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EXTENDED ABSTRACT

Title:
Public-private partnerships to boost innovation in regional contexts: the Demola case.
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Abstract: *(minimum1500 words)*

The fundamental role that innovation plays in economic growth and regional development and, consequently, in the improvement of social welfare, has been widely recognized by the scientific literature (Boon and Edler 2018). Also the most important international organizations recognize this role of innovation. The United Nations (UN), for example, includes fostering innovation among its Sustainable Development Goals; the Organization for Economic Co-operation and Development (OECD) has played a fundamental role in the awareness of political decision makers of the need to apply science, technology and innovation (STI) policies; and at European level, since 1984 the European Commission has been focusing on the importance of innovation, placing it at the centre of policies in European countries to boost employment, growth and investment. It is necessary, therefore, that governments promote innovation through public policies aimed at fostering the generation of scientific and technical knowledge, as key element for innovation, its application and dissemination to the whole productive fabric and society. In certain contexts, such as Spain, policies designed from a neoclassical approach and based basically on financial instruments do not achieve these objectives to the extent expected. The need arises, then, to pose the design of evolutionary policies based on the idea of innovation systems, in which a set of key actors interact in a more varied and numerous ways. In this context, collaborative instruments are needed to take advantage of the valuable resources that all these actors possess. We know that this kind of instruments are used successfully in other contexts such as some Finnish regions like Tampere. But we know too, that knowledge creation and, consequently, innovation are collective and cumulative process, dependents on the trajectory and the context, which varies between the different types of actors, industries, regions, etc. The problem is therefore that certain collaborative instruments can succeed in certain contexts and not in others. It is therefore necessary to know in what way all these contextual factors influence this success.
One of the main contributions of the evolutionary theory for innovation studies, from which a whole line of thought has been developed, is the concept of innovation system. It was originally created as a framework for analysis, at the national level, to review and

compare the evolution of different economies and determine the influence exercised by them on certain institutional and productive structures. The systemic analysis framework soon spread to the regional level (Cooke, Gomez-Uranga, and Etxebarria 1997). The usefulness of the innovation systems approach as a tool for analysing innovation processes at any of the aforementioned levels has contributed to making it one of the most widely accepted approaches to the theory of innovation. But what makes it especially interesting in the context of our research are its implications for the proper definition of the different instruments of government intervention (Uyarra and Flanagan 2009). In this sense, from the evolutionary and systemic perspective, the design of these instruments is based on the explicit recognition of the institutional framework formed by the different public and private actors of the system, the interactions that originate between them and the infrastructures that support them. The interactions between these actors are essential to explain the way in which knowledge is created and transferred within the innovation process; and their relations determine, in turn, the governance model of the system.

An important part of the literature has analysed the different factors that influence the design of public innovation policies through the so-called innovation policy mix (Borrás and Edquist 2013), but there is little evidence in this sense regarding specific instruments such as even Public-Private-Partnerships (PPPs), or even Public-Private-People-Partnerships (P4) (Ahmed and Ali 2006). The point is that the analysis of PPPs experiences has generally been carried out from a one-dimensional approach, generally focusing on specific projects or specific sectors in the environment of one specific countries. There was therefore no common framework for analysing and comparing PPP (Carbonara, Costantino, and Pellegrino 2013) between countries, especially in the field of innovation policies, where, additionally, different contextual factors have conditioned the path of PPP in each country, with important differences between them (Koschatzky and Stahlecker 2016).

This research starts from the basis of the importance that the scientific literature and the different institutions related to innovation management give to PPPs as a knowledge generating instrument, as a governance model of innovation systems and as a tool to strengthen the internal capacity to innovate as to absorb knowledge from abroad (Weresa 2017). So, the main objective of this research is to verify how the different contextual factors condition and affect the performance of the PPPs in the environment of different innovation systems and the relationships between the different key actors. The research is based on a comparative case study focusing on Demola that is an Open Innovation Platform (OIP) and university-business collaboration model for the creation of new products and services (Raunio, Räsänen, and Kautonen 2016). We also note that hybridization of public and private interests has been an important focus in the discussion on 'hybrid organizations'. Sabeti (2009), for example, defines such organizations as entities that combine a social purpose with a business method. In the case of Demola this is incorporated in their mission to 'democratize innovation' combined to a business-based operational mode.

The importance of studying Demola model in this research is given by its application in Spain and Finland regions following a standardized model. This will allow us to analyze a similar instrument in different regional innovation systems. We analyse Demola as a PPP policy measure fostering the convergence of innovation, education and research activities according to and a predefined conceptual framework of PPPs in innovation that allow us to perform the comparative analysis between different regions. While comparing the development and adaptation of the Demola concept in Finland and Spain, following a 'Porterian approach' (Porter, 1998) we will focus on dimensions related to

those proposed by Porter: 1) Resources and supportive factors (e.g., skilled professionals in , 2) Demand conditions (e.g., current need for industrial renewal, university educational reforms), 3) Government strategies and approaches (e.g., national innovation policies, higher educational strategies, European Union research and innovation policies), 4) Other contextual factors (e.g., cuttings in R&D spending, focus on particular societal challenges). The proposal from Rybnicek and Königsgruber (2019) about success factors for university-industry collaboration will be very important in our analysis too.

Resulting from the study, we expect identify resource and demand based as well as strategic and other contextual factors that will help explain the different direction, space and impact of Demola innovation platform in different regions of two countries, Spain and Finland.

The outcomes of this paper will contribute to academic discussions on PPPs, Open innovation platforms and hybrid organizations. We will deepen the knowledge on contextual factors contributing to the success (or failure) of standardized approaches to spread in different innovation contexts.

The research will contribute to better understanding of PPPs in different cultural, educational and innovation political contexts. Such knowledge will be particularly useful for 1) innovation managers interested in learning about an awarded and innovative approach to industrial renewal, 2) university leadership and educational experts interested in finding new means to connect university education with real-life problems and industrial processes, 3) and policy makers in order to know the key success factors in fostering of such PPP instruments.

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