# Chapter 7
# Did Smart Specialization Approach Universities and Firms?
## The Role of Technological Regimes and the Innovative Processes

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## ABSTRACT

*Smart specialisation is a major driver of contemporary regional development policy in the European Union. Politicians, policymakers, and academics enthusiastically wave smart specialisation as the remedy that will fix the problems affecting previous policy rounds. The expectations towards the 'remedial' effect of smart specialisation bear on the assumption that the policy approach will place the emphasis on what is unique in a given region by means of a so-called entrepreneurial process of discovery, basically a wide participatory process, underpinning a learning mechanism aimed at revealing the R&D and innovation domains in which that region can hope to excel. Universities are generally seen as central organisations in smart specialisation strategies, as made explicit in policy documents and academic papers. The chapter aims at knowing more about the power of smart specialisation policies to induce change in university-industry interactions and the promotion of sustainable growth.*

## 1. INTRODUCTION

In recent years, University-Industry collaborations (UIC) have been brought at the centre of attention by many scholars and policy makers (Davey, Meerman, Galán-Muros, Orazbayeva, and Baaken, 2018), mainly for their potential catalysing power in regional development (Sánchez-Barrioluengo and Benneworth, 2019). UIC have different dynamics from intra firm collaborations, thus the necessity of focusing specifically on this niche topic. The firms' sourcing strategy for innovation is important to investigate, since a successful innovation depends on how firms are able to identify, assimilate, and explore such sources (Aldieri, Kotsemir and Vinci, 2019).

Determinants of these collaborations, from various points of view (the university's, the company's, the region's...), are being measured and discussed as an effort to attain a somewhat 'strategically overloading' (Sánchez-Barrioluengo and Benneworth, 2019) and 'utopic' idea of a perfect balance between the three missions: teaching, research and entrepreneurship. This equilibrium has proven to be possible in regions with high absorptive capacity such as Silicon Valley in the United States of America (USA), the Golden Triangle in the United Kingdom (UK) (Varga, 2000), which fed the European Commission's conviction that such a framework could be attained in European regions with Higher Education Institutions (HEI).

The EU is known for struggling in commercializing the high-quality knowledge conceived indoors (European Commission, 2015), so these collaborations have a potential escalating effect on the region's economy. However, heterogeneity in both universities and firms give way for contrasting environments and difficulties in the implementation of 'soft' and 'hard' activities of collaboration. The two institutions have a different *mindset*, live in different environments and have different goals. The industry is generally striving to survive, thinks in terms of short range goals, prefers proven solutions with a low risk and is mainly concerned with costs, whereas the academia is generally striving for recognition from peers, thinks in terms of long range goals, is interested in creating new solutions with a high innovation rate and is mainly interested in studying scientific problems in depth.

To some extent, literature has explored the role of proximity in UIC. These studies have also focused on other aspects of firms, such as the economic sector, human capital, public funds received and expenditure on innovation. Some studies find geographical proximity as a meaningful factor for the creation of UIC, others defend that other forms of proximity should be employed instead.

The present chapter focuses on a central aspect of smart specialization which relies in geography. So, geographical proximity is considered as a determinant for the success of UIC through the analysis of distinct channels of UIC (De Fuentes and Dutrénit, 2016). Also, we will analyse the complementarity between 'hard' and 'soft' activities of collaboration, a niche (academic) market (Kirchherr, 2019) and a gap in the literature identified by Sánchez-Barrioluengo and Benneworth (2019). As such, this study takes a step forward in the investigation of geographical proximity in UIC by presenting a survey developed by two Portuguese universities on the year of 2019, in which it differentiates five types of collaborations: Protocols, Partnerships and R&D Projects; Training and Internships; Consulting; Seminars, conferences and joint publications; and Informal Contacts. Some authors suggest that the nature of UIC are distinct from country to country, since incentives, absorptive capacities, geography and embedded culture are context specific (De Fuentes and Dutrénit, 2016).

In this vein, the major hypothesis we aim to validate is that geographical proximity positively enhances cooperation between firms and universities.

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