

Innovative cluster, micro firms and local development in Barcelona

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Introduction

The economic literature on innovative environments identifies the presence of a set of elements that are decisive to improve the competitive performance of the firms that belong to it: a concrete geographical space, a set of actors, several material, immaterial and institutional common elements; and even more important, the ability to share an organizational logic, a learning system and a relational culture. The main objective of our research is to identify the presence and intensity of those elements among the entrepreneurs that develop their new firm with the support of Barcelona Activa (BA), the local development agency of the City Council of Barcelona.

A distinctive factor of an *innovative milieu*, as defined by GREMI (Groupe de Recherche Européen sur les Milieux Innovateurs), is the significance of social capital on the innovation process. In particular, the development of relational networks based on confidence, formalised in cooperative innovation projects and addressed to the generation and diffusion of knowledge. In this sense, and as far as our research is about new companies, we opt for analysing the entrepreneurs' perception of their interactions with the environment created by BA. This environment necessarily exceeds the frontiers of incubation spaces, adding other successful companies that recently left the incubation centre as well as companies attracted by the institutional networking initiatives.

Methodology

The field work consisted on a combination of complementary techniques during one year period (April 2005-April 2006). From a qualitative point of view, we conducted twenty-two in depth interviews with entrepreneurs belonging to the BA environment. Some of them (six) were subsequently used in the questionnaire design while the rest served confirmatory purposes. A part, the research team held seven interviews with different key staff members of Barcelona Activa. Finally, a total of three focus groups were celebrated. In them, entrepreneurship as well

as experts on the fields discussed about financing entrepreneurship, innovation and training, and networking and e-commerce.

On the other hand, in order to feed up the quantitative analysis, we conducted a survey of the population of entrepreneurs that usually interact with BA. That is, those one that could be considered part of the environment created by BA. The questionnaire was administrated through e-mail having a response rate of 52,4% of the population under study.

Results and discussion

From the point of view of a productive local system, as defined by GREMI, Barcelona Activa can not be identified as an *innovative milieu*. However, from its actions and its interaction with entrepreneurs we can deduce that it is contributing to the emergence of a significant innovation cluster, or environment, which favours entrepreneurial attitudes. In particular, some of the main results of our research are the following:

- Entrepreneurs that developed their business idea in the incubation centre show higher innovation intensity, specifically when these innovations are based on IT-use.
- These entrepreneurs are also more prone to support their innovation process on cooperation.
- Wherever entrepreneurs locate their firm, there is a great recognition of BA as an innovation agent. As far as this perception is observed among all the defined segments we study, the institutional role of BA as an innovation promoter would be proved.

To capture the scope of the innovation cluster, we build two synthetic indicators: the first one measures the perception of the entrepreneur about the environment created by BA, while the other gathers the innovation performance of his company. Innovation intensity, development of strategic alliances, recognition of knowledge spillovers, or cooperative innovation networks are some of the elements used to build these synthetic indicators.

From the crossed analysis of these two indicators, we collect some interesting evidences about what we define as the “milieu effect”. In this sense, and despite the fact that the perception of innovative cluster is higher than the actual innovation behaviour of the companies -and both of them are not majority in our sample-, we detect some other outstanding results:

- Companies created by those entrepreneurs that are more skilful in detecting and seizing the opportunities provided by the environment display a higher profitability, a greater export propensity, a bigger commercial use of Internet. Moreover, these companies offer qualified and well-paid jobs.

- In general, these firms differentiate more their services (or products) in the market and they also show the most innovative growth strategies, mainly when these are based on groups, alliances or on network building.
- The “milieu effect” is more alive among companies that have already leaved the incubation centre and between entrepreneurs with previous experience in entrepreneur activities.
- There is a *short-sightedness effect* among some entrepreneurs with companies, basically related to some IT-activities, that benefit from a market-niche but neither interact with their environment (other companies or innovation agents) nor obtain a high economic success.
- Moreover, another group of companies with performance difficulties turns to Barcelona Activa to take advantage from knowledge diffusion and networking mechanisms. Thanks to them they finally improve their capacities and their success probabilities.

Finally, by means of a path analysis methodology, we are able to give a quantitative measure of the effect of milieu on the chances of companies to success in market; that is, to improve their sales, to obtain profits and to create new jobs. Our results show how the combination of incubation experience, the development of IT-based innovations and the cooperation with other firms improve considerably this probability. In addition, the participation in the programmes and services offered by BA also improve this probability, mainly when these activities strengthen the commercial and social networks and when those who benefit are entrepreneurs with labour experience. Therefore, for a metropolitan and regional economy with a wide university supply and a growing importance of graduates among young people, besides the development of spin-offs centres in universities it is also very important to support complementary policies that encourage start-up activities among wage-earning and high-qualified workers.

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