ROA, Tobin's Q and MVA. The proportion of independent outside directors on the board was positively associated with ROE and negatively associated with ROA. The presence of a dual leadership structure is negatively associated with ROE and positively associated with ROA. No strong relation was found between the proportion of venture-capital in board, the presence of employee in board, or board meeting frequency and firm performance.

Keywords: ownership structure, board structure, firm performance, agency theory, venture capital

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1. Introduction

Recent empirical research has found that the effect of venture capital (VC) on the success of Start-up firms is considerable. Venture capitalists (VCs) are specialized intermediaries that direct capital to firms and professional services to companies that might otherwise be excluded from the corporate debt market and other sources of private finance. Venture capital firms concentrate in industries with a great deal of uncertainty, where information gaps among entrepreneurs and venture capitalist are commonplace. Most of prior research use "agency theory" framework to study the relationship between VCs (principal) and entrepreneurs (agent). According to agency theory, the governance arrangements of VC-backed firms tend to allocate greater control to investors.

Agency theory provides a basis for firm governance through the use of internal and external mechanisms. But, the characteristics of VC-backed firms make external monitoring less likely. External governance mechanisms (such as the product market, the market for corporate control, the presence of concentrated shareholdings by persons or institutions, the labor market for managers, and the capital market) are not an important consideration to enhance corporate governance in the VC-backed firms because these firms are not listed firms. VCs institute better internal governance mechanisms that substitute for the external

governance mechanisms for corporate control. As such, alternative monitoring mechanisms, including board of directors and ownership structure, must be in place to discourage deviant managerial behavior. The role of ownership structure and board structure in monitoring management and so improving firm performance has been largely investigated in empirical corporate governance literature.

The nature of the relationship between ownership and financial performance is a first key issue for governance. Berle and Means (1932), Jensen and Meckling (1976) and others support the existence of a linear or monotonic relationship between ownership and performance. Morck et al. (1989), McConnell and Servaes (1990) and others support a non-linear or non-monotonic relationship between them. Most of this research has been carried out for non VC-backed firms. Only a few of the studies have considered the context of innovative firms financed by VC. There exist corporate governance differences, between VC-backed firms and non VC-backed firms and it's important to study the relationship between ownership and firm performance.

The board of directors is a second key issue for corporation governance, and the efficiency of board has much due to its characteristics. Several studies have examined relation between board structure and firm performance, and have procured some consistent conclusions. But these studies not provide results in context of French VC-backed firms. Prior studies explore the involvement of venture capitalists on boards by making comparison between companies backed by venture capital and those not backed by venture capital and not analyze impact of VC's involvement in board structure on performance.

This paper continues the above line of research by investigating the impact of VC's involvement in corporate governance on performance in French context and examines whether the contribution of venture capital managers to corporate governance through the board of directors and ownership structure have an impact on performance. This study seeks to study the impact of ownership structure and board structure on performance as measured by ROE, ROA, Tobin's Q and VMA in French VC-backed firms. We work on a sample of 106 French VC-backed IPOs firms and for the period January 2000 to March 2009.

The contribution of this paper is three-fold. First, the paper contributes to an emerging body of literature on governance in VC-backed firms. While there is a large body of literature examining corporate governance practices in established firms, there have been relatively few studies addressing the nature of corporate governance mechanisms in VC-backed firms characterized by moral hazard problems.
Second, this study contributes to the body of literature examining the French context. In French and more generally in Europe, the VC industry remains small and focuses primarily on financing buyouts rather than on early and expansion-stage financing. Comparing to American VCs, European VCs are less "hands-on" and have less control rights.

Finally, we use four performance measures. Most of prior research results on impact of corporate mechanisms on performance are contradictory due to measure of performance. To solve this problem, we vary performance measure by using ROE, ROA, Tobin's Q and MVA.

The results show a strong positive relation between ownership concentration and performance, and manager and director ownership and performance measured by ROE and negative relation between ownership concentration and performance and manager and director ownership performance measured by ROA. For board structure mechanism, the results are contradictory when we change performance measures. We find when we use ROE, board size and the presence of a dual leadership structure have negative effects on performance and the proportion of independent outside directors on the board was positively associated with performance. When we use ROA, board size and the presence of a dual leadership structure have positive effects on performance and the proportion of independent outside directors on the board was negatively associated with performance. When we use Tobin's Q and MVA, board size has positive effect on performance and no strong relation was found between the proportion of independent outside directors and performance and between the presence of a dual leadership structure and performance. For all performance measure, no strong relation was found between the proportion of venture-capital in board, the presence of employee in board, or board meeting frequency and firm performance.

The remainder of this paper is structured as follows. Section 2 briefly examines the literature to investigate the ownership-performance relationship and the board-performance relationship and presents

the research hypotheses. Section 3 details the research methodology and data while Section 4 describes the results of empirical testing. Finally, Section 5 provides the conclusions of the paper.

2. Relationship between corporate ownership, board structure and a firm's performance: Theory and hypothesis

VC provides finance for a limited period of time to the founding or early growth of new companies that do not yet have access to the public securities markets or to institutional lenders" (Gupta and Sapienza, 1992). VC differs from in that there is much more involvement of providers of funds than is the case with other forms of lending such as bank. They use their high level of expertise to perform monitoring and to actively manage the companies they finance. They staged financing in several rounds and they usually have extensive control rights. Due to characteristics of firms that they finance, VCs avoid agency, adverse selection, moral hazard and hold-up problems when contracts are incomplete and investment proceeds in stages. Agency theory describes these problems and provides setting to study relationship between VCs and entrepreneur.

Agency theory is based on the idea that there is separation of ownership (principal) and management (agent), and this leads to costs associated with resolving conflict between the owners and the agents (Berle and Means, 1932; Jensen and Meckling, 1976). Agency theory assumes that agency problems can be resolved with appropriately designed contracts by specifying the rights belonging to agents and principals. Given the problems in mitigating agency problems through the use of contracts, various governance mechanisms can address the agency problems. Thus, agency theory provides a basis for firm governance through the use of internal and external mechanisms. The governance mechanisms are designed to protect shareholder interests, minimize agency costs and ensure agent-principal interest alignment (Davis et al., 1997). Two important governance mechanisms used for this purpose are board of directors and ownership structure. Charreaux and Pitol-Belins (1985 and 1990) noted that in the French context, the role of the board of directors evolves with the property structure and disciplinary function assumed by the board becomes secondary in the domestic or controlled firms. In the context of VC-backed firms, VCs institute better internal governance mechanisms (board of directors and ownership structure) that substitute for the external market for corporate control. VCs, in addition to providing capital, are active in monitoring management and providing value-added services to their portfolio companies by involvement in the corporate governance.

The literature on board and ownership structures, as internal governance mechanisms, is mainly focused on issues such as block holder ownership, manager and director ownership, VCs ownership, employees ownership, board size, inside versus outside directors, separation of CEO and Chair positions (CEO duality), proportion of venture-capital in board, number of board meetings, with an aim to improve performance.

2.1. Ownership concentration and performance

Berle and Means (1932) are among the first to consider the relationship between a firm's ownership structure and its performance. They assert that as the diffuseness of ownership increases, shareholders become powerless to control professional managers.

In this context, the presence of shareholders holding a high proportion of the firm's capital becomes a favorable element to control by the shareholders (Jensen, 1993; Bethel and Liebeskind, 1993; Bethel and al., 1998). Concentrated ownership may improve performance by increasing monitoring and alleviating the free-rider problem in takeovers (Shleifer and Vishny, 1986). In a firm characterized by dispersed ownership, an only shareholder is not incited to exercise a control, because it will be alone to support the cost of the investment whereas all shareholders will benefit from this monitoring.

Mork, Shleifer and Vishny (1988) found a significant relation between firm value and ownership concentration. The results of the empiric studies led on the ownership concentration influence positively firm performance (Shleifer and Vishny, 1990; Bethel and Liebeskind, 1993). These findings have recently been questioned by Agrawal and Knober (1996). They find no evidence for the relationship between firm value and managerial stockholdings, and concluded that managerial stockholding are optimally chosen over the long run.

However, the relation between ownership concentration and performance is different according to the national systems of firm governance (Depret and Hamdouch, 2005). The positive influence is only is only demonstrated in US countries characterized by external control.

H1: A positive relation exists between ownership concentration and firm performance.

2.2. Manager and director ownership and performance

Directors' ownership provides directors better incentives to monitor management's actions and to act in the interests of outside shareholders. This implies a benefit to shareholders from directors' ownership. Directors' ownership constitutes an excellent incentive to manage firm in accordance with the interests of the shareholders (Berle and Means, 1932; Jensen and Meckling, 1976; Cole and Mehran, 1998). More share capital detained by directors is important, more the conflicts of interests between shareholders and directors are substantial (Mtanios and Paquerot, 1999). When directors have more discretion, the moral hazard problem becomes more substantial, and thus the benefit from providing incentives to directors increases.

H2: Increasing on director ownership improves performance.

2.3. VC ownership and performance

VC invests in firm that presents a strong potential to create value. Venture capital usually refers to the provision of funds for young, entrepreneurial businesses. Venture capital has emerged as the most common form of financing for high-technology start-ups. This form of financing differs from standard bank finance in three major dimensions. VCs use their high level of expertise to perform monitoring and to actively manage the companies they finance. (Smith, 1996; Bathala and al., 1994; Mtanios and Paquerot, 1999).
Prior research finds positive relation between the value of the firm and the percentage of the shares detained by the institutional (McConnell and Servaes, 1990; Kochhar and David, 1996; Carelton and al., 1998; Han and Suk, 1998; Woidtke, 2002; Thomsen and al., 2006).
Megginson and Weiss (1991) find that on average VCs detain 36.6% of the capital before the IPO. Barry and al. (1990), using a sample of 433 firms find on average VCs detain 34.3% of the capital and Gompers (1996) find on average VCs detain 35,7% of the capital.

H3: Increasing on VC ownership improves performance.

2.4. Employee ownership and performance

Employee ownership remains a viable and rewarding strategy to share equity and profits with employees. Employee ownership represents a powerful tool for managers to align company and employee incentives, improve company-wide performance, and show appreciation to employees.
In the literature, employee stock schemes (ESO) have been propounded as an alternative to individual incentive programs.

H4: Increasing on employee ownership improves performance.

2.5. Board size and firm performance

Jensen (1993) and Lipton and Lorsch (1992) suggested that large boards could be less effective than small boards because large boards encourages the domination and the widening of the entrepreneur's discretionary power. Large boards make hard and cost communication, coordination, and decision making than in small boards.
Large boards are reputed to be little reactive and relatively inefficient in their working. Their faculty to exercise a more active surveillance of the leaders finds lessened himself then of it. In the same way, Ginglinger (2002) considers that large boards "increase potential conflicts, costs and to the final, slows down the decision making". When boards are small, they are less likely to function effectively and are easier for the CEO to control. The boards of directors of VC-backed firms are typically small in size (Jensen 1993) consequence to higher levels of board involvement of CVs in corporate governance.

H5: Board size is negatively related to performance.

2.6. The proportion of independent outside directors

Board members are called inside directors if they are members of the management or outside directors if they have no direct role in the company itself. Thus, decisions of the insiders are aligned with those of the managers. On the contrary, outside directors are recruited for service on the board to provide valuable advice and counsel. They may not be executives of competitors or sit on competitors' boards. Their decisions will be aligned with shareholder's interests. Outside directors are also called independent directors because they are not under the influence of the chief executive of the corporation and should have a positive influence on controlling members of the management (Alexander and Paquerot, 2000). Outside directors have mission to monitor management and assist in strategic planning within the firm.
The numerous empiric works argued that the presence of outside directors may enhance the effectiveness of the board of directors in monitoring managers, and improving firm value. In other words, the presence of directors who are not employees of the firm should exercise a better control and should reduce agency costs. More independent board structures contribute to better monitoring of management and decision-making that follows shareholder interests.
Besides, Hochberg (2004) finds that VCs influence the composition of the board of directors to assure an active control. The number of outside directors should be even more important in the VC-backed firms. The outside directors are primarily the VC directors. Jensen (1993) finds that the board of the VC-backed firm was previously noted to have a low insider membership.

H6: The proportion of outside directors in the board is positively related to performance.

2.7. CEO-Chairman duality

For Jensen (1993), CEO-Chairman duality contributes to speculation and inefficacy and damages the shareholder's interest. The interior control system will be inefficacy. Separating the titles of chairman and CEO will reduce agency costs and improve firm performance. Godard and Schatt (2000) found that the performance of the company with independent leadership from managers was better than that of the company with dual leadership structure.

H7: Two-duty conditions is negatively related to firm performance

2.8. The proportion of VC directors

In addition to small board size, low insider representation, and CEO-Chairman duality, we study the proportion of VCs directors. Higher involvement of VCs in corporate governance means that VCs would be active board members. VCs are directly selected by investors (their limited partners) to represent the investors' interest. Furthermore, a large proportion of VCs directors are contingent upon the success of the businesses in which they invest (Sahlman, 1990).

H8: The proportion of VCs directors in the board is positively related to performance.

2.9. Board meeting frequency

Effectiveness of a board depends on frequency of the board meetings. In board meetings, board members discuss the various issues facing a firm. Board meetings are an important resource in improving the effectiveness of the board. Increase in board meetings is considered to represent the intensity of board activity (Vafeas, 1999). Lipton and Lorsch (1992) suggest that boards that meet frequently are more likely to perform their duties diligently to protect shareholders interests.

H9: Board meetings are positively associated with firm performance.

3. Data, variables and regression equation

3.1. Data

The sample covers the period January 2000- March 2009. The initial sample consists of all French IPOs on the First, Second and New Markets on the period from January 2000 to December 2004 and all IPOs on Alternext and Euronext on the period from January 2005 to March 2009. The data in this study are collected from the IPO prospectuses and annual reports of VC-backed firm.

The VC-backed firms are identified from the data provided in prospectuses. IPO prospectuses and annual reports were obtained from archives of the French Stock exchange Corporation. The exam of ownership structure allows us to identify VC-backed firms. The guide of the VC companies and the guide of French Private Equity Association (AFIC) permit to identify VC.

The selection criteria are as following: First, non VC-backed firms are excluded if the exam of ownership structure not identifies one or more than VC. Second, we eliminate firms without complete information concerning the variables described in the methodology. The final sample consists of 106 French VC-backed firms.
Details of board size, outside directors, board composition, COE-Chairman duality, ownership structure, and firm characteristics (size, age …) were hand collected from the prospectus.

3.2. Variables

3.2.1. Performance measures

The indicators of the performance are distinguished according to two criteria: nature of the performance (financial or economic) on the one hand, and situation in the time of the measure (ex post or ex ante) on the other hand. We use return on equity (ROE), and return on assets (ROA) like several previous studies (Boubakri and al. (2005), Jahmani and Ansari (2006)…). We use also Tobin's Q and Value Market Added.

The performance measure (Y_i) adopted in this paper shall be as follows:

(1) Return on Equity (ROE) measures the rate of return on the ownership of the common stock owners. To calculate ROE, the net income after tax is divided by shareholder equity.
(2) Return on investment (ROA) is the ratio of money gained or lost on an investment relative to the amount of money invested. To calculate ROA, the net income is divided by the total assets.
(3) Tobin's Q is calculated by dividing the market value of a company by the replacement value of the book equity. Tobin's Q is estimated as (equity market value + liabilities Book value) divided by total assets book value.
(4) Market Value Added (MVA) is the difference between the current market value of a firm and the capital contributed by investors. MVA = market value - invested capital.

3.2.2. Independent variable

Ownership concentration (OC): We measure ownership concentration by the cumulative percentage of voting rights owned by the first five shareholders (Like works of Mtanios and Paquerots, 1999 and Demsetz and Villalonga, 2001).
Director ownership (DO): We measure director ownership by the percentage of equity owned by the director.
VC ownership (VCO): We measure VC ownership by the percentage of equity owned by VCs.
Employee ownership (EO): We measure employee ownership by the percentage of equity owned by employees.
Board size (BS): We measure board size of directors by the number of directors sitting on the board at the shareholders' annual meeting. It is the number of whole directors.
The proportion of outside directors (POD): It is calculated as the number of outside directors divided by the total number of directors.
The proportion of VC directors (PVC): It is calculated as the number of VC directors divided by the total number of directors.

The proportion of employee in board (PE): It is calculated as the number of employee in the board divided by the total number of directors.
Dummy variable of two-duty conditions (DUAL): A dummy variable that takes on 1 if the CEO is also the chairman of the board and 0 otherwise.
Board meeting frequency (MF): It is measured by the number of meetings per year.

3.2.3. Control variable

Firm Age (AGE): Quantitative variable measured by the difference between date of IPO and date of creation of the firm.
Firm size (SIZE): quantitative variable measured by the logarithm of Book value of total assets.
Debt ratio (DEBT): quantitative variable measured by financial debt divided by total of assets. This measure is also used by Agrawal and Knoeber (1996), Fernandez and Arrondo (2005) and Kochhar and David (1996).
Industry segment (SECTOR): qualitative variable indicating the industry segment of firm. It takes on 1 if segment is IT and 0 otherwise.

3.3. Statistic method and equation

We use descriptive statistics and regression analysis to test the hypotheses which we have suggested above and the statistic tool which we used is Eviews3.
The equations we design are as follows:

$$ROE_i = \alpha_0 + \alpha_1 OC_i + \alpha_2 DO_i + \alpha_3 VCO_i + \alpha_4 EO_i + \alpha_5 BS_i + \alpha_6 POD_i + \alpha_7 PVC_i + \alpha_8 PE_i + \alpha_9 DUAL_i + \alpha_{10} MF_i + \alpha_{11} AGE_i + \alpha_{12} SECTOR_i + \alpha_{13} SIZE_i + \alpha_{14} DEBT_i + \varepsilon_i \quad (1)$$

$$ROA_i = \beta_0 + \beta_1 OC_i + \beta_2 DO_i + \beta_3 VCO_i + \beta_4 EO_i + \beta_5 BS_i + \beta_6 POD_i + \beta_7 PVC_i + \beta_8 PE_i + \beta_9 DUAL_i + \beta_{10} MF_i + \beta_{11} AGE_i + \beta_{12} SECTOR_i + \beta_{13} SIZE_i + \beta_{14} DEBT_i + \varepsilon_i \quad (2)$$

$$Tobin's\ Q_i = \gamma_0 + \gamma_1 OC_i + \gamma_2 DO_i + \gamma_3 VCO_i + \gamma_4 EO_i + \gamma_5 BS_i + \gamma_6 POD_i + \gamma_7 PVC_i + \gamma_8 PE_i + \gamma_9 DUAL_i + \gamma_{10} MF_i + \gamma_{11} AGE_i + \gamma_{12} SECTOR_i + \gamma_{13} SIZE_i + \gamma_{14} DEBT_i + \varepsilon_i \quad (3)$$

$$MVA_i = \delta_0 + \delta_1 OC_i + \delta_2 DO_i + \delta_3 VCO_i + \delta_4 EO_i + \delta_5 BS_i + \delta_6 POD_i + \delta_7 PVC_i + \delta_8 PE_i + \delta_9 DUAL_i + \delta_{10} MF_i + \delta_{11} AGE_i + \delta_{12} SECTOR_i + \delta_{13} SIZE_i + \delta_{14} DEBT_i + \varepsilon_i \quad (4)$$

α_0…… α_{10} : coefficient estimates.

β_0…… β_{10} : coefficient estimates.

γ_0…… γ_{10} : coefficient estimates.

δ_0…… δ_{10} : coefficient estimates.

ε_i : The statistical errors

i: 1……..n

n=106 firms

4. Statistic results

4.1. Descriptive statistics

Table 1. Descriptive statistics of Board Characteristics

	BS	POD	PVC	PE	MF
Mean	6.235849	0.130460	0.137512	0.008176	5.962264
Median	6.000000	0.000000	0.038462	0.000000	5.500000
Maximum	16.00000	0.750000	0.750000	0.250000	14.00000
Minimum	3.000000	0.000000	0.000000	0.000000	1.000000
Standard Deviation	2.436046	0.188806	0.170340	0.042053	2.721780
Sample number	106	106	106	106	106

Table 2. The two-duty condition

	Modality	Ratio
DUAL	1	67,64%
	0	32,35%

Table 1 and table 2 report descriptive statistics for the variables used in the study of the relation between board structure and performance. The mean of board size is 6.23 directors among whom 13% are outsiders (the number of independent director is zero in many company, which means they have no independent system), 13.7% are VCs and 0.8% are employees. We can see also that most firms adopt two-duty governance system. The proportion of the companies which adopt this system is 0.676.

Table 3. Descriptive statistics of ownership structure

	OC	DO	VCO	EO
Mean	0.770945	0.231043	0.320338	0.018679
Median	0.797800	0.148300	0.274150	0.000000
Maximum	1.000000	0.859500	0.866800	0.443000
Minimum	0.126320	0.000000	0.000000	0.000000
Standard Deviation	0.173728	0.228572	0.219736	0.056227
Sample number	106	106	106	106

Table 3 presents basic statistics for ownership structure measures across all firms in the sample. At the average, ownership concentration is 77%. Ownership tends to be highly concentrated. The data also reveal that there is substantial variation across firms in ownership concentration: despite the large average, the minimum value for the 5 largest owner's holding is 12% and the maximum value is 100% percent.

As shown in Table 3 for our data, Director holds in average 23% of capital. VCs hold on average 32% of capital and finally, employee hold only a low percentage of capital (on average in 1.8 %).

Table 4 shows that the average level of debts is 50.03 %. The firm size of our sample (measured by the total log of assets) is on average 4.3. The firm age is on average 11 years. Almost 1/3 of these firms are "new economy" firms.

Table 4. Descriptive statistics of control variables

	Modality	Ratio
SECTOR	1	29,24%
	0	70,75%

	AGE	**SIZE**	**DEBT**
Mean	3950.11	4.316733	0.502920
Median	2882.000	4.345312	0.572818
Maximum	24310.00	6.323871	0.910929
Minimum	263.0000	1.763158	0.006323
Standard Deviation	3678.324	0.763212	0.255335
Sample number	106	106	106

4.2. Regression analysis

The correlation matrix computes the correlation coefficients of the columns of a matrix (see table 5). We don't find some kind of correlation between all variables. None of the correlations are high enough to warrant any problem.

Table 5. Correlation Matrix

	OC	**DO**	**VCO**	**EO**	**BS**	**ICA**	**POD**	**PE**	**DUAL**	**FR**	**AGE**	**SECTOR**	**SIZE**	**DEBT**
OC	1													
DO	-0.274	1												
VCO	0.165	-0.327	1											
EO	0.007	0.091	-0.099	1										
BS	-0.054	-0.179	-0.109	-0.037	1									
POD	-0.132	-0.216	0.108	0.041	0.395	1								
PVC	0.004	-0.125	0.447	0.044	0.225	0.118	1							
PE	0.157	-0.134	-0.003	0.226	0.203	0.014	0.028	1						
DUAL	0.137	0.154	-0.035	-0.041	-0.111	0.064	-0.128	0.064	1					
FR	-0.026	-0.023	0.039	-0.107	0.178	0.119	0.189	-0.119	-0.062	1				
AGE	0.062	-0.054	-0.180	-0.071	-0.047	0.128	-0.203	-0.068	0.135	0.035	1			
SECTOR	0.016	0.134	0.023	0.110	-0.028	0.237	0.123	-0.058	-0.150	-0.136	-0.122	1		
SIZE	-0.003	-0.122	0.016	-0.071	0.231	0.064	-0.006	0.246	0.071	-0.136	-0.144	-0.128	1	
DEBT	0.112	0.040	-0.035	-0.086	-0.106	0.073	-0.126	-0.087	0.160	0.063	0.290	-0.155	0.149	1

To examine the impact of ownership structure, board structures as governance mechanisms on performance, we estimate equations (1) to (4).
The regression results of equation (1) in table 6 where ROE is regressed on all board structure variables and ownership structures with other control variables show that there are five significant regression analyses. Ownership concentration and director ownership are positively correlated with performance. The effects are statistically significant at the 5 percent and the 1 percent level, respectively. Ownership structure and director ownership become a favorable elements to control and align interests to perform performance. They are consistent with the hypothesis 1 and 2 that ownership concentration and director ownership have a positive effect on performance. VC ownership and employee ownership have a negative impact in performance and neither of them is statistically significant for either dependent variable.

Table 6 provides also some evidence for board structure impact on performance. The coefficients of board size variable, CEO-Chairman duality variable, Sector variable and debt ratio are negatively correlated with ROE. The effects are statistically significant at the 5 percent, the 1 percent level, the 1 percent level and the 1 percent level, respectively. So, hypotheses 5 and 7 are supported. This finding for board size is consistent with Jensen (1993) and Lipton and Lorsch (1992). CEO-Chairman duality

contributes to speculation and inefficacy and damages the shareholder's interest consistent with Jensen (1993).

The coefficient of independent director variable is positively correlated with performance. The effect is statistically significant at the 1 percent. Hypothesis 6 is also right and confirms that Outside directors enhance the effectiveness of the board of directors in monitoring managers, and improving firm value (Alexander and Paquerot, 2000; Hochberg, 2004).

The presence of VCs in board and The proportion of employee in board are positively associated with performance but in absent significance. Board meeting frequency is negatively related to performance but not significant. Hence hypothesis 8 and 9 are not supported.

The regression results of equation 2 are completely contrary to those obtained in equation1 and show that there are five significant correlations. Ownership concentration and director ownership are negatively correlated with performance at 5% level. VC ownership and employee ownership have not a significant impact in performance. Board size variable, CEO-Chairman duality variable, Sector variable and debt ratio are positively correlated with ROA. So, hypotheses 1, 2, 5 and 7 are not validated when we use ROA as performance measure. Correlations are also found between independent director variable at 1% level and between the proportion of employee, the presence of VCs in board and Board meeting frequency and performance, but in absent significance.

Table 6. Regression Analysis of ownership structure, board structure and Firm Performance

	(1) ROE	(2) ROA	(3) Tobin's Q	(4) MVA
OC	**1.472904****	**-0.718511****	-0.150243	1828.300
	(2.365956)	(-2.318533)	(-0.092296)	(0.267929)
DO	**1.368803*****	**-0.660422****	0.276035	-3609.747
	(2.686724)	(-2.604061)	(0.207207)	(-0.646397)
VCO	-0.834195	0.393775	1.758082	7392.821
	(-1.501773)	(1.424073)	(1.210411)	(1.214193)
EO	-1.354763	0.632027	-1.909592	-5099.868
	(-0.748625)	(0.701590)	(-0.403551)	(-0.257099)
BS	**-12.33177****	**6.010241****	**45.82855*****	**140428.3***
	(-2.451149)	(2.399847)	(3.483669)	(2.546475)
POD	**28.12750*****	**-13.63914*****	-29.09593	-113247.3
	(3.106379)	(-3.025923)	(-1.228888)	(-1.141016)
PVC	2.938509	-1.294374	-18.47914	-26003.63
	(0.253694)	(-0.224487)	(-0.610130)	(-0.204813)
PE	4.872201	-2.319670	25.46060	-90644.54
	(0.171218)	(-0.163757)	(0.342177)	(-0.290608)
DUAL	**-65.19212*****	**31.58345*****	96.03648	139603.9
	(-2.895153)	(2.817627)	(1.631058)	(0.565607)
MF	-3.889376	1.730233	-2.586758	-28556.22
	(-1.027730)	(0.918441)	(-0.261404)	(-0.688400)
AGE	-0.003085	0.001498	0.002658	7.622746
	(-1.060022)	(1.033883)	(0.349159)	(0.238916)
SECTOR	**-67.51844*****	**32.46534*****	36.87424	363793.1
	(-2.789182)	(2.694151)	(0.582551)	(1.371039)
SIZE	0.131348	0.053561	**-206.4396*****	**-276714.8***
	(0.009330)	(0.007643)	(-5.608176)	(-1.793267)
DEBT	**-83.21682****	**40.19649****	192.4197*	566319.8
	(-1.996517)	(1.937303)	(1.765502)	(1.239551)
R^2	0.226953	0.216222	0.321200	0.124249
adj-R^2	0.108022	0.095641	0.216769	-0.010482
F-statistic	**1.908282****	**1.793168***	**3.075725*****	0.922198

Annotation: The number in the bracket is standard error
***Significant at the 1% level; ** Significant at the 5% level; * Significant at the 10% level

The regression results of equation 3 where we use Tobin's Q as dependent measure find only one correlation between board size and performance but board size is positively correlated to performance at 1% level. Firm size is negatively correlated to performance at 1% level. Hence, no one of all hypotheses is supported.

The regression results of equation 4 shows there is no significant correlation between all independent variables and performance with the exception of a positive and significant correlation (at 10%) between board size and performance measured by MVA. Firm size is negatively correlated to performance at 10% level. So, hypothesis 1 is not right. And no of other hypotheses are supported.

5. Conclusion

The possible impact of ownership structure and board structure on corporate performance has been a central question in research on corporate governance. This paper investigates those questions to better understand involvement of VCs in corporate governance and to understand also how internal control mechanism affects firm performance.

We find that the evidence on the nature of the relationship has been decidedly mixed if we change performance measure. We use in this paper ROE, ROA, Tobin's Q and MVA as performance measures. The results of impact ownership structure and board structure on performance of VC-backed firms provide supports for scholars and practitioners. To sum up, VCs mitigate principal-agent problems and improve performance. We show in this paper that there is significant correlation between ownership concentration, director ownership, board size and performance when we use ROE and ROA. We show also that board size has negative coefficient when we use ROE and positive coefficient when we use ROA, Tobin's Q and MVA. The result shows the condition that CEO and chairman is one person is significantly negative related to the ROE, and is significantly positive related to the ROA. The effect of outside directors is examined also, and the result shows that there is significant correlation between the proportion of outside directors and performance measured by ROE and ROI but there is no significant correlation between outside directors and other performance measure. In this paper, there is no statistic significance between the proportion of VC in board, the proportion of employee in the board, board meeting frequency and performance.

This study suggest that VCs is an active investor and play role in corporate governance by creating boards with low number of member and with greater independence. But this study is limited to ownership structure and board structure as governance mechanisms. Other governance mechanisms can be studied in the future to analyze VC involvement in corporate governance and impact of VC involvement on performance.

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