Chapter 29
The Challenges of Smart Specialization Strategies and the Role of Entrepreneurial Universities: A New Competitive Paradigm

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ABSTRACT
This chapter explores the relation between the concepts of entrepreneurial universities (EU) within the framework of Smart Specialization Strategies (S3). The latter is arising as a new competitive paradigm and universities can be of great importance for its successful implementation because of their contribution both as a partner institution, policy actor and producer of knowledge and social capital that can affect the potential for economic growth and development of regions. The links and contributions of both dimensions are presented and explored. As a final point, the concept of entrepreneurial ecosystem is presented as a consequence and future development of the dynamics resulting S3 and entrepreneurial universities interactions.

INTRODUCTION
To be competitive in the global arena regions must be capable of develop key capabilities in the exploitations of their resources and strengths. Smart specialization strategies are a new approach to the problem of competitiveness and differentiation in global arena assuming that the “one size fits all” model cannot be the solution to the problem. To accomplish this, higher education institutions are key partners as a driver to innovation, knowledge and social capital building and valuation. The links between the entrepreneurial

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university paradigm and the implementation of smart specialization strategies are thus discussed as a means to deepen the understanding of this institutional, entrepreneurial and territorial dynamics that is evolving towards a new competitive paradigm based on knowledge and innovation.

**Innovation and Territory: Towards Smart Specialization**

Nowadays, it is almost unanimous, in the area of Regional Science, that innovation is one of the key critical factors to increase entrepreneurial and territorial competitiveness, and should be understood not only in the strict technical meaning (product engineering and process) but include also, the organizational dimensions (management, markets, etc.) and institutional (partnerships, cooperation networks, etc.). Innovation is now understood as the result of a non-linear process mediated by a systemic and interactive combinatorial of local and regional factors rather than the Science & Technology (S&T) supply-side (technology-push) or the demand-side (demand-pull) only (Moulaert & Sekia; 2003; Santos, 2003; Landabaso, 2011).

It is also recognized today that globalization has accentuated the change in the design of business strategies from a static price-based competition to a dynamic competition that favors regions that are able to (re)create knowledge and specific know-how faster than their competitors. The contemporary knowledge and learning economy is implicitly an economy that founds its competitive advantages in the continuous call for innovation.

Innovation is thus understood primarily as the result of a collective, complex and interactive process (companies do not innovate alone!). Firms depending increasingly on the access and absorption of codified and tacit knowledge originating from different public and private actors. It is therefore not surprising that in these circumstances the innovative company is seen as a product of their local/regional environment, and this latter one is understood as the true innovator agent (Genosko, 1997, p. 287), thesis that basically is sustained by three approaches that analyze the relations between territorial development and innovation, formulating the idea that territorial competitiveness is increasingly dependent upon the capacity of promoting collective learning mechanisms and generating new forms of strategic knowledge (Camagni & Maillat, 2006).

The issue of innovation, with its corporate and territorial impacts, has been the subject of intense study, as mentioned before, by three schools of Regional Studies, whose analytical and operational similarities, moreover, place them more as complementary approaches: since 1985, the theoretical framework constructed by the GREMI (Groupe de Recherche Européen sur les Milieux Innovateurs), and, emerging during the 90s, both the Learning Region model and the Regional Innovation Systems approach. The often-quoted Lundvall’s statement (1992) seems to synthesize and unify their contribution to better understand the dynamics territories are facing: “in the contemporary economy knowledge is the most important resource, while learning is the most important process”.

In this sense, the dynamics of innovation appears to be based on resources that embody specific territorial assets, not being therefore a foot-loose process (Asheim & Isaksen, 1997). Production and innovation systems, territorially anchored, are increasingly seen as key instruments to capture and recreate knowledge. It is emphasized the idea that innovation also encompasses a strong territorial and institutional structure which constitutes an essential instrument on the process of techno-economic creation, assuming a strategic positioning on the continuous competitive renewal of firms and territories. According to this theoretical perspective, on which prevails a relational and networking vision, innovation is seen as the integration by the milieu of strategic information and resources, thus, largely surpassing the narrow definition of innovation as a merely technological and firm-centered event.