



CAHIER DE RECHERCHE  
2010-04

CORPORATE FINANCE: THE ROLE OF THE PRIVATE EQUITY  
FUNDS IN RESTRUCTURING OF THE ECONOMIC PRODUCTIVE  
TISSUE.

Sonia BENSLIMANE

Michel POIX

(IMRI)

# **Corporate finance: The role of the private equity funds in restructuring of the economic productive tissue.**

Sonia BEN SLIMANE  
Michel POIX  
(IMRI)

## **Abstract**

The question of financing innovative small business is determinant in the current context. Giving the share that they represent in the market, they contribute to increase productivity of the economy. The problems of financing the SME's are related to the almost intangible specificity of their assets that give them only a limited access to the traditional financing channels. Moreover, the financing becomes risky as the decision maker has no history to assess the potential of development on the basis of previous results. The traditional funding channels are incompatible with the context of a value creation based on innovation. Private equity activity is in this regard a better mode of financing innovative enterprises added to the advantage of assuming the risk associated with their specific characteristics. From an economic point of view, private equity funds can boost and contribute to the value creation process.

## **Introduction**

The question of financing innovative SME's is crucial in the current context. Giving the share they represent in the market, they contribute to increase productivity of the economy, based on innovation. However we note that the share of R&D expenditures from GDP is too low, it averaged among the European countries 2.13 % and it doesn't reach 3 %, referred to 2010 (OECD, 2007). On the other hand, several reports (OST 2006, Futuris, 2006) emphasize the inadequacy of R&D financing in France and suggest a more dynamic involvement of private R&D financing and the support of innovative SMEs. In this context, the problems of financing the SME's become important while the traditional channels of financing firms are not suitable for such activities. This is due to the almost intangible specificity of their assets and to the specificity of the highly innovative profile, with projects characterized often by high risk of failure and uncertainty. This paper tries to explain the reasons of this lack of equity for the case of innovative firms. In the following we try to explain the reasons why the traditional financing channels don't sustains the SME's activities mainly in the their early stage. In the second section we introduce the potentiality of the private equity in bringing equity and experience and advice the innovative firms in order to create an out put value. Then we highlight a current problem related to the lack of implication of the private equity in the early stages of the innovative firms, when they are more likely to spread the risk characterising them. In conclusion we try to propose some recommendations to reduce this divergence.

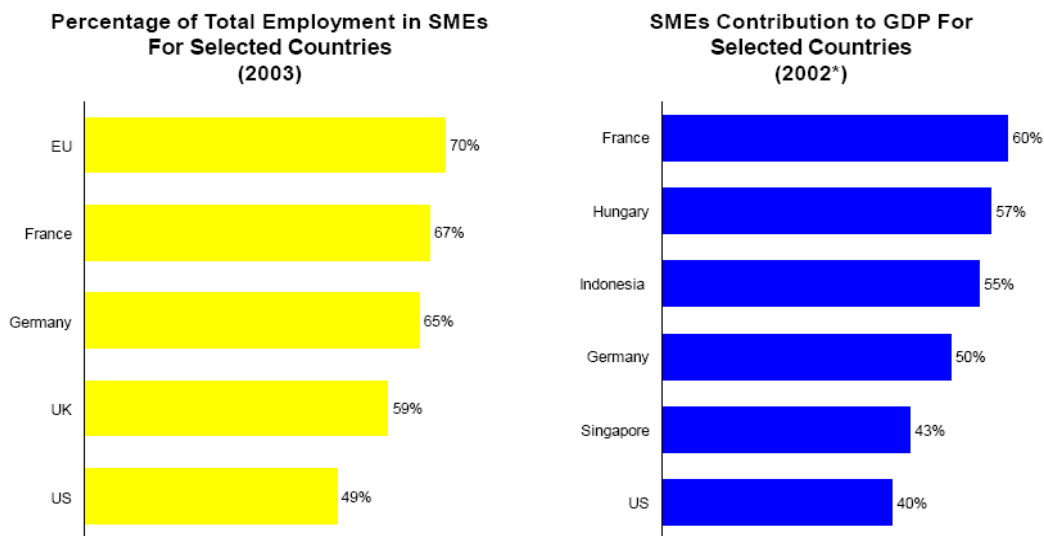
## **1. Financing innovative SME's: evident constraints**

The globalization of economy has increasingly drawn SME's into global cross border activities while they share a relatively important part of the market. Innovation has become a strategic instrument for the economy development and it becomes a source of comparative advantage. The specificity of the SME's characteristics concerns mainly the intensive activity of R&D. Their strategy is based on a specific combination of product / market, which allow them to be different in terms of technology and commercial opportunities and creating new niche markets. Indeed, the specificity of an innovative company concerns not only the creation of new technology and but also the organization allowing them a better reactivity to the environment requirements. In fact, the size and the specificity of products or services they propose allow more flexibility and a better adaptation and ability to the market evolution.

SME's need for that purpose, an appropriate environment in which they could have facility of access to short and long term funding and equity at reasonable rates. They also suffer from a lack in managerial skills and business planning. They need advice, monitoring and knowledge of the market opportunities. The following section offers through an analysis of the characteristics of innovative SME's the main problems that they face. We highlight the financial problems that reduce the possibility of financing sustains from the classic funding channels which could be explained by the lack of guarantees to cover the risk.

## Funding constraints

The innovative SME's have the particularity of a better responding to the market requirements given to their competitive business. As known, the SME's are source of innovation and contribute consequently to the development of new technological sectors, by proposing new products and services with a new approach. Thus they may increase the competition in the key technology sectors. Moreover, as shown in the following pictures we note the contribution of the SME's development to the job creation and the GDP increase:



*Note: (\*) Figures vary by country from 1997 to 2002  
Source: European Commission; US Department of Statistics; OECD; UNECE; World Bank; Euromed*

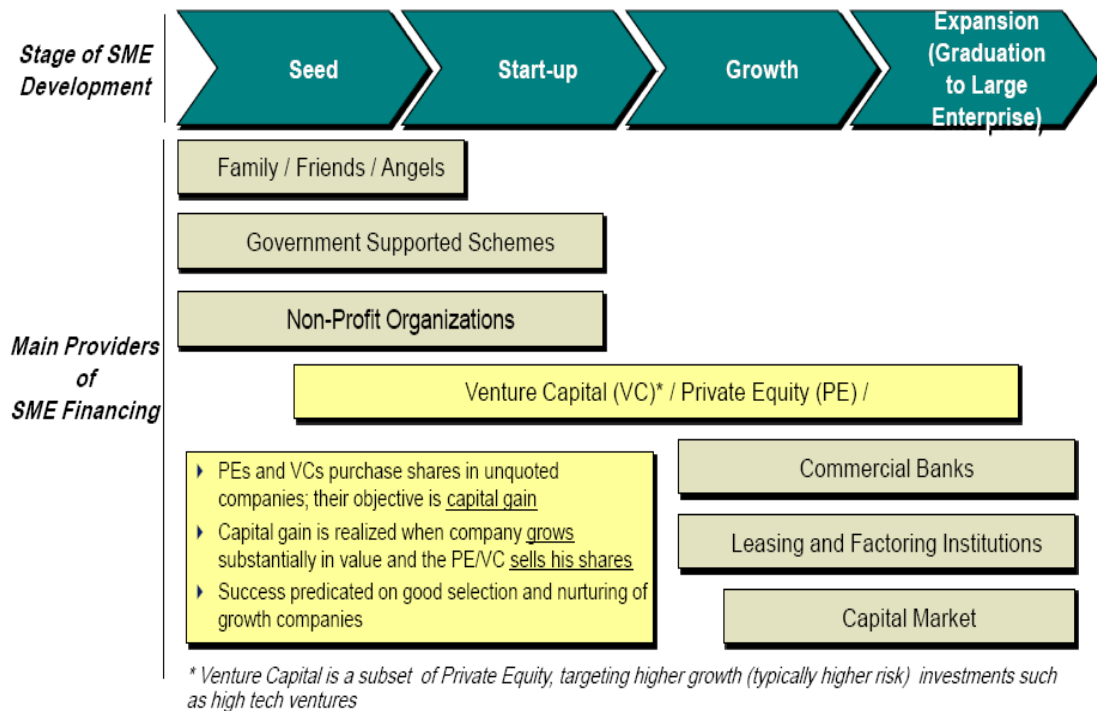
But on the other hand they encounter many barriers to develop their potential. In fact, the nature of assets mobilized by SME's is often intangible (Noe and Rebello, on 1996) which is more integrated into the human skills, whereas traditional firms accumulate their wealth in fixed assets. Consequently, on a given level of debt, the risk of bankruptcy is higher for firms investing in R&D

than in equipment or machinery. More over, the development of innovative businesses may be dominated by "irrational" specificities (Bernasconi, Monstet, 2000) that related mostly to uncertainty and risk. Uncertainty refers to the probability of technical and commercial failures. It concerns the issue of the activity, in terms of technical validity and effectiveness of the implementation in the market. It is even more important when there is neither demand for the product on the market nor the technology and business value recognizable at this stage. On the other hand the profitability expected by the investors is related to the existence of a demand on the market, which seems to be important given the risk assumed by them. This means that as the risk increases, profitability expected by investors shall be such that they assume the risk. As a result of this, lenders may require high-level guarantees for such projects. However, the proposed guarantees are often "foreseeable and not effective" (Duprat, 2006). Therefore there is no tangible argument for investors because the firms have not history to asset the profitability predictions (Copeland, Koller and Murrin, 2000). There's no financial history and no experience that discourages traditional creditors to take a risk of investing. Otherwise, large enterprises may benefit from funding for new projects because they argued on the basis of their previous results. Moreover, firms with high innovative profile are more exposed to the situations of asymmetry of information, and on the other hand adverse selection and moral hazard problems may appear (Himmelberg and Petersen 1994).In such situations, the opportunistic behaviours are very frequent (Bebczuk, 2003). The asymmetry of information increases when the uncertainty on the profitability is high and the intangible dimension dominates the project. The Agency theory based on

relationship "principal-agent" can be applied to the context of innovative SME's. It describes the relationship between the shareholder –principal- who seeks to maximize the value of the firm and the manager \_ the agent - who seeks to maximize the income and the size of its own business (Hart and Holstrom, 1987). The divergence of interests added to the intangibility of the assets, could lead to "opportunistic" behaviours. Giving that, banks protect themselves either by increasing the cost of loans (Julien, 1997) or by requiring guarantees that are hardly assumed by business at this stage (Hege 2001, Lev 2001). In this context Hogan and Hutson (2005) mention that entrepreneurs or managers perceive this information asymmetry as a financial barrier foremost in bank credits sector, whereas in venture capital financing it is possible to overcome.

Thus, the implication of the different sources of funding for a project, such as banks, financial markets and other loans, depends essentially on the extent of the risk related to the project, to the expected profitability and therefore the proposed guarantees. Thus, the risks assumed by lenders justify the guarantees required but reduces in the same time the loans opportunities for innovative projects. Aghion, Klemm, Bond, and Marinescu (2004) observe that innovative companies conducting intensive R&D, use debt financing less intensively. With growing intensiveness of R&D the level of debt financing decreases, however companies with low level of R&D exploit more debt than companies with no research and development. Consequently, the lack of loans and equities becomes central and SME's encounter lots of barriers in financing their potential. The picture bellows shows the needs in terms of financing for the SME's according to their development stages:

## Financing Sources Available for SMEs



Especially traditional debt instruments, as credits, become very often inadequate or inaccessible for them and not compatible with the financial requirements of innovative enterprises. Thus there is a linear dependence between intensiveness of R&D and equity financing. The higher the intensiveness of pro-innovation works, the higher probability to use of equity financing. The activity of capital investment or private equity seems to be better adapted to the development of innovative business. The next section proposes through description of private-equity Fund activity and the main implication in innovative activities.

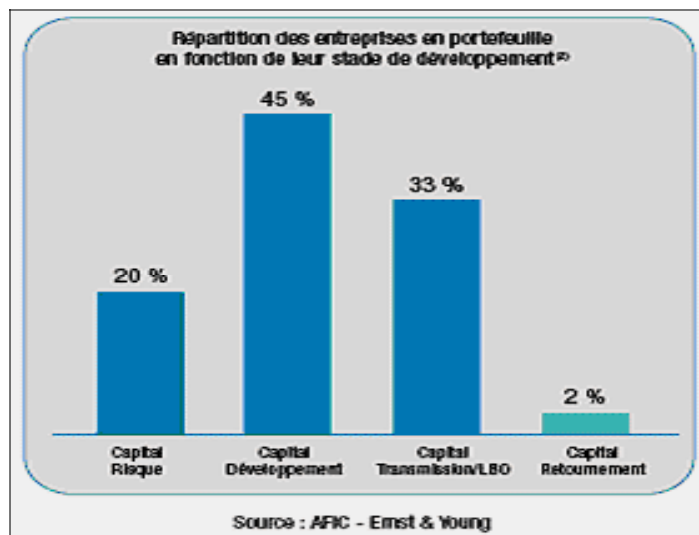


## **2 The Private Equity and SME's development: the two sides**

Equity and debt financing are both connected with high investment risk. In this context, Brouwer and Hendrix (1998) consider that because own capital is usually insufficient to finance technology advanced investments and credit is difficult to receive due to high risk of a project. Thus, equity financing becomes the primary source of financing innovative SME's. Innovative firms often execute projects that exceed the value of their assets, those group of firms will be in fact more dependable on external financing, preferring equity than debt capital (Aghion, Klemm, Bond and Marinescu, 2004). The use of capital investment is an alternative more adapted for unquoted SME's compared to the bank debt, which is typically more expensive (Belletante et al, 2001 and Julien, 1997). Private equity activity is in this regard a better mode of financing innovative companies. This activity extends to all the economic sectors such as the industrial goods, the transport services, software and biotechnology. Private equity funds are involved in the various steps of development of enterprises by taking shares in the capital of companies. The involvement of the Private equity funds is decisive for the stages of creation and development because they bridge the financial gap that the SME's face. The next subsection proposes to describe the main involvement of the private equity in the different stage of the cycle life of firms then underline their contribution in sustaining the innovative activities and bridging the financial gap for the SME's.

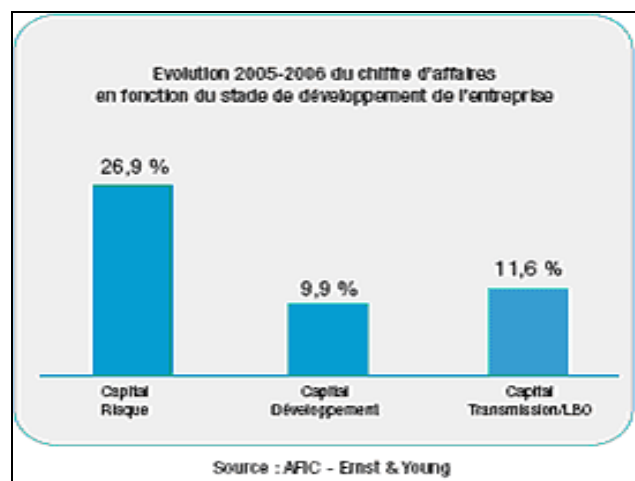
## 2.1 The role of the private equity in the economic growth

Private equity activity developed in Europe since the 1990s. They are considered as a better alternative of financing innovative companies. By taking shares of the firm's capital they contribute in many ways according to the type of involvement. The first contribution is related to increasing the value of the financed firm and the second one is related to creating a more potentiality of exists and more to bridge the lack in managing business, which is a frequent problem for innovative SME's. The private equity activity refers to a wide range of alternative investment including equity investments in unquoted companies, venture investing at early and late stages, large size and mid-size buyout investing, mezzanine debt and mezzanine equity investments, and finally real estate investments. They also refer to a limited partnership in which the general partners invest in private equity on behalf of the fund's limited partners. The funds tend to have a fixed life of 10 to 12 years, and then they are self-liquidating. These funds are expected to sustain innovative firms by taking shares participations in the capital of small or medium-sized enterprises generally unquoted on an average of five years (Bank of France, 2007). As shown in the picture below, the main investments in France concern Leveraged buy-outs with 1/3 of sustained business operations and venture capital which represents 1/5<sup>th</sup> of investments in 2007 (AFIC, 2007):



In Europe, more investors are present on all segments of capital investment, with a dynamic characterized by a significant part of LBO that concerns existing and mostly mature enterprises, for which it is not necessarily question of innovation (Hege et al. 2003). Financing Early stages and development stages represent only 19 % of operations (OECD, 2004), for which is more questions of efficiency and value creation perspective. From an economic point of view, private equity funds boost and contribute to the value creation process. When the private equity funds are involved in a medium-term, two perspectives could be attended. Their financial aim is first to increase the financial assets, and then by their involvement in the management and the strategy orientation, they encourage company to leverage its expertise and gain the value. Concretely, they assist SME's in preparing and up dating the business plans, in financial planning and budgeting, in financial controlling and reporting. They also organize and conduct proper governance and compliance, then introduce partnership and alliances to enhance operations, and they could operate periodical valuations and implement the value creation strategies for the SME's. The commitment of equity in the capital of small companies allows not only the

growth of small and medium-sized enterprises, but also to benefit from experience and professional network funding partners and align the interests of managers on those of the shareholders. The added value of the company may promote cooperation with large enterprises that lack flexibility due to their size and the maturity of their activities. These complementarities sustain the industry restructure and its evolution.. Observing the effects of the commitment of these funds on job creation, we note that in France, SME's in early stage have increased by 35 % the job creation. It had increased by 8 % for the development stage and 6.3 % for the case of LBO (AFIC, 2007). In terms of revenue growth as shown in the following picture, the SME's in venture capital stage have increased their turnover by 26, 9 %. Companies in the development stage have grown their turnover by 9.9 %. Transmission and LBO activities have grown by 11.6 %. (AFIC, 2007):



Moreover, the average growth rate of the sample is of 11.1 % knowing that companies not listed in the top 100 leading companies of the sample, present a growth rate of 9.7 % for the same period. At the same time, capital investment funds can boost and enrich the value creation process and by a contribution by

cognitive resources (Charreaux, 2003). The SME's submit more patents (Gompers and Lerner, 1998) thanks to the investors' involvement in the management of the company and its strategic orientation and encourage the company to leverage the skills and acquire more out value. Giving this, the private equity activity should be sustained and also more orientated in the optic of innovation boost and economy competitiveness.

## 2.2 The involvement of the private equity in innovation: the real estate:

Although technical innovation and entrepreneurship are important, PE funds prefer to invest in sustainable growing and well-structured firms to reduce by the way the high-risk related to the early stage activities. In France, the private equity activity represents a 15 % share of investments in 2006. The operations of LBO represent 80 % of investments in volumes with an annual rate increase of 40 % over the period 1996-2006 while venture capital activity represents only 5 % in terms of volume of activity (Bank of France, 2007). Investments in the LBO activities, means that Companies already have a product, technology or a well-defined service. In this context, the risk is no more related to the product nor to the technology, but it concerns the market. Finally investments transmission or succession that concerns the transmission of certain decided to transfer of the participants of some shareholders, who decided to leave the company. Gompers and Lerner (2001) had identified the parameters that influence the involvement of the private equity activity in the different stages of business. It depends first on the existence of opportunities on the market, the exit possibility such as IPO then the technological opportunities offered on the market. Da Rin et al (2005) underline the institutional environment which

promotes innovative SMEs. Currently PE funds are searching more mezzanine or growth stage investment to manage their portfolio risk, facilitate exit strategies and reduce the risk and realize attractive returns. In order to explain the lack of involvement of the PE funds in the innovative SME's, Hege and al (2003) observe the United States and the Europe case, and note that allocations are important at the beginning of the project financing, and then decrease as the project moves forward and is part of an entrepreneurial view. In Europe, the allocation of funds is much more linear. More specifically, there is a difference in the distribution of funds between the United States and the Europe case related specifically to the financial sustains to seed and venture capital activities. At the same time, collaboration between investors level is still very limited in Europe and the number of partnership remains low. This is due to the lack of collaboration between them, and explains the superiority of the US investment in innovative SME's at their early stages.

## **Conclusion**

The involvement of private equity in the small business capital funds allows not only to accelerate the growth of SMEs, access to capital but also of the experience and professional Network Associates funds and to align the interests of managers on those of the shareholders. Private equity funds increase the overall productivity of the economy by allocating financial resources to the most innovative and productive activities. In this context, success stories should be highlighted. More generally, it is crucial to maintain an entrepreneur climate for the innovative SME's by motivating the private equity funds to invest more in the innovative sectors particularly in the early stages of the SME's, in parallel to the involvement of the public sustain institutions. The motivation should be axed in terms of allowing tax advantages and creating new regulatory and economical models for supporting innovation.

## References

- AFIC, 2007, « Rapports sur le Poids économique et social du Capital Investissement en France 2006 ».
- Aghion, Philippe, Alexander D. Klemm, Stephen Bond, and Ioana E. Marinescu (2004) "Technology and financial structure: are innovative firms different?," *Journal of the European Economic Association*, 2 (2-3), 277-288.
- Bebczuk. R, 2003, « Asymmetric information in financial market: introduction and applications », Cambridge University press, Cambridge, pp3-33.
- Bellettante B, Levratto N et Paraque B, 2001, " Diversité économique et modes de financement des PME », paris, l'Harmattan.
- Bernasconi M et Monstet M, 2000, "Les start-up high tech ", Paris DUNOD.
- Brouwer, Maria, and Bart Hendrix (1998). „Two worlds of venture capital: what happened to US and Dutch early stage investment?," *Small Business Economics*, 10 (4), 1998, 333-348.
- Bulletin de la Banque de France, Septembre 2007, N°165.
- Commission Européenne, 2006, "Key figures 2005 on science technology and innovation toward a European research area".
- Charreaux G, 2003, "Le gouvernement d'entreprise", Encyclopédie des ressources humaines, Ed Vuibert.
- Copeland T, Koller T et Murrin J, 2000, " Valuation: measuring and managing the value of companies ", 3eme edition.
- Da Rin M, Nicodano G et Sembenelli A, 2005, Public policy and the creation of active venture capital market, European central bank working papers series, N° 430.
- Dert F, 1997, " l'art d'innover ou la conquête de l'incertain", avec une équipe de solving international, Paris Maxima.
- Duprat A, 2006, "L'analyse technique 100% pratique", Paris, Gualino.
- Gompers P et Lerner J 2001," The venture capital revolution", Journal of economic perspectives, N°15.
- Gompers P et Lerner J, 1998, Venture capital distributions: Short and long run reactions, Journal of Finance, N°53.
- Futuris (Rapport), 2006, "La recherche et l'innovation en France", Editions Odile Jacob.
- Hart O et Holstrom B, 1987:" THE theory of contract: The advances in economic theory": 5<sup>th</sup> world congress, New York, Cambridge University Press.
- Hege U, Palomino F et Schwienbacher A, 2003, "Determinants of venture capital: Europe and the United States", working paper HEC.
- Hege U, 2001 : "le financement et l'évolution des start-up Internet"; Revue économique, Vol 52.
- Himmelberg, Charles P., and Bruce C. Petersen (1994). „R&D and internal finance: a panel study of small firms in high-tech industries," *The Review of Economics and Statistics*, 76 (1), 38-51.
- Hogan, Teresa, and Elaine Hutson (2005). „Capital structure in new technology-based firms: Evidence from the Irish software sector," *Global Finance Journal*, 15 (3), 369 - 387.
- Lev B, 2001, "Intangibles: Management, measurement and reporting" Brooking institute press.



- Mahéroult, Loic (2004). „Is there Any Specific Equity Route for Small and Medium-Sized Family Businesses? The French Experience,” *Family Business Review*, 17 (3), 221-235.
- Noe T et Rebello M, 1996, “Asymmetric information, managerial opportunism, financing and payout policies, *The Journal of Finance*, N°51.
- OCDE, 2004: “Promouvoir l’entrepreneuriat et les PME innovantes dans une économie mondialisée” Note de synthèse des rapports de référence.
- OCDE, 2007, « science, technologie et industrie : tableau de bord de l’OCDE, Note de synthèse sur la France ».
- OST, 2006, « Rapport OST : Indicateurs des sciences et technologies ».