

## **Cooperation understood as knowledge exchanges driven by people: consequences for the design and analysis of innovation surveys**

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The cooperation between firms and different types of organizations with the aim of improving their capacity to innovate has been unanimously signalled as important. This has been specially notorious in appreciative theory with a neo-schumpeterian turn. Moreover, research on innovation concerned with the commercial success of innovations, or the usefulness of innovations for specific social actors, insists on cooperation as a main explanatory factor in the observed results. Cooperation for innovation is undertaken with various types of “external” actors: other firms, universities and different kind of scientific and technical service providers, clients and users. Survey-type empirical research has seldom include users (as different from clients) as partners for cooperation, even though early in innovation research they were recognized as a powerful source of innovation, and recent research as well as policy making is highlighting the role of users to such an extent that the expression “user-driven innovation” has become fashionable.

The identification of the factors that can foster or hamper the propensity of business firms to cooperate for innovation is far from simple, particularly because they are highly context dependent, as any factor embedded in the cultural milieu in which it operates. However, some assumptions can be made to give an a priori framework for empirical work, both to propose indicators and to interpret results. These assumptions go as follows:

- i) Cooperation with external actors with the aim to better innovate is related to knowledge exchanges. If the firm has all the knowledge it needs, or can access the information it needs and transform it into knowledge without further interactions with external actors, or can develop internally in a profitable way the knowledge it needs without cooperation, or it does not care about knowledge, cooperation for innovation would probably not take place.
- ii) Knowledge exchanges are embedded in people, and therefore what people know (in the firm) is important to assess the scope of such exchanges, that depend on the recognition of sources of useful knowledge, the understanding of the ways in which such knowledge can be turned into a useful tool for business purposes and the capacity to establish fruitful dialogues with people belonging to different organizational and institutional cultures.
- iii) Knowledge exchanges involve a good deal of tacit knowledge (“The things that we know in this way include problems and hunches, physiognomies and skills, the use of tools, probes and denotative language...” Polanyi, 1983: 29). So, such exchanges are mostly exchanges between people in different organizations and not between organizations as such, even when such exchanges result from institutional agreements.

This framework leads to understand cooperation as a substantively “people driven activity”, even if it can be performed through formally institutionalized agreements. From an empirical point of view, this leads to understand the factors related to the firms’ propensity to

cooperate looking with particular care to the different types of knowledgeable people within the firm, to what they know, to the efforts done to update and upgrade what they know and, last but not least, to the opportunities they are given to exploit their creativity while developing their organized work. The latter has been included in some innovation-related empirical work, (Lund and Gjerding, 1996; Arundel, et al, 2006) but has not yet entered into the main recommendations for comparative research on innovation.

The more cooperation is seen as important for innovation and for better exploiting the pool of knowledge available at national and international level, the more it enters the realm of science, technology and innovation policies. Innovation surveys should provide policy guidance for policies aiming at fostering cooperation for innovation between firms and other actors. This is not always the case: “A series of interviews conducted by MERIT staff with members of the European policy community in the spring of 2005 found that econometric results (stemming from CIS surveys) rarely influenced policy making. Instead, the policy community preferred detailed descriptive analysis, particularly when combined with case studies. This conflicts with the perspective of the academic community, which focuses on econometrics. This has also increased over time, with a decrease in academic reports that contain careful descriptive analyses and a trend towards increasingly complex econometrics in academic publications” (Arundel, 2005: 9). However, Arundel indicates that one of the subjects in which innovation surveys analyses so far have had more political impact was precisely cooperation. Cooperation seems also to be one of the issues that policy makers would like the most to get well acquainted to: “The main type of new indicators that the interviewed would like to have concern the process of commercialization and collaborative activities involving innovation. The latter has the higher political interest, cited by all the interviewed but two from the 19 countries” (Arundel, 2006: 3). We do not know for sure what Latin America’s science, technology and innovation policy makers, both at governmental and at academic level, would like to know about the real innovation processes. But we can be sure that it is equally valid for Latin America as it is for Europe the assertion that the primary audience for innovation indicators is the policy community. So, making the best of available data and presenting sound arguments to back alternatives for its recollection seems to be a valuable exercise. This is what we attempt to do in this paper for the Uruguayan case.

In section 1 we explore the factors that better explain the propensity to cooperate for innovation in Uruguayan industrial firms: our findings confirm the role played by knowledgeable people, even in a weak innovative environment. In Section 2 we organize the empirical data differently, which allow us to criticize the accuracy of the innovation survey results taken at face value. Nevertheless, the importance of knowledgeable people for cooperation is reassured. In section 3 we briefly discuss some recent empirical studies that address innovation industrial surveys with the kind of framework sketched above: our main point is that nothing forbiddingly complex can be found there to stop Latin American surveys to follow that path. In Section 4 we present some conclusions and suggestions for future work.

## References

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