

What is the Real Role of Corporate Venture Capital?

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ABSTRACT

Technological innovation is not exclusive to great industrial groups. Sometimes, innovative and dynamic companies emerge in high-tech sectors and constitute a serious threat for some industry giants. However, the high reactivity of these small companies is generally impaired by problems of financing. Larger firms which want to achieve financial profits and control the most recent innovations often have recourse to corporate venture capital (CVC) as strategic mode of financing. The advantages it brings to every stage of the project (launch, refinancing and project output) compared to financing by venture capital funds will be key factors for future development. In order to gain a better understanding of the role of CVC in the financing of innovating firms, we propose in this article to analyze the various types of CVC on the basis of former studies as well as concrete examples, then to assess what boosts value creation for CVC projects.

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I. INTRODUCTION

Issues related to innovation are crucial because the latter allows companies to establish or strengthen their competitive advantages by differentiating themselves from their competitors and gaining market share. It can be defined as “any process allowing to extract economic benefits or social knowledge constituted through the development and realization of ideas which improve products, services or process” (Source: Fund for Innovation, Canadian Innovation and Projects Section). Innovation is thus the core of the firms’ competitive strategies. It is the source of most century firms and a key factor of economic growth in many countries. In most countries, it is widely approved that the most intensive firms in information and communication technologies (ICT) are also those which innovate more frequently and combine several types of innovation. With the rapid development of ICT since the 1980s, many dynamic small companies have performed a fundamental role for innovation in high tech sector. Then, large enterprises questioned their expensive R&D programs and decided to invest in innovative firms, either directly or through private equity funds. This type of investment, called corporate venture capital (CVC), is not only a means to make profits, but more importantly, a highly strategic way to maintain a control of innovation by acquiring the latest innovations when they start developing. Despite crises, CVC continues to grow in the high-tech sectors, particularly in biotechnology. The advantages it brings at every stage of the project as opposed to financing by venture capital funds will be key factors for its future development. In order to gain a better understanding of the role of CVCs in the financing of innovating firms, we propose in this article to analyze the various types of CVC on the basis of former studies as well as concrete examples, then to assess what boosts value creation for CVC projects.

II. CHARACTERISTICS OF CORPORATE VENTURE CAPITAL

A. Definition of Corporate Venture Capital

In strategy, two types of technological alliances exist: cooperation agreements and capital participation. If the first type is based on a short or medium-term partnership, aiming at sharing certain strategic resources in particular in terms of R&D, the second type of strategic alliance leads to an exchange of capital and thus to strong commitments from each partner.

Along with joint-ventures and partial mergers, corporate venture capital (CVC) today has become one of the most widespread forms of financing for new innovating firms. In fact, CVC is only another form of venture capital. The concept is not recent and first made an appearance at the end of the thirties in the United States. It developed gradually to become a branch of finance specialized in funding innovative SMEs with strong growth potential.

The role of “corporate venture capital” funds, also named “industrial venture capital funds”, is for a parent company to contribute capital equity complemented by industrial input to an innovative start-up through an investment fund dedicated to industrial innovation.

This type of fund excludes any entity with a purely financial company as lead investor. The main difference between corporate venture capital and venture capital is the nature of the utility of fund partners.

Contrary to a traditional venture capital firm which seldom intervenes in the day-to-day running or decision making process of the firm it finances, CVC goes much further than simple leveraging.

The incentive for industrial groups to get involved in CVC can be summarized according to the five following points:

- * Technological interest: by investing in highly innovative firms in the same line of business, industrial groups can track innovations closely while keeping a lid on its R&D expenditure. In this way corporations can guard against these firms making technological breakthroughs by signing agreements for developing joint projects, license transfer or the acquisition of the firm at a later date (integrating the target company into the group) as from the first input of funds,

- * Adding value to in-house R&D: by supporting the creation of a start-up by spinoff, corporations develop their patent portfolio, the majority of which are often unexploited, via licensing agreements,

- * Market tracking and the experience effect: financing start-ups in new markets provides investors with information on customer behaviour vis-à-vis new products/services which could be used to develop new products/services inside the group,

- * Implementing new practice: the start-ups in which the groups invest can be used as a laboratory to test new practices of external management (vis-à-vis customers or suppliers) or internal (between employees, between management and staff) which could be adopted by the group if successful,

- * Financial interest: last but not least there is the financial aspect. As for other venture capital investments, the corporations hope to have made a capital gain on their investment at the time of exit or a return through dividend payments.

In this context, there are two ways of viewing the concept of Corporate Venture Capital; as external risk taking for the firm or as an alternative source of financing innovative start-ups (Gompers & Lerner, 2000). These two conceptions of CVC are not contradictory. Quite the reverse is true. They show common interests shared through an organisational mode which ensures the outsourcing of risk while enabling the financing and control of innovative projects. This is why CVC is often initially defined (Muzyka et al., 1996) as an input of capital equity and technical or strategic expertise to start-up entrepreneurs. This highlights the relationship of dependence that the start-up has from the parent company.

This relationship of dependence is conditional on the control exerted by the parent company on the investment fund and one can thus distinguish two categories of CVC:

- *Semi-captive funds* are created and capitalized by a large company which keeps control of it. The funds may be open to other industrial partners. The strategic objective of these funds is to invest primarily in projects close to the core activity of the original investors. This is the case for Innovacom, Emertec, Chrysalead, etc.

- *Captive funds* are wholly owned by the parent company and their goal is to serve the strategic and financial interests of the latter. This is the case for Unilever

Technology Venture, France Telecom Technologies Investments (FTTI), Intel Capital, etc.

Thus, contrary to management firms specialized in venture capital, CVC has a strategic approach which is primarily industrial. These funds seek to invest in projects which have synergies with the corporation's own businesses.

However, the organisational changes resulting from the implementation of *Corporate Venture Capital* programs are not always positive, hence the many detractors. The drawbacks include:

- Firstly, preserving integrity towards projects which are in competition with those of the parent company.

- Secondly, yielding to the economic climate and the strategic choices of their chief executives. The capital often comes from the surplus liquidity of the parent company. Their existence is therefore called into question during an economic downturn. There is no lack of examples; Innovacom (France Telecom) and Viventures (Vivendi) are today independent. Valéo Venture was closed down by the new CEO who considered that the program was of 'little strategic interest', whereas Air Liquide Ventures was taken over by Alto Invest for the same reasons...

To be successful, the financial intermediation in CVC should restore the dominant role of financial activism by including the processual dimension of investment and investment withdrawal. By investing in projects, the CVC acquires information whose value is maximized if the transaction costs of project identification, selection, investment, follow-on support and withdrawal are lower than those which would be generated by direct investments. Consequently, the intermediation in CVC is only relevant to new ventures whose specificity is not only to be innovating, but also to offer something outside the firm's expertise. In other words, the CVC justifies its role if:

- financial undertakings are targeted at innovative start-ups whose information is not transparent (firms with asymmetric information),

- the need for a device to indicate the quality of targeted projects is vital to avoid multiplying direct investments in innovative projects a large proportion of which could turn out to be unsuccessful or not strategic.

B. Importance of CVC Funds in Technological Sectors

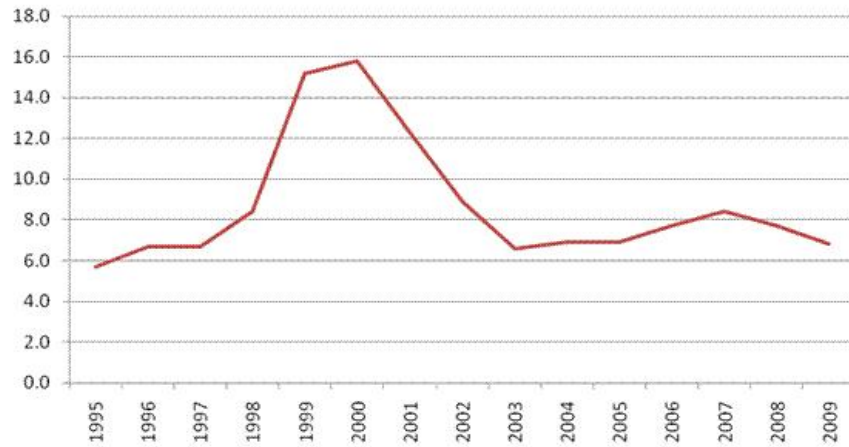
After the record years of the Internet bubble, the CVC share in total venture capital resumed its earlier level before the bubble, which was approximately 7% in 2009. This atypical period of investment is engendered mainly by the large firms of the ICT sector which invested in start-ups in order to benefit from their innovations. For example, Intel invested in 1998 in the Red Hat because it considered its free software as complementary to its own offer. Today, large companies face an inconsequential threat of new technologies emergence which are able to modify their markets rather than during the Internet bubble. This is why their investments in start-ups decreased to reach the same level as 1997 (figure 1). It results that the majority of large companies do not carry out important investments in start-ups because they do not consider these investments as a crucial strategy to cope with technological change.

This observation seems astonishing because on many markets, true technological splits came from start-ups. As an Internet provider in France and thanks to its

technological advance, Free, with its “adsl box” became the real competitor to France Telecom, the historical operator of telecommunication on the French market. Thus, investment in start-ups, which makes current technologies and economic models of established firms obsolete, seems a good means for these companies to maintain a dominant position on the market.

But CVC funds have a major disadvantage compared to independent venture capital funds. They have to invest, keeping in mind the strategy of their parent company, which makes it difficult to make bets on really revolutionary start-ups. This also means to support a firm which aims at destroying their parent company.

Figure 1
Proportion of CVC in US venture capital investment



Source : National Venture Capital association, US, 2010

Our study carried out in 2008 (see Table 1), on a sample of the 142 largest market capitalizations of American and European technology-based companies, show that 40% of the European groups have funds dedicated to Corporate Venture Capital against 60% for the American groups. The size of the CVC funds ranges from 21 million dollars for SBC Communication to 4 billion dollars for INTEL. The median size of the funds is largely equivalent in the United States (140 million dollars) and in Europe (120 million euros). The CVC funds are notably present in high-tech sectors since more than three quarters of industry groups in the sample have CVC funds. However, traditional business sectors characterized by a high proportion of tangible assets, tangible products and long business cycles have far fewer CVC funds.

Table 1
Firms with a CVC fund structure per sector

Sector	Proportion of companies with a CVC fund
Telecommunications	80%
Semiconductors	75%
Technological equipment suppliers	71%
Software	67%
Biotechnology	62%
Aerospace	56%
Chemistry	50%
Construction	50%
Oil	40%
Communication	40%
Materials	40%
Automobile	38%
Personal products	33%
Health services	33%
Agronomy	31%
Energy	29%
Equipment	25%

These results are consistent with the 2010 PwC/NVCA MoneyTree Report and show the evolution in industry sector of investment. In 1998 the top sector, respectively for venture capital and corporate venture capital investment, were software and telecommunications for the first one, software, telecommunications, networking and media for CVC investments. In 2008, the biotechnology and medical devices sectors became two predominant targets of investment for venture capital and CVC. The last figures of NVCA¹ highlight a significant increase in 2010 of Clean Technology sector with \$3.7 billion invested in 267 deals. This investment level exhibits a 76% increase in dollars and a 37% increase in deal volume from 2009 when \$2.1 billion went into 195 deals. The CVC Investment represents 17% of the deals and 15% of the investments in this sector.

Table 2
Top sectors for all venture and CVC investment

Industry sector	All Venture Investment	Rank for all Venture Investment	CVC Investment	Rank for CVC Investment
Software	19,5%	1	13,4%	2
Biotechnology	17,6%	2	22,0%	1
Medical Devices and Equipment	10,4%	3	8,6%	6
Telecommunications	10,2%	4	12,0%	3
Semiconductors	7,8%	5	10,5%	4
Industrial/Energy	6,9%	6	5,3%	7
Media and Entertainment	6,4%	7	10,1%	5

Source : National Venture Capital association, US, 2008

C. Typology of Corporate Venture Capital

Concerning CVC, several typologies have been put forward in academic literature (Ben Haj Youssef, 2001) which we summarize in Table 3. This typology is based on concrete examples of CVC programs set up by multinational firms or large corporations recognized in their respective sectors as being leading stakeholders in innovating activities and in R & D.

Table 3
Typology of corporate venture capital

Type of CVC	Type of commitment	Level of commitment	Objectives of the investment
<i>1) Direct Corporate Venture Capital</i>			
1.1) Internal division of venture capital investments	Financial & Organisational	High	To create a structure dedicated to venture capital investments to try out peripheral technologies outside the firm.
1.2) Internal investment fund	Financial & Organisational	Medium or High	To invest, with other public and/or private funds to generate both financial returns and have a window on new technology.
1.3) Spinoff Venture	Financial & Organisational	Medium or High	To promote -externally – the development of by-products using the company's internal expertise.
1.4) Venture co-operation	Financial & Organisational	Medium	Association of a corporation and an innovative SME to develop a joint project.
1.5) With 'step-by-step' investment	Financial	Low	Occasional investment with weak decisional and technological control in collaboration with other investors.
<i>2) Indirect Corporate Venture Capital</i>			
External Investment fund	Financial	Medium or High	Make financial returns from investments in various innovative SME portfolios via a Venture Capital Firm.

Source: Adapted from Ben Haj Youssef (2001)

The creation of an internal division which deals exclusively with investment in innovating firms first appeared in the Seventies (1.1). During this period, 25% of the 500 biggest firms listed by *Fortune* in the United States created such divisions. For example, *GE Business Development Services* was for a long time the body which tracked high-tech and investments for *General Electric*. However, other firms preferred to invest in internal funds (1.2). This is the case of *Texas Instruments*, *Apple* and *AT&T* in the United States and *Nokia* in Sweden. In France, several large groups followed this trend such as the *Innovacom* fund (198 million euros, France Telecom). Compared to the first type, internal investment funds spare the firm any shortcomings of the internal division concerning problems of coordination and organisational control (reticence by executives, company culture, administrative complexity, etc). In other words,

operationally, the firm recruits a team of venture capital specialists which is put in charge of managing the funds and keeps a level of autonomy.

Other forms of direct CVC now exist. For example, the executives of the parent company may successfully develop new products which result in the creation of a new firm. The parent company gives support by creating a spin-off fund (1.3) such as *Technocom Ventures* created by France Telecom in partnership with *Newbridge Networks*. Other partnerships between a large and a small company focus on financing a specific project whose development will benefit both parties. This is the case of the venture-cooperation (1.4) between *Johnson & Johnson*, the American chemicals and pharmaceutical giant, and *Damon*, an innovating firm, to develop hospital equipment. The last type of direct CVC is 'step-by-step' investment (1.5). Examples of this type of investment are marginal because it enables a corporation to participate in projects which neither bring in high returns, because the firm has a minority investment stake, nor does it allow control of innovations from the target firm, but simply affirms its presence and its brand image in its business sector.

Lastly, it should be noted that the mode of financing through external investment funds, managed by venture capital firms, remains highly attractive. Indeed, direct CVC only represents about a sixth of the overall annual sum invested in innovating firms in the United States. The success of the indirect method is due to the low commitment required and the flexibility in the choice of a portfolio of companies to be financed. This makes it possible to spread risk while increasing the amount of participation. It is true that indirect CVC does not allow for tracking technological advances but this monitoring is very costly: out of ten projects financed by a direct CVC, only one to two projects are successful and nearly half are failures (Lachmann, 2001).

III. DRIVERS OF VALUE CREATION FOR CVC PROJECTS

While the goal of an independent VC is looking for performance, a CVC fund must balance strategic objectives from its parent company and financial goals. These objectives can be conflicting and create agency conflicts between financed firms and the CVC fund. It is therefore necessary to analyze the goals of CVC funds in order to understand their influence on value creation of companies they fund.

A. Objectives of CVC and Benefits for Star-up

Generally, a CVC fund has a strategic mission to improve competitiveness and consequently the turnover of its parent company. As for their mode of intervention, almost all funds privilege direct investments (90% of funds), and 60% of CVC funds made limited partners investment (NVCA, 2010).

Our study shows that almost 70% of CVC investors have a combination of strategic and financial objectives: 15% invest only for strategic value and 16% only for financial return. Moreover, even if 50% invest primarily for strategic value, financial return is a requirement. On the same way, for the 19% of CVC funds, which invest primarily for financial return, look for synergies with the target.

Following the results presented in table n°4, the main strategic reasons cited by the managers of CVC funds are mainly the access to new markets (92%) and the development of products (88%) or technologies (83%). These results are consistent

with previous studies which identify three principal strategic motives for this type of investment: gain “window” on emerging technologies (Dushnitsky and Lenox, 2005), facilitate development of firms offering complementary products or services (Chesbrough, 2000), and identify and monitor potential acquisition targets (Maula and Murray, 2001).

For big firms (BF), carrying out this type of investment permits them:

- To accelerate their process of training: CVC avoid big costs of R&D programs by multiplying and diversifying projects and investments. The CVC supports investments in start-ups (and financial risk involved) while its parent office (BF) can benefit from the innovations accomplished by start-ups,

- To increase the effectiveness of technological watch. The objective is to identify the emerging markets as well as uses of customers and potential applications (Maruca, 1999), to create a complete system of offer with some partner customers, and to detect relational or processual innovations which, if they prove to be effective, will be adopted by the parent company. These techniques make it possible to precede innovation for on the one hand, not to be outdistanced on markets in the midst of technological changes and, on the other hand, to avoid developing similar in-house projects that are perfectly carried out outside (this resulting in clearly reducing in-house human costs and increasing the R&D on the key activities of the parent company,

- To have a new means of action. Indeed, the CVC offers the BF the possibility of managing the innovation in “acting to understand” (Jumel, 2004). The objective is to act first, to invest in a start-up, to launch a product or service by keeping the necessary flexibility to go back once the BF tests the utility of innovation. It is the opposing view to the traditional R&D approach.

Table 4
What are the objectives of CVC investors?

Provide window on new market	92%
Develop new products	88%
Gain window on emerging technologies	83%
Explore new directions	77%
Support existing businesses	65%
Improve manufacturing processes	58%

To evaluate the influence of the CVC financing on start-up targets, it is necessary to bring compare the CVC’s objectives to the benefits which they bring from a strategic point of view.

The study by McNally (1997) is one of the only ones covering the benefits CVC has brought to different ventures created in the United Kingdom. In the firms studied there are 23 start-ups (see Table 5). It shows that CVC funds played a more important role than the other funds involved. According to McNally, the most significant advantages are an increased credibility, help with short-term problems and access to organisational management know-how. This study also suggests that contacts between a start-up and its CVC are more frequent than with an investor in Venture Capital. More generally, the advantages of CVC in the eyes of the entrepreneurs are detailed in the table below.

Table 5
Benefits of a “corporate venture capitalist” to the start-up

Benefits from a CVC investment	Mentioned	%
Help for short-term problems	19	83%
Access to expertise in company management	16	70%
Giving credibility to the startup	16	70%
Access to technical expertise	11	48%
Price advantages on some resources	10	43%
Performance goals which are less restricting than a venture capital fund	9	39%
Access to the company’s marketing/distribution networks	9	39%
R&D and production support	8	35%
Starting point for other relationships with the company	1	4%
Access to more sophisticated means of financial control	1	4%
Supply of space, offices	1	4%
Access to more openings for the startup	1	4%
Synergies	1	4%
Added attractiveness vis-à-vis other investors	1	4%
Stability	1	4%
Access to the company’s operational expertise	1	4%

In the same way, Hellman's analysis (2001) on CVC investments highlights complementarities between the startup and the parent company as being the key factor of success. This author stresses that startups which maintain the business relationship (in addition to strictly financial relations) with the corporation statistically form more alliances with other firms. As an example, one can quote the case of Fon.Com, a company from Madrid having raised 18 million euros in the first pool at the beginning of February 2006. This start-up gets its strength from its prestigious industrial shareholders such as Google and Skype and from big venture capitalists like Sequoia Capital (US) and Index Venture (Swiss) who backed the project.

Another advantage for the start-up financed by CVC is to integrate a network of entrepreneurial relationships. In their model of growth per start-up stage, Kazanjian and Drazin (1989) explain how this sort of network develops. At its creation, the network is limited to the private bonds maintained by the director with other people. They are mainly family members and friends of the entrepreneurs who provide the first essential resources to the early stage of the start-up.

Then, when the firm enters a phase of expansion, it is the need for finance, expertise, market knowledge and know-how which guide the search for partners. The start-up then examines the cost and the benefits of any commitment to a relation with a partner. One can summarize these factors of finding partners under three categories:

- *access to resources*: these resources can be financial (one therefore contacts a venture capitalist) or may be the access to distribution networks, production infrastructures or any other resources which are necessary to create, produce and distribute ones products in a competitive way.

- *access to knowledge*: the start-up needs to optimize its resources in order to obtain the best result. Developing its expertise and its organization present a challenge which needs to be overcome. In the search for an investor, being able to benefit from

strategic advice can prove decisive. This knowledge can be more practical such as the acquisition of a technology.

- *the advantage of image*: legitimacy is an important factor and association with one of the main players in the sector improves the company's image with customers. The choice of partner also affects the choice of the venture capitalist: it is preferable to find a reputed one who will be able to give a stamp of quality to the firm in which he invests.

B. Performances of Start-ups Financed by CVC

Venture capital investors have an important role in mediating the investment of a startup company. The performance of this particular investment has been the core subject in several recent studies but the performance of corporate venture capital is not so well documented.

Most studies in the literature focus on venture capital in general such Block and MacMillan (1993), Ljungqvist and Richardson (2003), and Kaplan and Schoar (2005).

In the last studies, Ljungqvist and Richardson (2003) analyze the process of investment from the perspective of the GP by concentrating the study on the sums invested versus sums distributed. They find that Private Equity funds perform better than the market. However their sample is relatively small. Moreover, they have left out venture capital funds from their sample which generally has an average performance which is much lower than Private Equity funds. The study by Kaplan and Schoar (2005) is considered the leading article on the subject. The authors try to assess the net return investors receive over the fund's lifespan. The authors use a broad sample of mature American funds, set up during the period 1980-1997. The data comes from Venture Economics and covers 746 funds operating in the venture capital (VC) and buyout (BO) segments, which have an identified GP. Kaplan and Schoar (2005) show that in the United States, the average net profitability of Private Equity funds is 5% higher than the average profitability of the S&P 500 index over the period 1980-2001. The profitability of these Private Equity funds is calculated after fund managers have been compensated (approximately 20% of carried interest and 1.5% to 2.5% of the managed funds in management fees), which shows a brut performance well above that of funds invested in listed shares.

Taking into account the duration of investment, that means the ROI difference in annual terms between venture capital and public equity is certainly positive but weak. This result is rather surprising when taking into account the specific features of the private equity asset: risks linked to the agency relationship between LPs and GP, the nature and risk of the projects funded, the level of debt leverage/equities of BO transactions and the illiquidity of the investment. This small yield gap contradicts the often more flattering level of returns announced by the media or the industry.

Artus (2008) analyzes the comparative returns of private and the public equity on the US and European markets, over the periods 1995-2006 and 1996-2006 respectively. Using a different method from Kaplan and Schoar the aggregated returns from private equity are calculated quarter after quarter taking into account the balance of cash-flows during the period and the differences in net asset value (NAV) of the funds between the beginning and the end of the period. The evaluation of the NAVs, reported by the funds, is an approximate accounting procedure, which could be thought to "smooth"

changes to the true fund value. With this method, the net yield gap in favour of private equity over listed assets reaches 6.99% per year in the United States and 8.29% per year in Europe. Taking into account the volatilities and correlation between the returns of the two categories of assets, Artus (2008) estimates that the level of private equity held by investors is below the optimal level resulting from a model of portfolio choice.

Corporate Venture Capital (CVC) is significantly different from traditional venture capital in organizational structure, objectives, investment behavior, and the service range offered to portfolio companies (Gompers and Lerner, 2000). These differences may engender important implications for the CVC performance and the results have to be analyzed very carefully because of the bias in the measure of performance. For example, Porter (1987) studied various investments (joint ventures and start-up) of 33 major groups between 1950 and 1986. He merely argued that “the disparities between investments are enormous” and do not allow to make any statistical comparison.

For some authors, the performance is similar for the two sorts of investment. Gompers and Lerner (2000) consider that the performance of CVC is similar to that of independent VCs at an equal risk level and on the same industries and activities. This performance was calculated for 30 000 investments during 1983-1994 on two criteria: the probability of achieving an IPO or being acquired for more than twice the value of the initial investment.

This similarity is observed particularly in cases where the strategic objective of CVC is clearly identified. However, when investments are made without a strong strategic reason, they appear less stable than those of independent VCs (id est that some investment may be stopped prematurely because of the bankruptcy target).

A second category of authors considers that CVC offers a better performance than independent VC. In their meta-analysis based on eight major studies on the subject, involving about 200 companies, Block and MacMillan (1993) highlight that seven studies show that CVC activities have reached a better performance than traditional activities.

Stuart et al. (1999) and Chesbrough (2000) note a higher valuation of CVC-backed IPOs as opposed to exclusively traditional VC-backed firms. Moreover, the paper of Stuart et al. (1999) based on the analysis of 301 venture-backed biotechnology firms between 1978 and 1991, highlights that strat-ups financed by CVC are introduced on the stock market more quickly (Ginsberg et al, 2003; Maula and Murray, 2001).

Ivanov and Xie (2010) confirm the existence of additional value for CVC-backed startups at IPOs. They also point out that CVC-backed firms are better valued at acquisitions when they observe a strategic relation between CVC objectives and the target.

Academics and practitioners have long suggested that CVCs add value to their portfolio firms, but evidence to such a problem is rather limited. Some previous studies find that CVC-backed startups investment is mainly fostered by a double purpose: financial objectives and strategic objectives. Financial objectives were mentioned in several studies and they were also considered as an important feature of CVCs. This is because return is among the most current performance indicators for companies.

Actually, CVCs can select the most profitable companies which suggest a markedly better performance. In addition, CVCs may provide expertise and backing, which can be of great benefit to firms thanks to specialized staff who is well informed

about the market and Information Technology. Thus, CVCs may be able to provide their portfolio startup companies with a rapid access to markets, technical help, and an inside knowledge of the product, given their collaboration with trade industries. Therefore, CVCs act an important role in distribution and research and development (Teece, 1986; Stuart et al., 1999; Gompers and Lerner, 2000; Maula and Murray, 2001). Such a CVC-backing paves the way for the success of a start-up and consequently, it results in a higher financial performance.

The discrepancy in the considered CVC shows that complementarity relations are fluctuating depending on the industry. As far as startups are concerned, it happens that many companies looking for specific products or services that a given startup can offer. This argument has been developed by such studies as that of Brandenburger and Nalebuff (1996). Dushnitsky (2004) points out that there is a complimentarily-built relation between a company and a startup and this is likely to increase with the interest such useful startups represent for the investing company.

On the one hand, startups develop and test technologies. On the other hand, CVCs assist startups and gain “window” on emerging technologies (Dushnitsky and Lenox, 2005; Wadhwa and Kotha, 2006). Startups also facilitate the company’s development through offering additional services and significant information (Chesbrough, 2000). Furthermore, startups can identify and monitor potential acquisition targets (Maula and Murray, 2001).

However, Benson and Ziedonis (2010) find that CVC acquisitions tend to destroy value for shareholders of the same acquirers. Although return is significant and negative, there is no evidence that such a negative reaction on the market reflects disappointment regarding the invested payment. Hence, Benson and Ziedonis conclude that average return to CVC acquisitions remains more than 1.5% lower than the average return to non CVC acquisitions in multivariate analysis.

Finally, we can conclude that benefits of CVCs investments are higher than these of independent VCs. The main explanation is their tight commitment to startups. As opposed to independent VCs, these benefits can be direct: value creation or indirect in their strategic programs and their access to technologies.

In fact, investors may overpay some targets they acquire or it is also possible that weakly-managed firms make value-destroying takeovers of portfolio companies, which means, as Jensen (1986) shows, that value-destruction is tightly associated to agency problems and misaligned incentives. Another possible explanation, in Roll’s analysis (1986) as “hubris”, or in Malmendier and Tate’s terms (2005) and (2008) as “over-confidence” is that destructing CVC acquisitions is the product of some biases among managers in valuing portfolio companies. Nevertheless, these findings turn to be unimportant empirically.

IV. CONCLUSION

In the previous analysis, we noticed that there are real advantages for CVCs financing. The big enterprises benefit from an opportunity of investment in a diversified portfolio, which makes it possible to reduce the risk of innovation while keeping a certain control over startup or an option of repurchase on the innovation once it has gone beyond the stage of emergence.

Thus, CVC seems a more efficient way of financing to help startups in their development.

Its current problems are due to the economic conjuncture and do not call into question this model of financing. Moreover, it continues to develop in the high-tech sector, which is less affected by the current crisis, in particular the biotechnology sector. The advantages that CVC brings to each stage of the project, as compared to venture capital financing, will be determining factors for its future development.

ENDNOTE

1. http://www.nvca.org/index.php?option=com_content&view=article&id=137&Itemid=216

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