



**Centre
de Sociologie
de l'Innovation**

Ecole Nationale Supérieure
des Mines de Paris
60, bd Saint Michel
75272 Paris Cedex 06
Tél. : 33 1 40 51 91 91
Fax : 33 1 43 54 56 28



PICO project

« Academic entrepreneurship, from knowledge creation to knowledge diffusion »

ARMINES - CSI, Ecole des Mines, Paris
Politecnico di Milano
Universiteit Gent
DINAMIA, Lisbon
Nottingham University Business School

01/01/06 – 01/01/09

Focus of the project

- What?

Research-based spin-offs (RBSOs): companies created on the basis of scientific knowledge generated in a public research organization (PRO)

- Why?

- A key role in transforming scientific knowledge into new knowledge that is embodied in new technologies, products, services and processes
- Are they an engine of innovation and economic growth for Europe ?
- Previous studies: a small number of “gazelles”
- **Hypothesis:** the knowledge they create may contribute to the competitiveness and growth of their customers or may be transferred to and successfully exploited by outside companies (licenses, alliances, mergers, acquisitions...).

> *What are the conditions under which RBSOs effectively contribute to the generation of new knowledge and its dissemination in their local/national environment?*

Objectives

- Scientific objectives:
 - analysis of the determinants of RBSOs' knowledge creation and innovation activity,
 - analysis of the impact of RBSOs' innovation activity on their growth,
 - analysis of the impact of RBSOs on the innovation activity and growth of their customers and (alliance or M&A) partners.
- Policy objectives:

A better understanding of the knowledge creation and transformation function of RBSOs and its (direct and indirect) effects on innovation and growth:

 - lessons for academic entrepreneurs, PRO officials and policy makers,
 - reassess the rationale for public support to the creation and development of RBSOs,
 - contribute to the customization of public policy for RBSOs.

Methods

- A multi-disciplinary research work at the European level:
 - economics of R&D and innovation, sociology of science and innovation, entrepreneurship, strategic management, science policy...
 - integration of data relating to different European countries → cross-country comparison
- Theoretical foundations
 - literature analysis and conceptual models
 - resource-based view of the firm and institutional theories
- Data collection
 - case studies on RBSOs (UK, France, Belgium, Italy, Portugal, Slovenia), on customers/partners and on M&As
 - data on other customers/partners through telephone survey
 - data on RBSOs' environment and secondary data on RBSOs and customers/partners
- Data analysis: quantitative and qualitative analysis

Expected results

- Contribution to the research on RBSOs:
 - joint analysis of several factors on an international level
 - RBSOs' impact on customers and (alliance / M&A) partners
- Contribution to the EU priority « Citizens and governance in a knowledge-based society »
 - understanding knowledge
 - providing the bases for decision making
- Policy recommendations
 - compare the effects of different policies in different environments
 - propose policy measures and discuss them in focus groups with policy makers and RBSOs' managers
- Dissemination of the results
 - publications and presentations
 - symposium, final conference, book.