



**UNIVERSITÀ DEGLI STUDI DI FERRARA**

DIPARTIMENTO DI ECONOMIA ISTITUZIONI TERRITORIO

Via Voltapaletto, 11 - 44100 Ferrara

**Quaderno n. 3/2007**

**February 2007**

**VC Managers, Incentive Schemes and Transitioning Economies**

**Jacopo Mattei**

**Quaderni deit**

**Editor:** Giovanni Ponti ([ponti@economia.unife.it](mailto:ponti@economia.unife.it))

**Managing Editor:** Marisa Sciutti ([sciutti@economia.unife.it](mailto:sciutti@economia.unife.it))

**Editorial Board:** Giovanni Masino

Simonetta Renga

<http://newdeit.economia.unife.it/quaderno.phtml>

# VC MANAGERS, INCENTIVE SCHEMES AND TRANSITIONING ECONOMIES<sup>1</sup>

Jacopo Mattei<sup>\*\*</sup>

This draft: February 2007

## Abstract

The research presented is devoted at understanding the impact of hypothetic incentives, designed to attract Venture Capital towards UE New Member States (NMS). We interviewed a sample of western European VC managers, trying also to evaluate the impact of possible restrictions and of the specific features of target Countries. First some interesting characteristics of VC institutions clearly emerge and typical attitudes of VC managers are highlighted. Then, relying both on the results obtained in the field research and on past contributions, we elaborate a proposal of a possible framework for the development of proper VC markets in NMS. A set of differentiated policies would be necessary for the scope, with attention paid not only to the supply side.

**Keywords:** Venture Capital, Incentives, Innovation, Policy, VC Management, Transition Economies.

**JEL Classification:** G24

---

\* I thank Vittorio Modena for useful comments. Then I would like to highlight the precious participation of some VC and PE institutions; specifically: Apax Partners, AVM Italia, Banca Intesa, BankMedici, Club Invest, MPS Venture, Net Partners, Sanpaolo IMI Private Equity, SG Private Equity Italia, Terrafirma CP, Tlcom, Vestar Europe. The answers reported are anyway absolutely confidential and none of the results presented are in any manner ascribable to one or another of the interviewees. Financial support from UE Commission, through the University of Pavia, is gratefully acknowledged.

\*\* University of Ferrara, Faculty of Economics, via Voltapaletto, 11 – 44100Ferrara. E-mail: [j.mattei@economia.unife.it](mailto:j.mattei@economia.unife.it)

<sup>1</sup> We then adopt the common distinction between the different possible investment stages and refer to the usual meanings of seed, startup, development, expansion, turnaround and bridge investments.

## **1.Introduction.**

This is a discussion of the results obtained from a field research aimed at understanding which incentives could attract Venture Capital managers towards transitioning countries, specifically towards UE New Member States (NMS). Many authors have dedicated much attention to Venture Capital for many different reasons: because it is a specific type of financial intermediary, because in its operations various tools and techniques are directed at solving many different technical problems and, indeed, because it is a crucial driver for economic growth and innovation. We will try to link the evidence here gathered with the main bodies of literature, with the ultimate scope of drawing some general policy hints. Above all, we will show that managers can have different preferences depending on the type of funds they work with, and that for obtaining success it is necessary to foster not only the supply side, but to create also favourable conditions on the demand side for risk capital.

For the sake of clarity, we'll adopt the Sahlman's definition of VC to be "*a professionally managed pool of capital that is invested in equity linked securities of private ventures at various stages in their development*"<sup>1</sup>.

VC managers are on one side responsible of results with the suppliers of capital (the financiers) and, on the other, have to give proper incentives (and to control) financed ventures for maximising the value of their investments. That is as to say they manage a kind of "double relationship" (with financiers and with portfolio companies). Henceforth, for properly discussing the focal point of the research we first have to

review the economics behind that relationship and to remind some of the main tools adopted for solving related problems.

Anyway we can't forget that VC is not only a finance phenomenon. In the last decade policy makers in industrialised countries made great efforts for creating conditions suitable for a well developed VC industry. In fact it is clear that VC can play a major role in many of the main theoretical hypotheses on ventures creation (the innovation hypothesis; the hypothesis of the territorial or of the company incubator; the self-employment hypothesis) and that this in turn could result in enhanced economic development and growth. Therefore we will also briefly overview some background literature on "this policy related" issue and recall the main actions implemented throughout industrialised countries.

## **1.1.Background.**

Finance literature was mainly directed at the analysis of the characterising features of VC operations and to the discussion of tools and techniques adopted and of their economic rationale.

As previously discussed, formal<sup>2</sup> Venture Capitalists are managers of someone else's funds, investing them in companies for obtaining best possible results for their principals (the financiers) The relationship with financiers is typically characterised by serious agency<sup>3</sup> problems: capitalists give up the control on their finances, delegating it

---

<sup>2</sup> This is for opposition to "informal" VC, referring to the so called "business angels", i.e. high net worth individuals investing on their own in private ventures (usually at the very early stages).

<sup>3</sup> Jensen and Meckling (1976).

to some professionals, in order to receive back, at a certain future time, the principal with commensurate gains. In the best practice their interests are aligned to those of managers with specific arrangements about time length, distribution and compensation. First of all, funds are not committed for an indefinite period of time, but only for a medium term (let say up to 10 years); moreover cash contributions are often staged across the first two to four years of operations and, after a stated point in time, VC managers commit themselves to make annual distributions of proceeds. A specific role is then played by usual compensation schemes, designed for allowing managers to cover all costs with a fee (expressed as a percentage of committed funds) and to align their interests to those of financiers with a carried interest on investments<sup>4</sup>.

On the other side of the business, the investment process, mainstream financial literature identifies three main distinguishing features:

- Screening: VC managers spend a significant amount of time and great effort in evaluating different investment opportunities. They use not only financial evaluation techniques, but are explicitly concerned about the technology, the strategy, the competition potential, the contract terms and all the issues related to the management team . Specifically management risk is one of the most common source of uncertainty that VCs identifies (Kaplan – Stromberg (2001)), at such extent that many authors consider management contributions one of the most valuable benefits to portfolio companies by Venture Capital injections. For example Hellmann and Puri (2002) provide empirical evidence that there are VC value added inputs that go beyond what suggested by traditional financial

<sup>4</sup>Sahlamn (1990) report a 20% entitlement on fund's gains.

intermediation theory, in the direction, above all, of fostering a quicker and deeper professionalisation of start-up firms. Hence it is clear that in the screening process, preceding every single investment, many different issues and problems are addressed, so that none could cast doubts about the great amount of effort and costs absorbed in this initial phase. Some data, reported among the others by Giovannini (2003), highlight the overall seriousness of the process: 50% of proposed investments are eliminated in the pre-analysis phase, 35% after brief analysis, 14% after detailed analysis and only a tiny 1% of proposals receive finance at the end<sup>5</sup>.

- Contracting: VC investments have to solve many different problems of information asymmetries, alignment of incentives and so on. Kaplan and Stromberg (2000 and 2001) identified the main features of investment contracts and related them to financial contracting theory. Usual VC contracts show some main features:
  - o separately allocate cash flow rights, voting rights, board rights, liquidation rights and other control rights;
  - o claims often correspond to holding of a Zero-Coupon debt and voting equity;
  - o different shareholder rights and future financings are contingent on observable measures of financial and non financial performance, especially in the earlier stages of the relationship with the entrepreneur;
  - o allocation of rights is such that if the venture performs poorly the VCs obtain full control;

<sup>5</sup>I will also provide later on some data from our field research.

- for mitigating the potential hold-up problem, non compete and vesting provisions are widespread used.

With this important empirical support, it is straight to understand how VC managers always consider with priority issues related to the structuring of contracts, to the amount invested and to the staging of funds (Sahlman 1990).

- **Monitoring:** at the end VCs are concerned with having cash back, i.e. with the assessment of the performance of investments; therefore they need to control that managers of investee companies are effectively committed to obtain good results. In fact VCs play a large role in recruiting the senior management team, in assisting ventures with different business concerns, in facilitating strategic relationships with other companies or in designing employees compensation schemes. Any way it has to be noted that, if on one hand VCs really play a nurturing function, on the other some results (Kaplan and Stromberg (2001)) indicate that they do not intend to become too much involved in the company to an extent that would be too much time consuming (costly).

Clearly enough, all the described process, with its features, is targeted to the ultimate objective of VCs: obtaining the greater possible return on every single venture. Henceforth VCs always have in mind that in a medium term horizon they have to divest: much of their job is functional to that. In the practice, three main divestment (“exit”) options can be individuated:

- the “go public” option, which is the exit through the stock market with an IPO;

- the trade sale option, which is the sale of the stake in the company to strategic or financial investors;
- the buy-back option, i.e. the commitment of the entrepreneur to buy VCs stake s.

Some authors investigated the impact of available exit ways on the development of the VC industry. Specifically it is worth to cite the Black and Gilson 1998 study: they found that a well developed stock market plays a major role in fostering VC investments<sup>6</sup>. A rationale for this was individuated in something beyond the simple divestment opportunity for VCs, that copes with the attractiveness of VC finance on the demand side (entrepreneurs). In fact, with a concrete “go public” option, there could be the opportunity of an implicit contract over control<sup>7</sup>, such that the entrepreneur can reacquire it by making VCs exit through an IPO.

### **1.2.VC oriented policies.**

Great attention was also devoted to the problem of how to create a VC industry, as well as to the related public policies. In the last decade an extensive literature discussed how VC can foster innovation and development and how public authorities could promote a well developed VC industry<sup>8</sup>. Many different programs have been in place in industrialised countries. The U.S. market itself, the greatest in the world, has been, and

<sup>6</sup> In this direction is also Michelacci and Suarez (1998).

<sup>7</sup> As it has been suggested, entrepreneurs’ fears of losing control could be one of the main factor hindering a greater demand for VC finance.

<sup>8</sup> For an extensive review see Lawton (2002).

it is, assisted by public policy programs<sup>9</sup>. Similarly we can list Israel, Belgium, the Netherlands, Germany, Sweden, Finland, Ireland, Scotland, UK, Denmark, Austria, Australia and Canada as countries where policies have been directed towards the Venture Capital market. The European Union, as well, is backing the huge European Investment Fund (EIF), which has the scope of making equity investments in private ventures. Some of the above programs are great success stories: not only the U.S., but, remarkably, Israel (Avnimelech and Teubal (2002), IFISE report (2003)).

Theoretical and empirical studies have deeply examined the fact that in the market there could be a so called “equity gap”<sup>10</sup>: the possibility that some entrepreneurs searching for risk finance are rationed, therefore indicating a specific VC market failure. If this would be the case, there is a clear scope for public authorities to try to reduce this rationing. It has to be considered, moreover, that early stage investments are the greater deputies to spur innovation<sup>11</sup> and stimulate economic growth (policies objectives). Many different tools have been individuated and used for stimulating the risk capital supply, above all government equity investments, grants, loans, tax relieves and guarantees; directed to re-shape the risk-return profile of VC investments for private investors. Of these, anyway, it is still not very clear what could better foster a proper VC supply. A recent study (Da Rin, Nicodano, Sembenelli 2004) empirically demonstrates that, overall, is indeed a well developed stock market which positively affects Venture Capital availability; in a weaker way, a favourable capital gains tax regime is also important.

<sup>9</sup> See for example the SBIC program, dating back to 1958. An extensive list of U.S. initiatives can be found in Lerner (1999).

<sup>10</sup> This gap could rely between the informal financing options and the established Private Equity market; see for example Harding (2000) for reference to the U.K. case.

<sup>11</sup> In fact it is proved that VC can play a big role in promoting innovation (Kortum and Lerner (1998)).

Many authors have nonetheless pointed at the fact that the supply side is only a part of the story. For having a sound VC market it would be crucial to sustain a strong and aware demand side for risk capital. In this sense Harding (2002) significantly discuss of a possible “knowledge gap”: “...those supplying venture capital do not know about the good, investable projects across all economic sectors. Those demanding venture capital are not aware that venture capital is a suitable means of growth finance or do not want to give up some control of business to allow it to grow.” Therefore it has been addressed that policies have to be directed also at stimulating the SME sector in general and at promoting a widespread entrepreneurial culture ( Queen (2002), McGue (2002)).

## **2. Methodology**

From a different perspective (we would say a “micro-view”), in this paper we try to understand which Public Authorities interventions can promote the development of the VC market.

Moving from the above framework, the research is directed at the evaluation of different incentives and at the assessment of the perception, among venture capital and private equity managers, of the general environment of NMS. We interviewed directly a certain number of practitioners through the support of a semi structured questionnaire. This was conceived to answer some specific research questions; first of all we tried to grasp a general judgement on governmental VC incentive schemes; then we specifically asked to evaluate different kinds of incentives. Significant attention was devoted also to

understand the impact of some possible restrictions and to analyse what are the minimum perceived background conditions of VC involvement in certain regions/countries. Finally, throughout all the research, we tried to understand the general attitude towards UE NMS in general (Latvia specifically).

The sample was not statistically selected, but results can have a general validity as we interviewed VCs from different types of institutions and different European Countries.

### **3. Results.**

Interviewees generally had a positive attitude towards eastern European countries. Nevertheless they showed only a bare knowledge about main aspects of those countries. Specifically they really didn't know much on the legal framework, the deal flow potential, the entrepreneurship attitude/culture, the educational level, the size of the economy and so on. Moreover, as the research copes with schemes in which the government or public authorities have to work with private institutions, strongly market (and profit) oriented, we wanted to evaluate our ex-ante concern of going to analyse a biased sample, i.e. a sample with prejudices "against" public involvement. In fact, only a minority (four) of the interviewees' institutions had previous experience in investments or partnerships with the public sector. Anyway, the others didn't have negative preconceptions and, more interestingly, the above fours generally evaluated positively those experiences with, in one case, even a judgement of significant appreciation.

### **3.1. Incentives.**

The first point has been to analyse how the different possible incentives schemes are judged. Asking about the general and compared effectiveness of different programs we obtained some pretty differentiated judgements and hints. First of all there was a widespread concern about the exit ways available, so that many managers would really appreciate a commitment by the public authorities in fostering or providing means of divestment for the venture capitalists. This is a result in line with the mainstream literature<sup>12</sup>, which indicates the necessity to convert the investments in cash in a medium time horizon as one of the characterising features of VC and PE.

Some other interesting and differentiated points emerged in the interviews. Among all, the main are outlined (ordinate) here below:

- a) credit availability or support;
- b) background conditions;
- c) presence of specialised professionals;
- d) subsidies to administration expenses.

Point a) is related to the fact that some kind of institutions structure either their deals either the target companies (or even both) with an high leverage; for them an easy access to credit, or a credit line made available by public authorities, could be an important plus in the potential playing field. With point b) the managers indicate the great importance of working in a country/region where there is a positive attitude and

<sup>12</sup> For a general discussion of VC/PE investment process see the famous Sahlman (1990) article.

general awareness towards venture capitalists and, above all, a sound and transparent legal system. Moreover, in structuring the deals and managing relations with portfolio firms, is crucial (c) the presence of prepared and specialised professionals. In fact VCs need to lay down tailored contracts for each participation, to audit and revise the target companies, to manage, there on, all arising problems with those firms. Another important policy (d) could be the supply of some kind of help and support for the operations in the initial phases of a management company.

Whether the government would post some capital for the establishment of the funds, the important is that this would be done with the right timing and staging, typically with a “private” mind. Indeed it has been suggested that public authorities could have a major role in seed finance. In fact the characteristics of first-early stage rounds are peculiar under many facets, things that can hinder private investors from this kind of operations:

- low dimension,
- high risk,
- difficult predictability of future cash flows.

The tax issue seems to be somehow puzzling, as, in general, is considered not especially relevant within UE; nevertheless some interviewees suggested the importance of not neglecting it, in a specific manner about capital gains. Here much depends on the compensation schemes the management company use to arrange with the investors (its supplier of capital). If managers received a high portion of their revenues in function of net capital gains, then the taxation would become a potential incentive.

Going to a more detailed analysis we asked some questions (represented in Table 1) with the purpose of assessing the potential impact of different incentive tools. Interviewees gave a score to different hypotheses of incentives from 1 (not effective at all) to 5 (very effective). Results are reported (descriptive statistics) in Table 2.

At this level of analysis, we can grasp some general indication. For example the government, in order to maximise the number of potential targets of an incentive scheme, should avoid to offer only partial downside guarantees (A2) or co-investment options (A6). On the contrary it could use incentives on the upside (A3) or the reputation-making<sup>13</sup> device of a significant minority participation in the VC fund (A5).

Nevertheless it is more interesting to note how there is a clear differentiation of preferences among different typologies of players. In fact we can distinguish at least three different categories of VC/PE investors:

- captive funds (bank backed);
- large independent international funds;
- national - regional funds or partnerships.

The firsts are funds entirely, or in majority, financed by, or through<sup>14</sup>, a single bank and managed by a branch of the same institution. The second kind are the typical institutionalised and specialised companies managing one or more huge funds (> 1

---

<sup>13</sup> One interviewee said: “ *If I have a government participation in an unknown country, at least I can use it in the fund raising as a proof that there is some kind of support to the initiative; it would be an important business card to play with financiers*”.

<sup>14</sup> This refers to the fact that some banks have promoted the establishments of closed -end funds through the offer of quotes to other investors (qualified private or institutional ones).



billions € on an international field, both for finance raising and investments. The thirds are smaller funds (usually in the range 10 to 200 millions €) financed by various types of private investors and managed by small independent professional companies.

For instance each of these three types has barely the same weight within our sample. Hence, here on, we are confident on the possibility of offering a differentiated analysis based on the above distinction<sup>15</sup>.

Specifically, bank backed funds are really not sensible to incentives on the downside and to subsidies for administration expenses. On one side, in fact, they fear that guarantees, in various forms, could weaken the commitment of managers; on the other hand, they can often rely on already existing bank's branches in the objective countries, so that they wouldn't afford great new expenses for the location there. Indeed these institutions generally<sup>16</sup> consider as very important the possibility of operating with funds of significant dimension, at least 50 millions €. Anyway they are the more open to the hypothesis of considering opportunities of investments in Eastern European Countries (NMS).

The other two types, even if for different reasons, are, in our sample, much more reluctant to consider operations in not well developed countries. International funds judge essential, before deciding to open a new branch, to be pretty confident on the presence of a good background of existing start-ups as they want to be in the condition

---

<sup>15</sup> Also Van Osnabrugge and Robinson (2001) clearly identified possible differences in the behaviour of captive and independent funds; they attributed this to a greater "agency pressure" for the latter kind.

<sup>16</sup> There is one important exception: one of the interviewees from this category was concerned of funds over-dimensioning for efficiency consideration, so that he suggested the optimal dimension of 10 millions.

of examining a substantial deal flow. Regional funds, instead, are hindered by the kind of capital providers they have and the kind of relationships they manage with them; the issue has to do with the fact that it would be very difficult to justify such a far location where investors can not have any feeling of direct control. Indeed both international and regional funds are extremely concerned about exit problems, and suggest that the public authorities should take actions in the direction of fostering the development of a capital market and should, otherwise, provide exit options for investments in successful companies.

Analysing the single hypotheses, we observe that small funds are relatively more attracted by the subsidies to administration expenses (A4), for obvious reasons, and by governmental underwriting of a certain stake of the fund at the same conditions as private investors (A5). Managers see this last hypothesis as an important signal of the existence of some commitment, which they can spend in the fund-raising process.

Big international funds are, among all, the relatively more prone to the scheme of public co-investments in the single companies (A6), as they consider this a good device for exploiting all the opportunities (even those, in case, too big for the investment policies previously agreed) and for leveraging operations.

### **3.2. Dimensions and time horizon.**

A second part of the research is devoted to understand the optimal features of regionally specialised Venture Capital funds (for, let say, a small NMS). We asked to estimate the optimal funds' dimension and time horizon, and the feasible size of a single investment.

The median optimal fund dimension is of 20 millions € with a mean even greater and a significant variation within the sample (Table 3). Only 1/3 of the operators are inclined to manage funds under the median dimension, and 1 out of 4 would anyway like to have funds double than that. In this result a major role is played by the custom of structuring the management fee as a percentage (usually 2 to 3%) of managed funds. Henceforth is clear how too tiny funds wouldn't allow to earn enough money for the coverage of all costs. It could be a relevant issue also the fact that, for major players, managing big funds is a consolidated habit and a typical distinguishing feature.

On the optimal time horizon (Table4) there is more consensus. A total length of around 10 years is generally perceived as suitable for investing in new markets. Frequently this is the time horizon also of managed funds in western UE countries. For NMS someone has suggested the necessity of longer periods, up to 12 years, but anyway the generality of managers consider a potential risk for efficiency the case of diluting in a too long time the investment period; at most there could be a relaxation of time restraints on the divestments.

Finally we tried to evaluate which is considered the optimal dimension of the single investment in New Member States (Table 5). The median of collected answers is 1 million € and only 20% of the sample accept the idea of going below such threshold.

This result is ascribable in part to economy of scale reasons within the dynamic of costs of the management company itself, in part to the presence of potential problems of “follow up” on the single investments. The last issue copes with the fact that managers

keep always in mind the fact that an investment is usually made of a certain number of rounds and, very often, the final overall amount of it is not clearly foreseeable: the strong risk is the possibility of falling in a situation where a company needs a capitalisation, let say for finally succeeding in its business, but the Venture Capitalist can not underwrite it for whatever reason.

### **3.3.Restrictions.**

A third part of the research analyses what would be the effect of the imposition of some restrictions by the governing authority. More specifically we aimed at:

- a) understand which is the minimum acceptable cap<sup>17</sup> on single investments,
- b) evaluate the impact of such an imposition on administration expenses,
- c) assess whether the costs of reporting to the governing authority are significant, whether not.

Results on point a) are in line with the optimality issue on single investments we discussed above. The median minimum cap accepted is 1 million. If forced to, 40% of the sample can accept the idea of going below; among these the median equals the mean: 625.000 € In general, managers had some difficulty in estimating the increase in management costs (point B) due to the imposition of a cap on single investments lower than the optimal dimension; indeed much depends on the cost structure of the management company. On the contrary, almost 40% of the interviewees estimated a perfect inverse relation; let say: the imposition of a size half than the optimal would

<sup>17</sup> See sub 5.

cause double management costs. This, in turn, implies that for being effective in inducing investments half the optimal size, public authorities should cover half of the resulting management costs.

Clear and interesting are the findings on point c): all the interviewees guessed that additional costs of reporting to a public authority would be absolutely negligible; indeed only one manager estimated that these would be greater than zero. In fact no one expects the requirements of such reporting tougher than what needed by private investors in the fund; there is a continuous flow of reports, evaluation and assessments from the managing team to capitalists. This is one of the devices adopted for solving the agency problem between suppliers of funds and managers<sup>18</sup>. Moreover someone suggested that the reporting activity is vital to the management company itself, as it helps in paying a continuous attention to ongoing operations.

### **3.4. Deal flow and background conditions.**

The last step of our study wants to estimate what would be a sufficient deal flow for making a country/region interesting for VC operations and which the expected number of existing start-ups. The issue is constrained to the hypothesis of funds dedicated to investments in a single country; as we cope with small economies, it then should be born in mind a significant caveat on reported results.

Interviewees were asked to evaluate a deal flow such as to make them consider the option of establishing a permanent branch in NMS, with specific reference to Latvia.

<sup>18</sup> Sahlman (1990).

We distinguished potential deal flow between simple contacts, formalised demands for finance and complete business plans.

VCs were very sensible to the issue of potential deal flow, but, as reported in Table 6, it is evident that many managers, accountably, weren't able to give us a point estimate and preferred not to answer (n.a.). The 36% of our sample, instead, would like to be in the condition of being informally contacted 200 to 500 times.

Indeed the majority (55%) consider optimal the possibility of examining 21 to 50 complete business plans. The analysis on these would finally lead to investment decisions. In our sample the rejection rate on examined proposals is between 10 and 30 percent. The datum sheds light on the high level of "abortion costs" for management companies and, therefore, partially justifies the reluctance<sup>19</sup> of accepting too small funds (with the implication of too tiny management fees). In fact the examination of a complete business plan, the evaluation of the opportunity with proper financial analysis, the scrupulous study of prospective competitive threats and advantages, requires a long time of a qualified resource's work, which is in line of what reported in the introduction about the efforts in the screening phase of the investment process.

### **4. Conclusions and Policy Recommendations**

With the analysis here described we obtained some interesting results, partially in line with the mainstream literature, partially offering new hints to be further investigated. Summarising, from our research mainly emerges:

<sup>19</sup> Supra, table 3.2.

- a stigmatisation of the importance of exit options – divestment ways;
- a general interest on “upside” incentives, motivating managers in the “right” direction, rather than on “downside” guarantees;
- the differentiation of typologies of funds – management companies;
- the reluctance to consider the feasibility of too small single investments;
- an high attention on the potential deal flow;
- a strong selection of proposed deals, implying high administration costs;

With the above points in mind we can afford the exercise of extrapolating some policy recommendations for those governments who would like to try to attract Venture Capital / Private Equity by means of incentives schemes and, more generally, public administration driven actions<sup>20</sup>.

It appears to be very difficult to design an optimal incentive scheme; as showed, there is among funds managers a high differentiation of preferences on proposed hypotheses. In the light of what discussed insofar, we think that interested public authorities could refer their policies to five main drivers, hereon enumerated.

1. Tailor the incentive to the situation.

Every scheme intended to attract VC for stimulating economic activity and innovation should be made on the basis of an in deep analysis of many different factors. The public authority always has to assess the potentiality of the

<sup>20</sup> We would like to cite as important contributions, although in slightly different directions, to the issue of finance availability in transitioning and developing economies the articles from Bliss (1999) and from George and Prabhu (2003). The first identifies in privatisations an important deal flow source and, moreover, discusses how VCs could use a different set of investment criteria in transitioning economies, specifically with a more “proactive” attitude. The seconds indicate in Developmental Financial Institutions (quasi-governmental organisations) a source of finance potentially successful in fostering early stage ventures in developing countries.

country/region, has to understand needs on both the side of entrepreneurs and the side of investors, has to study foreseeable effects of its projected policy, has to adopt a market oriented mind in order not to lower expected returns and not to burden operation with bureaucracy. Every single country, every single market, every single time can be approached with different optimal schemes.

2. Tailor the incentive to the investors.

We noted how there can be identified a clear segmentation of different typologies of VC funds. Captive funds, big international funds and “locals” are three clearly different players of the VC market and have strongly diverse preferences on management issues. Therefore the public authority in charge of an hypothetic scheme must consider that different incentives can attract different kinds of investors. For example we have seen that upside incentives are mainly suited for captive funds, whilst subsidies to administration expenses are better designed for small local funds/partnerships. This doesn’t mean that a government should launch a fit for all program, only it should be aware of what kind of investors is going to eventually attract.

3. Foster a favourable general environment for venture capitalists.

First of all, legal systems have to contain all the instruments necessary to the structure of typical VC participation contracts and relationships. Then, the presence of a well developed or, at least, developing capital market is an indispensable turning key in making successful an attempt to attract risk capital players. Finally it is very important that there is, among entrepreneurs, among scientists and so on, a general awareness of what VC is and of which are

potential sources of finance. A government action on these three points is absolutely not to postpone at any other consideration.

4. Promote the image of a positive attitude by the government towards VCs.

Investors and potential players should be confident that there is an active interest by the public authorities in making the country prepared to support their activity and operations. This could be done by disseminating the knowledge on which of the above actions have been implemented or are going to be. The point definitely consists in promoting the idea that the government would always be a conscious and potentially active partner for private investors.

5. Foster a proper demand for VC finance.

The demand side is an essential part of the market. Fostering the supply is not sufficient to make the game play. This issue, highlighted also by many cited authors<sup>21</sup>, should consist in the fact that government have to sustain small enterprises with many different measures beyond a program for VC; namely with grants, loans and, what maybe is more important, with a sound “incubator” like program.

Finally, summarising, we would say that the critique analysis of situations, the distinction of different kinds of players, the setting of a positive environment, the “marketing” of what done and the support to the demand side could be the drivers of every good and serious policy action<sup>22</sup> in risk capital fostering. A “mix of policies”,

---

<sup>21</sup> In this sense Harding (2002), McGlue (2002), OECD (1997b).

<sup>22</sup> We would like anyway to remind an important notice citing a paragraph from OECD (1997a): “...such schemes when poorly designed could lead to inappropriate investments at substantial public cost. Government programmes could subsidise or maintain unviable firms or ventures, which are not attracting private capital because they do not represent good investment opportunities. They may also create distortions if investment decisions are based on non-economic criteria...”.

with Teubal and Andersen (2000) words, could be what is needed for stimulating development friendly economic environments.

**TABLES**

**Table 1. Incentives.**

Question	Description
A1	The public sector participates to the fund as a passive investor with 40% of the capital and gives an option to buy it out at the original value.
A2	The public sector guarantees the private investors in the fund (limited partners) that they will not lose more than 50% of their investment in any case.
A3	The public investor profits will be paid only until 5% IRR is achieved, any better profit will be distributed to the private investors and management company pro-rata.
A4	The public sector pays to the management company 100.000 Euros per year for the first three year of operation and to cover part of its expenses (maximum 50%).
A5	The public sector participates in the fund with 25% of the capital “pari passu” (at the same conditions as the private investors), however there are no restrictions on the fund’s operation.
A6	The public fund autonomously co-invests together with the private funds in selected firms with the same amount of money (50%). There are no restrictions to the private fund.

**Table 2. Incentives’ scores statistics.**

statistics	A1	A2	A3	A4	A5	A6
mean	3,23	2,00	3,64	3,00	3,36	2,56
median	3,00	2,00	4,00	3,00	3,00	2,00
variance	1,77	0,80	0,85	2,19	1,85	2,28

**Table 3. Optimal fund dimension statistics.**

Mean	26.591
median	20.000
std dev	17.258

Euro rounded values in thousands (1.000=1.000.000).

**Table 4. Optimal time horizon statistics.**

Mean	8,77
median	10
std dev	2,4

Time expressed in years.

**Table 5. Optimal minimum investment dimension statistics.**

Mean	1.357.143
median	1.000.000
std dev	788.685

Euro units.

**Table 6. Frequency of estimates for necessary deal flow.**

simple tel./email enquiries	frequency	Formalised demands	frequency	complete business plans submitted and evaluated	frequency
<100	0,18	< 50	0,36	<20	0,27
101 to 200	0,18	51 to 100	0,27	21 to 50	0,55
201 to 500	0,36	>100	0,09	>50	0,09
>500	0,09				
not answered	0,18	not answered	0,27	not answered	0,09

## REFERENCES

- AVNIMELECH G. – TEUBAL M. 2004, “Venture Capital Start-Up co-evolution and the emergence & development of Israel’s new high tech cluster”, *Economic Innovation New Technologies*, pp.33-60, vol.13 (1).
- BLACK B.S. – GILSON R.J. 1998, “Venture Capital and the structure of capital markets: banks versus stock markets”, *Journal of Financial Economics*, pp.243-277, vol.47.
- BLISS R.T. 1999, “A Venture Capital model for transitioning economies: the case of Poland”, *Venture Capital*, pp.241-257, vol.1 (3).
- DA RIN M. – NICODANO G. – SEMBENELLI A. 2004, *Public policy and the creation of active Venture Capital markets*, IGIER working paper 270, Milano.
- DUBOCAGE E. – RIVAUD-DANSET D. 2002, “Government policy on Venture Capital support in France”, *Venture Capital*, pp.25-43, vol.4 (1).
- GEPRGE G. – PRABHU G.N. 2003, “Developmental financial institutions as technology policy instruments: implications for innovation and entrepreneurship in emerging economies”, *Research Policy*, pp.89-108, vol.32.
- HARDING R. 2000, “Venture Capital and regional development: towards a Venture Capital system”, *Venture Capital*, pp.287-311, vol.2 (4).
- HARDING R. 2002, “Plugging the knowledge gap: an international comparison of the role for policy in the venture capital market”, *Venture Capital*, pp.59-76, vol.4 (1).
- HARRISON R.T. – MASON C.M. 2000, “The role of the public sector in the development of a regional Venture Capital industry”, *Venture Capital*, pp.243-253, vol.2 (4).
- HELLMANN T. – PURI M. 2002, “Venture Capital and the professionalization of Start-Up firms: empirical evidence”, *Journal of Finance*, pp.169-197, vol.52 (1).
- JENSEN M.C. – MECKLING W.H. 1976, “Theory of the firm: managerial behavior, agency costs and ownership structure”, *Journal of Financial Economics*, (3).
- KAPLAN S.N. – STROMBERG P. 2000, *Financial contracting theory meets the real world: an empirical analysis of Venture Capital contracts*, NBER working paper 7660, Cambridge.
- KAPLAN S.N. – STROMBERG P. 2001, *Venture Capitalists as principals: contracting, screening and monitoring*, NBER working paper 8202, Cambridge.
- KORTUM S. – LERNER J. 1998, *Does Venture Capital spur innovation?*, NBER working paper 6846, Cambridge.
- LAWTON T.C. 2002, “Missing the target: assessing the role of government in bridging the European equity gap and enhancing economic growth”, *Venture Capital*, pp.7-23, vol.4 (1).
- LERNER J. 1999, “The Government as Venture Capitalist: The long run impact of the SBIR program”, *Journal of Business*, pp.285-318, vol.72 (3).
- MCGLUE D. 2002, “The funding of Venture Capital in Europe: issues for public policy”, *Venture Capital*, pp.45-58, vol.4 (1).
- MODENA V. (ed) 2003, *Israeli financing innovation schemes for Europe*, IFISE Final Report, University of Pavia, Pavia.
- OECD 1997a, *Financing innovation*, OECD working papers vol.V n°9, Paris.
- OECD 1997b, *Government Venture Capital for technology-based firms*, OECD GD(97)201, Paris.
- PIPER A. 2000, “Finance in UK High technology small firms: an overview”, *Venture Capital*, pp.143-153, vol.2 (2).
- QUEEN M. 2002, “Government policy to stimulate equity finance and investor readiness”, *Venture Capital*, pp.1-5, vol.4 (1).
- SAHLMAN W.A. 1990, “The structure and governance of Venture Capital organisations”, *Journal of Financial Economics*, pp.473-521, vol.27.
- TEUBAL M. – ANDERSEN E. 2000, “Enterprise restructuring and embeddedness: A policy and legal perspective”, *Industrial and corporate change*, pp.87-111, vol.9 (1).
- VAN OSNABRUGGE M.V. – ROBINSON R.J. 2001, “The influence of a venture capitalist’s source of funds”, *Venture Capital*, pp.25-39, vol.3 (1).
- CASELLI S. GATTI S. (eds) 2003, *Venture Capital. A Euro -System Approach*, Springer-Verlag, Berlin, London.