Human Resources Management, a Non-Financial Benefit of Venture Capital

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RESUMO

Este artigo procura verificar se venture capital adiciona valor às empresas que financia. Eu proponho que venture capitalistas adicionam valor porque transferem informação sobres executivos seniores através das empresas em seu portfólio. Para que esta transferência ocorra em uma escala significante é necessário que os venture capitalistas operem uma rede envolvida em localizar e realocar gerentes. Resultados obtidos por meio de uma pesquisa entre venture capitalistas dos Estados Unidos confirmam a existência da rede. A maioria dos participantes afirmam que é comum para eles 1) tomar sugestões de outros venture capitalistas quando contratam executivos; e 2) recomendar executivos para outros venture capitalistas. Uma análise econométrica mostra que entre os fatores relevantes para explicar a intensidade com a qual os venture capitalistas participam do network encontramos: 1) o valor da informação transmitida via network; 2) o grau de risco que os venture capitalistas atribuem aos seus investimentos; 3) o grau de dificuldade que os venture capitalistas encontram para convencer executivos a administrar suas empresas; e 4) os ganhos que os venture capitalistas, que recomendam executivos, podem obter ao convencer outros executivos a aceitar ofertas de trabalho.

PALAVRAS-CHAVE

venture capital, recursos humanos, network, benefícios não-financeiros

ABSTRACT

This article addresses the question of whether venture capital brings non-financial benefits to the firms it funds. I propose that venture capital adds value because venture capitalists are able to transfer information about senior managers across firms and time. For this transfer to exist on a significant scale, it is necessary that venture capitalists operate a network, within which they are involved in locating and relocating managers. Results obtained through a survey of venture capitalists based in the US confirm the existence of such a network: The majority of the respondents affirm that it is common for them 1) to act on suggestions from their colleagues when hiring managers; and 2) to recommended managers to other venture capitalists. Econometric analysis shows that the factors relevant to explain the intensity with which venture capitalists network include: 1) the value of the information transmitted though the network; 2) the degree of risk that venture capitalists attribute to their investments; 3) how difficult venture capitalists find it to entice executives to manage firms funded with their capital; and 4) the gains that the venture capitalists who suggest managers can obtain when enticing managers to accept job offers.

KEY WORDS

venture capital, human resources, network, non-financial benefits

INTRODUCTION

Recent research has emphasized that venture capital[1] organizations play a different role from that of traditional capital providers. Venture capitalists gain a detailed knowledge of the firms they fund. As a consequence, these inside investors can provide financing to young businesses that otherwise would not receive external resources (BARRY, 1994 reviews this theoretical literature). This is because typical candidates for venture capital funds are young, fast-growing firms. These firms are characterized by critical asymmetries of information and adverse selection problems. This makes opportunistic behavior a critical concern in the financing of these firms. Sahlman (1990) describes venture capital as an institution shaped to provide monitoring and to control opportunistic behavior (GOMPERS, 1995 and LERNER, 1994 present an empirical analysis of this issue).

Most studies concerning the special role of venture capital as financial intermediary have focused on the effectiveness of venture capital in ameliorating asymmetric information problems (see CHAN, 1983, AMIT, GLOSTEN, and MULLER, 1990, ADMATI and PFLELDERER, 1994, SAHLMAN, 1990, and BARRY, 1994 for a review of this literature). In these papers, venture capital becomes a financial contract designed to ameliorate the adverse selection problem, give investors the necessary control, and remunerate them for the high risk they assume. (BARRY, 1994)

Can venture capital also bring non-financial benefits? Do firms turn to venture capital sources only when they would otherwise face credit rationing? There is much anecdotal evidence suggesting that venture capital provides other resources such as marketing, consulting, etc. Barry (1994) suggests that venture capitalists add value because they frequently specialize in a particular technology or stage of development and, therefore, can offer strategic guidance. However, to date, no empirical standard treatment has been given these special roles of venture capital.

In theoretical papers dealing with venture capital, the set of possible outcomes is determined before the intervention of venture capital. For instance, the managerial factor is included in the description of the project. The roles that venture capital contracts play are restricted to screening projects and guaranteeing that the right decisions are made in due time. In contrast, this article recognizes the crucial role that management plays in determining the success of young, fast-growing

[1] Venture capital and private equity are used as synonyms.

enterprises. The potentialities of a young firm certainly depend on the efficacy with which it can attract executives. Therefore, the efficacy of the different types of financing depends on the ability with which they attract efficient managers.

This article argues that venture capital brings non-financial benefits to new projects because it allows the transfer of valuable information acquired in previous investments, a feature not afforded by other sources of funding. More specifically, this work focuses on the transfer of one particular form of information crucial to new firms - the abilities and qualification of senior managers - that endows firms funded with venture capital with superior managers. This transfer of information is accomplished through an informal network of venture capitalists that is involved in locating and relocating managers. The goals of this article are 1) to provide evidence about the existence of this previously unstudied network; 2) to explain the benefits that the network brings to firms in venture capitalist's portfolio; and 3) to study what motivates the participation of venture capitalists in the network.

The results in this article are based on a survey of U.S. based venture capitalists. The survey results confirm the existence of the network: a majority of the venture capitalists confirm that their relationships with their colleagues include acting on their suggestions when hiring mangers, and in turn recommending manager to each other. A substantial proportion of venture capitalists confirm that they adopt the strategy of recycling managers in their portfolio firms.

Econometric analysis shows that venture capitalists' decision to join the network can be explained by factors such as: the subjective risk venture capitalists attribute to their investments; the value of the information transmitted through the network; the size of their funds; and the difficulty that venture capitalists find in hiring managers. In addition, venture capitalists' motivation to network also depends on possible gains when hiring managers due to the reputation they can acquire for assisting managers with job placement. Moreover, the econometric analysis suggests that the decisions to suggest managers and to act on suggestions when recruiting managers are distinct decisions.

This article is organized as follows: Section 1 discusses the features of private equity financing that allow venture capitalists to add value within the portfolio firm by transferring valuable information among firms. Section 2 presents the the survey and Section 3 presents some initial results supporting the existence of an informal network operated by venture capitalists in which they are involved in locating and relocating managers. An econometric analysis of venture capitalists motives for networking is provided in Section 4. The last Section concludes this article.

1. ADDING VALUE THROUGH THE TRANSFER OF INFORMATION

Other researchers have emphasized the importance of venture capital in solving information problems. This study is the first to emphasize the importance of venture capitalists as managers of human capital. In this section, I outline how a mature private equity industry provides venture capitalists with the opportunity to transfer information from past investments to new firms. This information is valuable for the success of young developing firms, and constitutes a source of value added within portfolio firms. Moreover, this feature is unique to venture capital financing mainly because this type of information is difficult to transfer in any systematic fashion.

1.1 Organizational Capital

Two firms holding the same assets can be valued differently. A common explanation for this discrepancy is that firms have intangible, non-tradable assets. Research on transaction cost economics casts light on the nature of such non-tradable assets. Broadly speaking, transaction costs encompass a spectrum of institutional costs including those of, negotiating, drawing up and enforcing contracts, monitoring performance, and changing institutional arrangements. Following the transaction cost approach, economic organizations and the contractual arrangements made by them are seen as minimizing specific transaction costs (see CHEUNG, 1987 for an introduction to the topic of economic organization and transaction cost). In view of transaction costs, the firm's value depends on its ability to efficiently[2] contract with suppliers, customers, and employees.

Many of the contracts between the firm and its suppliers, customers, and employees involve principal-agent problems in the context of uncertainty. Moreover, the uncertainty generally affects all the parties involved in the contracts. Therefore, the contract design depends on the information that the parties involved in it have about each other. This becomes an even more complex issue when there is interdependence between the effort of many agents (e.g., when the outcome of an employee's effort depends on the effort of another employee). Therefore, the firm's ability to contract, and consequently its efficiency, depends also on the information it has, not only about individual agents (employees, customers, and

[2] Efficiency here is understood as the ability to design contracts that maximize benefits vis-à-vis transaction costs.

suppliers), but also about the synergy existing among the different agents, and the information these agents have about the firm. Thus, part of the value of a firm comprises "assets" that are idiosyncratic.

Among these idiosyncratic assets are the institutional arrangements made inside the firm, its ability to contract efficiently given certain information, its knowledge about the parties involved in the contracts, its reputation (i.e., the information different agents have about the firm), etc. I will call such assets, *organizational capital.* In general, organizational capital is intangible, nontradable, and difficult to transmit. When a firm shuts down, most of its organizational capital is lost. I will argue that a mature private equity industry has the unique feature of fostering venture capitalists with the opportunity to transfer organizational capital across firms.

1.2 The Transfer of Organizational Capital

The main goal in private equity financing is profit through capital gains made in portfolio firms. As a result, a potential candidate for venture capital resources must have the prospect of producing large capital gains in a relative short period of time (usually, firms with the potential to become publicly traded). Firms suitable to receive venture capital funds are typically high-risk. More importantly, These firms are characterized by a high degree of asymmetric information. Managers frequently have more accurate information about the prospects of the firm than they may be willing to reveal. For instance, they generally lack the incentive to liquidate a project with dim perspectives as long as others are providing capital.

The information asymmetry makes project governance extremely important. Among the mechanisms venture capitalists adopt to mitigate this problem are close monitoring and staging of the investment (SAHLMAN, 1990, GOMPERS, 1994, and LERNER, 1994. The project is divided into stages. At every financing round, venture capitalists invest only the capital necessary to take the firm to the next stage of development. They monitor the firm closely and, at every round of financing, decide whether or not to continue funding the firm. These mechanisms ameliorate the information asymmetry and provide the venture capitalist opportunities to withdraw from a project with limited profit potential. Furthermore, this gives managers the incentive to use capital efficiently.

With the purpose of increasing the likelihood of success and improving their information about the perspectives of the projects, venture capitalists frequently become actively involved in the operation of their portfolio firms. For example, they often sit on the board of directors, replace managers, help establish business strategies, provide industry knowledge, structure deals with suppliers and customers, and act as confidants to managers. Because many of the firms suitable to receive venture capital funds are young companies lacking experience in human resources management, venture capitalists often become involved in selecting, recruiting and properly[3] remunerating key employees.

The close involvement of venture capitalists with the portfolio firms does not only attenuate the information asymmetry and improve the returns on the investment. It also provides venture capitalists with expertise in selecting, recruiting, and properly remunerating management teams, as well as in timing the development of the firms as organizations (e.g., when is the right time to add a professional CEO or CFO, etc.). As an additional benefit, it gives venture capitalists non-public information about the abilities and qualifications of the managers in the firms they fund.

Even though venture capitalists finance firms with potential to become publicly traded, more often than not, their investments end when their portfolio firms are either liquidated or merge with larger corporations. It has been estimated that about one third of the capital invested by venture capitalists results in loss. (SAHLMAN, 1990) In the case of mergers, the portfolio firms become divisions of the acquiring corporation and do not need senior management teams. Therefore, in most cases, senior managers have limited viability in firms funded with venture capital, and leave their companies when they are sold or liquidated (this is not necessarily so if the firm goes public). The limited viability of senior managers in firms funded with venture capital frequently puts venture capitalists in contact with managers between jobs.

The nature of the involvement of venture capitalists with their portfolio firms provides them with the necessary conditions to transfer organizational capital from one firm to another. Among other things, they can transfer the knowledge they acquire about suppliers, customers, and the management team of the companies they fund. When they exit an investment, they have the possibility of recycling competent managers by rehiring them to manage other firms in their portfolio. Venture capitalists also bring to a project the expertise they develop in selecting, recruiting, and remunerating managers; and in timing the development of the companies as organizations.

[3] The adjective "properly" refers to the design of contracts that gives the managers the right incentives, aligning his/hers interests with the investors.

An example in which the transfer of organizational capital is very intense is given by Kleiner, Perkins:

> *"The keiretsu conceit aside, the Kleiner partners' role in Silicon Valley may in some ways be closer to that of the Hollywood moguls of the '30s and '40s, whose success was built on their ability to lock up stars, directors and writers. Kleiner Perkins has similarly amassed a pool of talent. "If you're well regarded as a manager in their stable, you're going to be used over the years," says Frank Ingari, whom Doerr tapped to run networking software company Shiva Corp. in 1993.*[4]
>
> *"One way Doerr hardwires his network is by placing Kleiner CE0s on the boards of other corporate members of the keiretsu ... The CEO of video game maker Crystal Dynamics, Randy Komisar, one of a number of Go veterans now running Kleiner companies, sits on the boards of two Kleiner-associated companies, Total Entertainment Network and MNI Interactive. CEO John Kernan of Lightspan Partnership sits on the board of fellow educational software company Academic Systems..."*[5]
>
> *"The network has been buttressed by the "CEO-in-residence" program which brings temporarily out-of-work top executives into Kleiner and Perkins to review business plans, to do a little strategic thinking and help with recruiting..."*[6]

Another specific means of transferring organizational capital is related to the way venture capitalists can deal with managerial risk incentives. Managers of small growing firms are exposed to high risk. As mentioned before, senior managers find themselves in a vulnerable situation when the firm does not go public. The fact that venture capitalists can possibly offer another chance in another portfolio firm reduces the firm-specific risk that managers face. Therefore, it may be that firms funded with venture capital have an advantage when recruiting managers because of the "insurance" that venture capitalists can offer - I will refer to this as "*insurance effect*."

[4] Institutional Investors (June-1996, p. 95).

[5] Institutional Investors (June-1996, p. 96)

[6] Institutional Investors (June-1996, p. 96).

This paper focuses on two particular ways that venture capitalists can transfer organization capital: the transfer of information about the qualification of senior managers and the insurance effect. Both of these mechanisms depend on the possibility of consecutively employing managers in more than one portfolio firm. The possibilities of a same venture capitalist reemploying the same managers seem somewhat restricted: few venture capital funds are large enough[7] to match job openings with the availability of managers. However, one factor that broadens the transfer of organization capital is the relationship among venture capitalists, much of it motivated by the syndication of investments.

Syndication is a strategy that venture capitalists commonly use to improve the screening[8] of investments, achieve better monitoring, guarantee sources of funds to specific projects, and diversify their portfolio. (LERNER, 1994) The possibilities for syndication depend on both the connections a venture capitalist, has, and his or her reputation among other venture capitalists. Syndication is especially important for the transfer of organizational capital. It creates strong bonds among venture capitalists and, therefore, allows reliable information to flow among them. The syndication of investments broadens the transfer of organizational capital because it allows the transfer to occur across firms in the portfolio of different funds. The fact that reliable information can circulate among venture capitalists give them an unusual[9] role as certifiers of senior managers abilities. This reasoning suggests that venture capitalists operate an informal network involved in locating and relocating managers. The rest of this article is dedicated to the analysis of this previously unstudied network.

2. THE SURVEY

A survey was conducted to verify the existence of a network among venture capitalists involved in locating and relocating managers, as well as to investigate the motivations of venture capitalists in joining the network. The survey included

[7] In telephone interviews, some venture capitalists reported that they reemploy eficient managers whenever there are opportunities for that. Nonetheless, their funds are not large enough to allow the systematic recycling of mangers.

[8] In other words, they feel more confident in financing a firm if other experienced investors think the firm should be funded.

[9] This feature is unique to venture capital. When a firm is funded with other sources of capital, no agent can play this certification role.

questions about the relation of venture capitalists with the managers of their portfolio firms, and with other venture capitalists. This section describes the survey. explain the variables, and presents the results.

The survey was conducted between Nov 1995-Dec 1996. The questionnaire was sent to 879 venture capitalists randomly selected from Venture Economics (1994). The mailing list was restricted to venture capitalists based in the US. The valid responses amounted to 156. Since the survey was conducted with the option of anonymity, some questions left blank remained so. The reader will find a detailed description of the sample with a discussion of possible sampling biases in Carvalho (1997).

2.1 The Variables

The survey classified the respondents according to the following characteristics: 1) the subjective risk they assess of their investments (variable SUBJECTIVE RISK); 2) the type of financing the venture capitalist is specialized in (used to define the variable EARLY); 3) the amount of time in the private equity industry (variable EXPERIENCE); 4) the size of their funds (variable CAPITAL); and 5) how many deals they had structured in the previous 5 years (variable DEALS). The information concerning variables EXPERIENCE, CAPITAL, and DEALS was obtained directly from questions 5 - 7 of the of the questionnaire (appendix B). The description of the respondents according to these three characteristics is in Carvalho (1997)

Concerning the type of financing (related to the variable EARLY), the respondents were asked to list the three types of financing with which they are primarily[10] involved (question 1, appendix B). To answer this question, they were given a menu including: seed, startup, R&D, first-stage, second-stage, mezzanine, LBO, acquisition financing, control block purchase, industry consolidation, and blank slot to fill with types not listed above (this classification was taken from Venture Economics (1994)).

As there is no clear division among the types of financing, I grouped seed, startup, R&D, and first-stage in a broader category, *early-stage* [11] financing. To create the

[10] They were asked to rank only the three most frequent types of finance in order to prevent them from listing types that they do only occasionally (we would not be able recognize each ones are done only occasionally).

[11] This procedure is similar to the one adopted in GOMPERS (1993).

variable EARLY, I classified venture capitalists according to the number of early-stage financing out of the three main types of financing. Therefore, variable EARLY assumes value 0 if the venture capitalist did not list any early-stage financing, takes value 1 if the venture capitalist listed only one early-stage financing, and so on.

Theoretical reasoning suggests that the risk venture capitalists face in their investments is an important element in the decision to network. Among other effects, risk intensifies the syndication of investments. In the absence of information of the riskiness of the portfolio of projects held by venture capitalists, it was necessary to ask them for a subjective assessment of the riskiness of their investments. Venture capitalists revealed their subjective risk (variable SUBJECTIVE RISK) by answering the question: *"in the realm of venture capital, how would you classify most* [12] *of your investments (Use a scale from 1 for low risk to 5 for high risk)?"*

One potential problem that arises when a subjective measure is used is that each respondent arbitrarily sets a different scale. This prevents interpersonal comparison and makes the measure appear amorphous. On the other hand, there are two arguments to justify its use, one conceptual and the other practical. The conceptual one is that if riskiness of the investments have influence on a certain behavior, then the right variable to be used is the riskiness that the agents perceive, i.e., the subjective risk they assess. The practical one is that there is no available data about the riskiness of individual investments made by venture capitalists.

Even though variable SUBJECTIVE RISK appears amorphous it has a strong correlation with early-stage financing - as it is expected from any measure of riskiness in venture capital investments. The coefficient of correlation[13] between variables SUBJECTIVE RISK and EARLY is 0.674. Although crude, the use of this subjective measure provides the first step in understanding the role of riskiness in determining venture capitalists' behavior. Moreover, as we will see, this measure turns out to be important in explaining the cross-sectional variation of other variables.

I also collected data on the number of managers that were assisted with respect to job placement (variable PLACEMENT), and the number of replacement of managers (variable REPLACEMENT) - questions 8 and 9 in appendix B. Table 1

[12] The purpose of including the phrase "most of your investments" was to simplify the venture capitalists' task of assessing risk by preventing them from having to consider types of investments that that they do only occasionally.

[13] Significant at the 1% level.

shows the distribution of variable PLACEMENT. As it can be seen, the respondents on average had assisted 2.59 managers with job placement in the previous 5 years.

Table 2 shows the distribution of variable REPLACEMENT. As it can be seen, on average the respondents had replaced 4.59 managers in the previous five years. Since the number of replacements is very sensitive to the number of deals that venture capitalists had made, I computed the average replacement by dividing REPLACEMENT by DEALS (whenever the latter is different from zero). Table 3 presents the distribution of the variable average replacement and shows that on average the respondents replace 0.37 managers per firm they fund. The data summarizing replacement of managers offer a first assessment of how much venture capitalists are involved with the recruitment of managers. However it underestimates this involvement because it does not account for the number of managers added[14] when the portfolio firms expand.

TABLE 1 - DISTRIBUTION OF THE VARIABLE PLACEMENT : NUMBER OF EXECUTIVES THE VENTURE CAPITALIST HAS EMPLOYED MORE THAN ONCE OR HELPED WITH JOB PLACEMENT IN THE PREVIOUS 5 YEARS[a]

PLACEMENT	Frequency	Valid percentage	Cumulative percentage
0	35	24.8	24.8
1 and 1.5[b]	16	11.4	36.2
2	36	25.5	61.7
3 and 3.5	27	19.2	80.9
4	3	2.1	83.0
5	11	7.8	90.8
6	2	1.4	92.2
7	1	0.7	92.9
8	1	0.7	93.6
10	7	5.0	98.6
more than 10	2	1.4	100.0
missing	15	-	
total	156	100	
average			2.59

a In some other cases the respondent indicated that the answer given to this item referred to the whole fund instead. In such cases the answer was considered blank.

b Some respondents gave intervals as answers. In such cases, the midpoint of the interval was used. This is why PLACEMENT assume noninteger values.

[14] A venture capitalist can be actively involved in recruiting managers and never replaced any.

Finally, the respondents were asked to rank the three activities performed by venture capitalists that they consider most important (question 3, appendix B). They were given a menu including a) monitoring performance against goals, b) helping with management decisions, c) providing industry knowledge, d) providing finance, e) developing business strategies, f) recruiting managers, and two blank slots to complete with unlisted activities. Table 4 presents a summary of the answers given to this question. Specifically, 16.8% of the respondents ranked recruitment of managers as the most important activity, 18.7% as the second most important, and 18.79% as the third most important. In all, 54.2% ranked recruitment of managers as one of the three most important activities.

TABLE 2 - DISTRIBUTION OF THE VARIABLE REPLACEMENT: NUMBER OF CE0s REPLACED IN THE PREVIOUS 5 YEARS[a]

REPLACEMENT	Frequency	Valid percentage	Cumulative percentage
0	7	4.9	4.9
1	15	10.5	15.4
2	15	12.6	28.0
3	29	20.3	48.3
4	20	13.9	62.2
5	20	13.9	76.1
6	5	3.5	79.6
7	2	1.4	81.0
8 and 8.5[b]	6	4.2	85.2
10	12	8.4	93.6
more than 10	9	6.4	100.0
missing	13	-	
total	156	100	
average			4.59

a In some other cases the respondent indicated that the answer given to this item referred to the whole fund instead. In such cases the answer was considered blank.

b Some respondents gave intervals as answer. In such cases, the midpoint of the interval was used. This is why REPLACEMENT assume noninteger values.

2.2 Concerns With Biases

There is always a general concern of sampling biases in studies that employ the survey method. Moreover, there is heightened concern that voluntary surveys are answered more frequently by those interested in the issues covered in the survey. This methodological concern is aggravated when the survey is conducted with anonymity. The scarcity of data regarding individual venture capitalists further complicated these issues. It is unlikely that the available information about the population of venture capitalists can been used to rule out possible biases.

TABLE 3 - DISTRIBUTION OF AVERAGE REPLACEMENT [a]

average replacement	Frequency	Valid percentage	Cumulative percentage
0 to l	11	7.9	7.9
.11 to .2	40	28.5	36.4
.21 to .3	17	12.0	48.6
.31 to .4	28	20.0	68.6
.41 to .5	20	14.3	82.9
.51 to .6	9	6.4	89.3
.61 to .8	5	3.6	92.9
more than .8	10	7.1	100.0
missing	16	-	
total	156	100	
average			0.37

a The average replacement was obtained by dividing REPLACEMENT by DEALS.

TABLE 4 - IMPORTANCE GIVEN BY VENTURE CAPITALISTS TO THE ACTIVITIE OF RECRUITING MANAGERS

Rank [a]	Frequency	Valid percentage	Cumulative percentage
first	26	16.8	16.8
second	29	18,7	35.5
third	29	18.7	54.2
less than third	71	45.8	100.0
missing	1	-	
total	156	100.0	

a Some answers presented ties. In case two activities were tied in the first place, the second place was counted as blank. If three activities were tied in the first place, then the sencond and third places were left blank, and so on.

A second caution must be noted. The information obtained was gathered primarily from qualitative variables. With this type of variables, the distinction between values is not always[15] clear. However, the distinction between different values becomes meaningful if their cross-sectional variations can be predicted or used to predict the cross-sectional variation of other variables.

[15] For instance, there is not a clear distinction between totally agreeing and just agreeing.

Most of the questions asked in the survey are used as control variables. The existence of sampling biases does not consist a barrier for the use of those variables. Nonetheless, the average answer to the four questions addressing the existence of the network deserve a special concern: if the transfer of information is restricted to a small group of venture capitalists, that transfer does not constitute a relevant issue.

As discussed in Carvalho (1997), the use of 1) the available data concerning the population of venture capitalists; and 2) the measure of interest that venture capitalists showed in the survey does not indicate the existence of sampling biases. Consequently, there is no evidence of biases on the average answer given to the questions related to the existence of the network. On the other hand little data is available about the population of venture capitalists. This prevent us from completely ruling out the possibility of sampling biases. Therefore, it is not possible to make conclusions about the exact extension of the network. Nonetheless, the results are sufficient to conclude that a significant proportion of venture capitalists network.

3. GENERAL RESULTS OF THE SURVEY

In this section, I present evidence supporting the conjecture that venture capitalists operate informal networks involved in transmitting information about the characteristics of managers in the firms they fund.

3.1 The Network

With respect to the existence of the network, venture capitalists were asked to show their agreement to the following propositions: 1) *"venture capitalists operate informal networks involved in locating and relocating managers"* (proposition NETWORK); 2) *"it is common for me to suggest likely managers to others in the private equity industry"* (proposition SUGGEST); 3) *"it is common for me to act on suggestions from others in the private equity industry when hiring a top manager for a firm"* (proposition TAKE SUGGESTIONS); and 4) *"once I learn about the good qualifications of a manager, I try to keep him/her working for companies I fund, i.e., I entice him/her to leave, a firm when I sell or liquidate it and take a position in another company I fund*" (proposition RECYCLING STRATEGY).

Venture capitalists strongly believed in the existence of the network. A large majority, 77.9%, agreed that they operate informal networks (proposition

NETWORK, Table 5); only 6.5% disagreed. A bulk of 56.2% agreed that it is common for them to suggest likely managers to others in the private equity industry; only 19.3% disagreed (proposition SUGGEST, Table 5). Even more of them, 62.3%, agreed that it is common for them to act on suggestions when hiring managers; only 11% disagreed (proposition TAKE SUGGESTIONS, Table 5). Finally, a considerable proportion of venture capitalists, 37%, affirm that they adopt recycling strategy (proposition RECYCLING STRATEGY, Table 5).

TABLE 5 - QUESTIONS CONCERNING THE EXISTENCE OF THE NETWORK [a]

proposition	wording	strongly agree	agree	neutral	disagree	strongly disagree
NETWORK	Venture capitalists operate informal networks involved in locating and relocating competent managers	19.5	58.4	15.6	5.2	1.3[b]
SUGGEST	It is common for me to suggest likely managers to others in the private equity business.	6.5	49.7	24.5	18.7	0.6[c]
TAKE SUGGESTIONS	It is common for me to act on suggestions from others in the private equity industry when hiring a top manager for a firm.	7.1	55.2	26.7	9.7	1.3[d]
RECYCLING STRATEGY	Once I leam about the good qualifications of a manager, I try to keep him/her working for companies I fund, i.e., I entice him/her to leave a firm when I sell or liquidate it and take a position in another company I fund.	8.4	28.6	27.3	23.7	13.0[e]

[a] Results in percentage terms.

[b] From a total of 155 valid answers.

[c] From a total of 155 vahd answers.

[d] Fom a total of 154 valid answers.

[e] From a total of 156 vahd answers.

The results presented in this section show that a significant proportion of venture capitalists suggest managers to each other, act on suggestions when hiring senior managers, and have a strategy to recycle managers. It is particularly striking that such a large proportion agree that venture capitalists operate informal networks involved in locating and relocating managers. These results endorse the general assumption that the network exists.

3.2 The Value of the Information

An important element which may explain the motivation that venture capitalists have in networking is the value they attribute to the information they obtain from each other. More specifically, do venture capitalists have (or at least think they have) information about managers that search firms do not? Is this information really important for the success of their investments? If the answers to these questions are negative, then the exchange of information may simply be a way of lowering costs of recruitment.

The survey was designed to address these issues. Venture capitalists were asked to express their agreement with the following propositions: 1) *"the success of the firms I fund depends mostly on their top managers"* (proposition SUCCESS DEPENDS ON MANAGERS; 2) *"as a venture capitalist I learn substantially more about the managers of the companies I fund than what can be revealed to outsiders by their track records"* (proposition INSIDE INFORMATION); and 3) *"to manage a firm funded with venture capital requires different skills from those needed to manage a company funded with other sources of capital"* (proposition DIFFERENT SKILL).

The following results provide an indication of how unique and valuable the information that venture capitalists acquire about managers is: a massive majority of the respondents, 93.5%, agreed that through their relations with managers, they learn substantially more about the managers than what can be revealed to outsiders by the managers' records; 49.7% strongly agreed (proposition INSIDE INFORMATION, Table 6). Even more than that, 95.5%, agreed that the success of their firms depends mostly on their top managers; 71.1% strongly agreed (proposition SUCCESS DEPENDS ON MANAGER, Table 6). Finally, 58.7% agreed that to manage a firm funded with venture capital requires different skills from those required to manage a firm financed with different sources of funds, while only 22.6% disagreed (proposition DIFFERENT SKILL, Table 6).

TABLE 6 - QUESTIONS CONCERNING THE VALUE AND UNIQUENESS OF THE INFORMATION[a]

proposition	wording	strongly agree	agree	neutral	disagree	strongly disagree
SUCCESS DEPENDS ON MANAGERS	The success of the type of firms I fund depends mostly on their top managers.	71.1	24.4	3.2	1.3	0[b]
INSIDE INFORMATION	As a venture capitalist I learn substantially more about the managers of the companies I fund than what can he revealed to outsiders by their track records	49.7	43.8	5.2	1.3	0[c]
DIFFERENT SKILLS	To manage a firm funded with venture capital requires different skills from those needed to man age a company funded with other sources of capital.	14.8	43.9	18.7	20.0	2.6[d]

a Results in percentage terms.

b From a total of 156 valid answers.

c From a total of 153 valid answers.

d From a total of 155 valid answers.

3.3 Recruiting Managers

The respondents also showed their agreement with some auxiliary propositions related to their activities as human resources recruiters. These propositions are: *"it can be difficult to entice a manager to leave a stable position in a well established company and take a chance in a new firm with risky prospects"* (proposition DIFFICULT HIRE, Table 7); *"if it were not for their confidence in my personal commitments to them , some of the top managers of the companies I fund might not have accepted the job offer they received"* (proposition PERSONAL COMMITMENTS, Table 7); and *"having a reputation of helping good managers with job placement, in the event that the companies for which they work are liquidated, helps entice other managers to work for other companies I fund"*(proposition REPUTATION, Table 7).

TABLE 7 - AUXILIARY QUESTIONS[a]

proposition	wording	strongly agree	agree	neutral	disagree	strongly disagree
DIFFICULT HIRE	It can be difficult to entice a top manager to leave a stable position in a well established company and take a chance in a new firm with risky prospects.	12.2	42.3	20.5	21.8	3.2[b]
PERSONAL COMMITMENTS	If it were not for their confidence in my personal commitment to them, some of the top managers of the companies I fund might not have accepted the job offer they received.	20.3	48.4	21.5	7.8	2.0[c]
REPUTATION	Having a reputation of helping good managers with job placement, in the event that the companies for which they work are liquidated, helps entice other managers to work for other firms I fund.	7.2	36.8	40.9	10.5	4.6[d]

a Results in percentage terms.

b From a total of 156 valid answers.

c From a total of 153 valid answers.

d From a total of 152 valid answers.

4. AN EMPIRICAL ANALYSIS OF THE MOTIVATION TO NETWORK

The last section presented evidence that a significant proportion of venture capitalists network: 62.3%, affirm that it is common for them to act on suggestions when hiring managers; 56.2% affirm that it is common to suggest managers to their colleagues. and 37% adopt the recycling strategy. The cross sectional variation in the answers for these questions suggest that there are different motivations to join the network. This section is an empirical investigation of the motivations to network.

4.1 Hiring Under Suggestions

The factors that explain why venture capitalists act on suggestions from other venture capitalists when hiring managers (TAKE SUGGESTIONS) may be grouped in 3 categories: a) the cost[16] of locating and hiring managers through the network; b) the costs of hiring through different means, and c) the expected value of the information transmitted through the network. Unfortunately, none of these factors can be directly measured. Nonetheless, the survey collected information on some variables that may serve as proxies. These variables are: 1) the risk that venture capitalists assess of their investments (SUBJECTIVE RISK); 2) whether venture capitalists think that managing for venture capital investors is qualitatively different (DIFFERENT SKILLS). 3) how difficult it is to entice executives to manage firms funded with venture capital (DIFFICULT TO HIRE); and 4) the size of the venture capital funds (CAPITAL).

There are two reasons why the risk of the portfolio firms (SUBJECTIVE RISK) should influence the intensity with which venture capitalists act on suggestions when hiring managers. Firstly, high-risk projects typically have multiple investment options and strategies. They require fast decisions from their managers. Therefore, their success depends largely on having management teams able to lead through an ocean of turbulence and uncertainties. This should cause venture capitalists to look for managers whose competence can be certified. Therefore, risk increases the utility of the information venture capitalists can transmit.

Secondly, venture capitalists syndicate investments to improve monitoring and screening of investment (LERNER, 1994), and to diversify risk. Syndication creates strong bonds among venture capitalists and allows reliable information to flow among them. The contact with other venture capitalists who can give reliable suggestions should increase the intensity with which venture capitalists act on suggestions when hiring managers. Therefore, risk increases the intensity with which venture capitalists syndicate investments, which in turn creates strong bonds among them, and increases the availability of reliable suggestions.

[16] This cost is related to the time venture capitalists spend to find the manager through the network.

There are two conjectures relating the amount of capital that venture capitalists have under management (CAPITAL) to their habit of hiring under suggestion from their colleagues. Firstly, large funds are managed by many venture capitalists. Therefore, the incidence of reliable suggestions coming from partners is more frequent. Secondly, other venture capitalists may have interest in developing good relations with venture capitalists managing large funds. This may happen because of interest in prospective syndications[17] (LERNER, 1994), and also because well-established venture capitalists have the capacity to form opinion in the industry. Therefore, the flow of reliable suggestions to venture capitalists managing large funds can be more intense.

For those venture capitalists who believe that there is an intrinsic difference between managing a firm funded with venture capital as compared to managing a firm funded with other sources of capital (DIFFERENT SKILLS), recommendations from other venture capitalists are unique because they convey an evaluation that other agents can not provide.

Difficulty in enticing managers to leave their jobs to manage firms funded with venture capital (DIFFICULT HIRE) can be another reason to recruit executives among those suggested by venture capitalists. Venture capitalists who face this problem would rather contract managers who have had the experience of working for a firm funded with venture capital and, consequently, are less apprehensive about taking the job. In addition, it is probable that the managers suggested by venture capitalists find themselves in the job market.

Ordered probit analysis presented in Table 8 presents a picture of the factors affecting the intensity with which venture capitalists act on suggestions when hiring senior managers. Regressions 1 and 2 show that all the variables mentioned above are relevant to explain the intensity with which venture capitalists affirm to hire under suggestions. Moreover, the signs of the parameters are as conjectured.

As expected, when the amount of capital and the risk increase, venture capitalists more intensively hire under suggestions. Nonetheless, it is not clear whether venture capitalists hire under suggestions to control the risk in their investments or if the opportunities to hire under suggestions are a byproduct of high-risk financing.

The positive parameter associated with variable DIFFERENT SKILLS suggests that the more differentiated the information transmitted through the network the more venture capitalists hire under suggestions. This result is important because it suggests that networking is related to the quality of the information transmitted, rather than simply a way of lowering costs of recruitment.

[17] This is related to the Window-dressing argument.

TABLE 8 - EFFECTS ON THE INTENSITY OF NETWORKING: ***HIRING UNDER SUGGESTIONS***

Estimates are from ordered probit analysis. The dependent variable is the agreement to the proposition *"it is common for me to act on suggestions from others in the private equity industry when hiring senior managers."* Its values range from 0 for totally disagree to 4 for totally agree. Values in parentheses are t-statistics. The independent variables are described in Section 3.1, and Appendix A. The sample in these regressions has 141 observations. This sample has 15 observations fewer than the survey sample due to some blank answers.

	regressions	
Independent variables	(1)	(2)
CONSTANT	-0.26999	0.66649
	(-0.426)	(1.175)
DIFFICULT HIRE	0.26128**	
	(2.548)	
DIFFERENT SKILLS	0.12539	0.15565*
	(1.240)	(1.675)
SUBJECTIVE RISK	0.17938**	0.15683*
	(2.065)	(1.779)
log(CAPITAL)	0.15247*	0.11191
	(1.675)	(1.229)
log likelihood	-148.91	-152.88
significance level of the regression	0.0038	0.0576
number of correct predictions	82	82

* Significant at the 10% level.

** Significant at the 5% level.

The difficulty in enticing managers to take job positions (DIFFICULT HIRE) plays a positive role in making venture capitalists network. This may happen because 1) managers who have previous experience managing for venture capital investors can be less apprehensive of managing high-risk firms with strong inside investors; and 2) managers recommended by venture capitalists possibly are in the job market.

4.2 Suggesting Managers

This section examines the motivations for suggesting managers. Possible factors that explain why venture capitalists suggest managers are related to 1) the benefits expected from recommending managers; and 2) the fulfillment of previous commitments assumed when hiring managers. The benefits originated from suggesting managers can be a) the availability of recommendations when needed (reciprocity); and b) developing the reputation of assisting managers with job placement that can be helpful in prospective recruitment. The following variables in the survey are related the above factors: 1) the risk that venture capitalists assess of their investments (SUBJECTIVE RISK); 2) the size of the venture capital funds (CAPITAL); 3) personal commitments assumed by the venture capitalist when hiring managers (PERSONAL COMMITMENTS); and 4) the importance that venture capitalists attribute to the reputation resulting from assisting managers with job placement (REPUTATION).

The riskiness of the investments (SUBJECTIVE RISK) can affect the intensity with which venture capitalists suggest managers in two different ways. Firstly, as discussed in the previous section, risk can intensify the syndication of investments. This increases the availability of suggestions. It also increases the demand for recommendations, i.e., the opportunities for suggesting managers.

Secondly, high-risk investments presents a lower proportion of successes (independent of the qualification of managers) and, consequently, a intense flow of managers in between jobs. This increases the availability of managers to be suggested. In addition, the large proportion of failures increases the value that managers attribute to the insurance effect.

The number of partners the venture capitalist has is related to the size of the fund (CAPITAL). Therefore, the larger the fund, the larger the number of partners and the larger the incentives to suggest managers. In addition, as explained in the previous section, the size of the fund may be related to opportunities to syndicate investments, which increases the network opportunities.

Variables PERSONAL COMMITMENTS and REPUTATION are related to the insurance against firm-specific risk that venture capitalists can offer (insurance effect): From the managers' perspectives, there are considerable uncertainties about some aspects of their relationship with venture capitalists that can not be contracted. Managers also face agency problems. For instance, venture capitalists can engage in opportunistic behavior if they have incentive to abandon viable[18] firms. Possibly, venture capitalists have to make personal commitments to the managers being hired (commitments not written in a contract). Because of this, venture capitalists may feel obligation to assist competent managers with job placements when they exit an investment (even if this was not an explicit commitment at the time the manager was hired). Consequently, the use of personal commitments (PERSONAL

[18] SAHLMAN (1990) notes that "the seemingly irrational act of shutting down an economically viable entity is rational viewed from the perspective of the venture capitalist confronted with allocating time and capital among various projects."

COMMITMENTS) when enticing managers can be a significant factor in explaining why venture capitalists suggest managers.

Before accepting a job offer, managers usually verify how committed the venture capitalist is to the firms he or she funds, as well as to the managers they hire. In some cases, the venture capitalist needs to give the manager being enticed references of professionals who have worked for him or her and who can certify the venture capitalists' commitment to firms and managers. Consequently, venture capitalists may be concerned with having the reputation of assisting managers with job placement after they exit their investments. Therefore, variable REPUTATION may be important in explaining the intensity with which some venture capitalists suggest managers.

TABLE 9 - EFFECTS ON THE INTENSITY OF NETWORKING: SUGGESTING MANAGERS

Estimates are from ordered probit analysis. The dependent variable is the agreement to the proposition "*it is common for me to suggest likely managers to others in the private equity industry*." Its values range from 0 for totally disagree to 4 for totally agree. Values in parentheses are t-statistics. The independent variables are described in Section 3.1, and Appendix A. The sample in these regressions has 141 observations. This sample has 15 observations fewer than the survey sample due to some blank answers.

		regressions	
Independent variables	(1)	(2)	(3)
CONSTANT	0.30746	0.50369	0.71965
	(0.403)	(0.889)	(1.255)
SUBJECTIVE RISK	0.22500	0.23722**	0.22569**
	(2.301)	(2.525)	(2.327)
REPUTATION	0.42063***	0.48488***	
	(3.759)		(4.967)
PERSONAL COMMITMENTS	0.13949		0.31555***
	(1.113)		(3.019)
log(CAPITAL)	-0.01236		
	(-0.154)		
log likelihood	-154.08	-154.82	-160.18
significance level of the regression	0.0	0.0	0.00006
number of correct predictions	79	78	74

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

Ordered probit analysis in Table 9 presents a picture of the factors affecting the intensity with which venture capitalists suggest managers. When the risk increases, venture capitalists suggest managers more intensively. Nonetheless, it is not clear whether this effect is resulting from a higher supply of managers who want to be suggested, or higher demand for suggestions from other venture capitalists. The size of the fund turned out to be irrelevant in explaining why venture capitalists suggest managers.

The more venture capitalists affirm to use personal commitments when enticing managers and the more they believe that the reputation of helping managers with job placement is important, the more they suggest managers. This result constitutes evidence supporting the argument that venture capitalists add value because they reduce the firm-specific risk that managers face and, therefore, attract managers. Nonetheless, more conclusive evidence must be based on whether managers perceive that venture capitalists can offer firm-specific insurance when accepting job offers. Nonetheless, this result indicates that this conjecture is reasonable and consistent with venture capitalists behavior.

4.3 Recycling Managers

A significant proportion of venture capitalists, 37%, reported to follow a strategy of keeping efficient executives that they had previously employed to manage firms in their portfolio (RECYCLING STRATEGY). The decision to recycle managers is in some way different from the decision to suggest managers and take suggestions: recycling is done internally in a fund, not involving networking with outside venture capitalists.

There are several factors likely to explain the adoption of the Recycling Strategy. They are related to how much venture capitalists value the information they acquire about managers' ability, the availability of efficient managers to be recycled, and the existence of opportunities to recycle managers. The following variables in the survey are related to these factors: 1) the risk that venture capitalists assess of their investments (SUBJECTIVE RISK);

2) how much the success of portfolio firms depends on their senior managers (SUCCESS DEPENDS ON MANAGER); 3) whether venture capitalists think that managing for venture capital investors is qualitatively different (DIFFERENT SKILLS); 4) personal commitments assumed by the venture capitalist when hiring managers (PERSONAL COMMITMENTS); 5) the importance that venture capitalists attribute to the reputation resulting from helping managers with job placement (REPUTATION); and 6) the size of the venture capital funds (CAPITAL). Next these variables are linked to the adoption of the Recycling Strategy.

The risk that venture capitalists assess of their investment (SUBJECTIVE RISK) is likely to be linked to the Recycling Strategy. The agency problems and monitoring costs are elevated for high-risk financing. As a consequence, venture capitalists funding high-risk firms have an extra incentive to keep managers for whom they have positive prior information. Moreover, the exit of investments through mergers and liquidations is high, regardless the efficiency of the managers. This increases the availability of managers to be recycled.

How much venture capitalists value information acquired about the managers they hire is also supposed to influence the adoption of the Recycling Strategy. Therefore, venture capitalists who think that to manage for venture capital investors require specific skills (DIFFERENT SKILLS) should value the relations they establish with efficient managers, and try to keep them.

The size of the fund (CAPITAL) is presumed to be related to the existence of opportunities[19] to recycle managers: large funds finance a large number of firms, and this increases the probability of matching available managers with job openings. As seen in the previous section, Variables REPUTATION and PERSONAL COMMITMENTS are linked to the Recycling strategy through the *insurance effect*.

According to the ordered probit analysis presented in Table 10, the factors affecting the intensity with which venture capitalists affirm to follow the recycling strategy are the use of personal commitments when enticing managers (PERSONAL COMMITMENTS), the importance they attribute to the reputation of helping managers with job placement (REPUTATION), and the value attributed to the information they acquire about the managers in their portfolio companies (DIFFERENT SKILLS). As expected, the parameters associated to these variables are positive. Again, the positive effect that variables PERSONAL COMMITMENTS and REPUTATION exert on the decision to recycle managers is further evidence for the conjecture that venture capital can add value through the *insurance effect*. Contrary to the predicted variables SUBJECTIVE RISK and CAPITAL failed to be significant in explaining the recycling strategy

[19] As mentioned in previously, some venture capitalists affirm that because they fund a small number of firms, the recycling of managers is not very intense.

TABLE 10 - EFFECTS ON THE INTENSITY OF NETWORKING: RECYCLING MANAGERS

Estimates are from ordered probit analysis. The dependent variable is the agreement to the proposition "*once I learn about the good qualifications of a manager, I try to keep him/her working for companies I fund, i. e., 2 entice him/her to leave a firrn when I sell or liquidate it and take a position in another company I fund*." Its values range from 0 for totally disagree to 4 for totally agree. Values in parentheses are t-statistics. The independent variables are described in Section 3.1, and Appendix A. The sample in these regressions has 141 observation. This sample has 15 observations fewer than the survey sample due to some blank answers.

		regressions	
Independent variables	(1)	(2)	(3)
CONSTANT	-0.18211	-0.34325	-0.31590
	(-0.271)	(-0.689)	(-0.734)
REPUTATION	0.25650**		0.32710***
	(2.450)		(3.709)
PERSONAL COMMITMENTS	0.16301	0.26430***	
	(0.173)	(2.728)	
SIJBJECTIVE RISK	-0.05754		
	(-0.663)		
DIFFERENT SKILLS	0.13554	0.16191*	0.13310
	(1.538)	(1.939)	(1.594)
log(CAPITAL)	-0.06497		
	(-0.927)		
log likelihood	-205.57	-208.64	-207.14
significance level of the regression	0.00518	0.00518	0.00115
number of correct predictions	45	37	46

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

4.4 Assisting Managers With Job Placement

The data collected included information on the number of managers venture capitalists had assisted with job placement[20] in the previous 5 years. The purpose of this section is to examine the motivations that lead venture capitalists to help

[20] Question 9, appendix B: *In the past 5 years, approx2'mately how many executives have you either employed more than once or helped to be placed after their firms were sold or liquideted*?

managers with job placement. Venture capitalists assist managers with job placement by recycling managers or suggesting them to others. Therefore, the factors that possibly affect this behavior are the same that affect the intensity with which venture capitalists suggest managers and adopt the recycling strategy. These are: 1) the risk that venture capitalists assess of their investments (SUBJECTIVE RISK), 2) personal commitments assumed by the venture capitalist when hiring managers (PERSONAL COMMITMENTS); 3) the importance that venture capitalists attribute to the reputation resulting from assisting managers with job placement (REPUTATION); 4) whether venture capitalists think that to manage for venture capital investors is qualitatively different (DIFFERENT SKILLS), and 5) the size of the venture capital funds (CAPITAL). The number of deals the venture capitalist structures (DEALS) is used as a control variable.

Poisson regressions in Table 11 present a picture of the factors affecting the intensity with which venture capitalists assist managers with job placement. Regressions 1 to 3 show that all variables listed above are relevant to the motivations behind such behavior. Moreover, the signs of the relations are as predicted.

The high significance of the parameters associated with variables REPUTATION and PERSONAL COMMITMENTS reinforces the plausibility of the conjecture that venture capital can offer managers insurance against project-specific risks. The novelty in the regressions in Table 11, as compared to the regressions for the recycling and suggesting managers, is the significance of the parameter associated with the variable CAPITAL: the number of managers helped increases with the size of the fund. Nonetheless, it is unclear if this is related to the number of managers recycled, suggested, or both.

TABLE 11 - EFFECTS ON THE INTENSITY OF NETWORKING: HELPING MANAGERS

Estimates are from Poisson regressions. The dependent variable is the number of managers the venture capitalist had helped with job placement in the previous 5 years. When the respondent gave an interval as answer, the midpoint of the interval was used. Since Poisson regression require the dependent variable to assume only integer values, the original dependent variable was multiplied by two. Values in parentheses are t-statistics. The independent variables are described in Section 3.1, and Appendix A. The sample in these regressions has 128 observations. This sample has 28 observations fewer than the survey sample due to some blank answers.

		regressions	
Independent variables	(1)	(2)	(3)
CONSTANT	-0.77772**	-0.41324	-0.48742 *
	(-2.424)	(-1.285)	(-1.853)
REPUTATION	0.33961***		0.35950 ***
	(6.899)		(8.223)
PERSONAL COMMITMENTS	0.03425	0.20065 ***	
	(0.665)	(4.435)	
SUBJECTIVE RISK	0.06418 *	0.06862 *	0.06506 *
	(1.749)	(1.914)	(1.789)
DIFFERENT SKILLS	0.06259	0.09720**	
	(1.570)	(2.469)	
log(CAPITAL)	0.07664**	0.07123 **	0.07642**
	(2.473)	(2.260)	(2.471)
DEALS	0.02199***	0.02562***	0.02178 ***
	(5.203)	(6.070)	(5.158)
R_p^2	0.2542	0.1675	0.2565
R_d^2	0.1774	0.1082	0.0782

* Significant at the 10% level.

**Significant at the 5% level.

*** Significant at the 1% level.

CONCLUSION

A significant part of a firm's value - organizational capital - consists of nontradable and, in general, nontransferable knowledge and experience. Along with their investment activities, venture capitalists become actively involved within their portfolio firms and acquire part of these nontradable assets. Since they fund a continuous stream of firms, venture capitalists have the opportunity to transfer organizational capital across firms. This is a source of value-added not available in other forms of financing.

In this study, I confined the role of venture capitalists in transferring organizational capital to two aspects: the transfer of knowledge about the qualification of managers; and the control of the firm-specific managerial risk. This latter relates to how venture capitalists can reduce the risk that managers face in managing a company of uncertain future existence. This is accomplished by referring managers to other venture capitalists.

The transfer of information about the qualification of managers can be accomplished in two different ways: by a single venture capitalist consecutively employing the same manager in different portfolio firms (recycling managers); or by referrals from one venture capitalist to another. The first form does not require communication among venture capitalists, while the second form require intense exchange of information among venture capitalists.

Through a nationwide survey of venture capitalists, I obtained evidence that they operate an informal network involved in locating and relocating managers. A majority of the venture capitalists affirm that it is common for them to hire managers under suggestions from their colleagues (62.3%) and to suggest managers (56.2%). Furthermore, 37% affirm that they adopt the strategy of recycling managers.

Ordered probit analysis revealed that the intensity with which venture capitalists network is positively influenced by the following factors: 1) the value of the information transmitted though the network; 2) the risk that venture capitalists assess of their investments; 3) the size of the fund; 4) how difficult is to entice executive to manage firms funded with venture capital; and 5) the gains that venture capitalists who suggest managers can obtain when enticing managers to accept job offers. Econometric analysis also provide evidence that the decisions to take suggestions and suggest are independent. All factors listed above are significant in explaining the decision to take suggestions. The decision to suggest managers is dominated by the risk of the investments in venture capitalists' portfolios and the gains that venture capitalists who suggest managers can obtain when enticing managers to accept job offers.

The relevance of the value of the information in explaining why venture capitalists act on suggestions when hiring managers indicates venture capitalists are interested in the quality of the information transmitted. This supports the conjecture that venture firms funded with venture capitalists who network on average should have superior management.

Finally, The importance attributed to the reputation of assisting efficient managers with job placement is significant in explaining the intensity with which venture capitalists suggest managers. This is consistent with the conjecture that firms funded with venture capital have an advantage when hiring managers, because venture capitalists can offer the manager an "insurance" for the case in which the manager is efficient but the project is not successful. This enables firms funded with venture capital to attract managers and constitutes another source of value-added. Nonetheless, more conclusive evidence for this conjecture must be based on whether managers perceive that venture capitalists can offer firm-specific insurance when accepting job offers.

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A - LIST OF VARIABLES

TABLE 12 - LIST OF QUALITATIVE VARIABLES AND THEIR VALUES

proposition	wording	strongly agree	agree	neutral	disagree	strongly disagree
SUCCESS DEPENDS ON MANAGERS	The success of the type of firms I fund depends mostly on their top managers	4	3	2	1	0
DIFFICULT HIRE	It can be difficult to entice a top manager to leave a stable position in a well established company and take a chance in a new firm with risky prospects.	4	3	2	1	0
PERSONAL COMMITMENTS	If it were not for their confidence in my personal commitment to them, some of the top managers of the companies I fund might not have accepted the job offer they received	4	3	2	1	0
INSIDE INFORMATION	As a venture capitalist I learn substantially more about the managers of the companies I fund than what can be revealed to outsiders by their track records.	4	3	2	1	0
TAKE SUGGESTIONS	It is common for me to act on suggestions from others in the private equity industry when hiring a top manager for a firm.	4	3	2	1	0
REPUTATION	Having a reputation of helping good managers with job placement, in the event that the companies for which they work are liquidated, helps entice other managers to work for other firms I fund.	4	3	2	1	0
DIFFERENT SKILLS	To manage a firm funded with venture capital requires different skills from those needed to manage a company funded with other sources of capital.	4	3	2	1	0

B - SURVEY QUESTIONNAIRE

1) Using the numbers 1, 2 an 3 (1 the most important, 2 for the second most important and 3 for the third most important), please rank the three types of financing in which you are most involved (classification taken from "*Pratt's Guide to Venture Capital Sources*").

____ seed

____ startup

____ R&D

____ first-stage

____ second-stage

____ mezzanine

____ bridge financing

____ LBO

____ acquisition financing

____ control-block purchase

____ industry consolidation

____ other ______________________

2) In the realm of venture capital, how would you classify most of your investments (use a scale from 1 for low risk to 5 for high risk)?___________

3) Using the numbers 1, 2 and 3 (1 for the most important, 2 for the second most important and 3 for the third most important), please rank the three activities performed by venture capitalists that you consider most important.

____ monitoring performance against goals

____ helping with management decisions

____ providing industry knowledge

____ providing financing

____ developing business strategies

____ recruiting managers

____ other :____________________

____ other: ____________________

4) Please indicate the extent to which you agree or disagree with the following statements:

	strongly agree	agree	neutral	disagree	strongly disagree
a. The success of the type of companies I fund depends mostly on their top managers.	1	2	3	4	5
b. It can be difficult to entice a top manager to leave a stable position in a well established company and take a chance in a new firm with risky prospects.	1	2	3	4	5
c. If it were not for their confidence in my personal commitment to them, some of the top managers of the companies I fund might not have accepted the job offer they received.	1	2	3	4	5
d. As a venture capitalist I learn substantially more about the managers of the firms I finance than what can be revealed to outsiders by their records.	1	2	3	4	5
e. I hire firm managers based mostly on their general personal characteristics and skills such as integrity, energy, intelligence, etc., rather than firm or industry specific knowledge.	1	2	3	4	5
f. The abilities I look for in a firm manager are knowledge and skills that are highly specific to the firm he or she would manage and not easily transferable to other firms I fund.	1	2	3	4	5
g. The abilities I look for in a firm manager are skills and knowledge which are industry specific.	1	2	3	4	5
h. Once I learn about the good qualifications of a manager, I try to keep him/her working for companies I fund, i.e., I entice him/her to leave a firm when I sell or liquidate it and take a position in another company I fund.	1	2	3	4	5
i. It is common for me to suggest likely managers to others in the private equity business.	1	2	3	4	5
j. It is common for me to act on suggestions from others in the private equity industry when hiring a top manager for a firm.	1	2	3	4	5
k. Having a reputation of helping good managers with job placement, in the event that the companies for which they work are liquidated, helps entice other managers to work for other firms I fund	1	2	3	4	5
l. To manage a firm funded with venture capital requires different skills from those needed to manage a company financed with other sources of capital.	1	2	3	4	5
m. When the CEO of a company I fund is not an owner but a competent executive, I spend some effort helping him/her manage better	1	2	3	4	5
n. When the CEO of a company I fund is the entrepreneur, to some extent I act as a mentor and spend effort to help him/her manage better.	1	2	3	4	5
o. Venture capitalists operate informal networks involved in locating and relocating competent managers.	1	2	3	4	5

5) How many years have been in the private equity/venture capital business? _____ years

6) Roughly speaking what amount of capital your fund(s) has under management? ___________________

7) Approximately how many deals have you made in the last 5 years?   deals

8) Approximately how many CE0s you have replaced in the last 5 years? CE0s

9) In the last 5 years, approximately how many executives have you either employed more than once or helped to be placed after their firms were sold or liquidated? executives

10) Would you be willing to briefly answer some questions on the telephone as a follow up to this survey?

□ Yes

□ No

If yes, Name:______________________________ Phone:___________________

□ Please send me a summary of the responses of this survey.

Name: ____

Address: ____

Firm (optional): ____

Please use the space below and the back of this page for any comments you consider relevant.

A revisão do texto é de inteira responsabilidade do autor.

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