

Expanded abstract

Role and expectations of Science Parks as elements of attraction and support for companies and social entrepreneurs: a fsQCA study

Science parks (SP) are one of the most common, but also controversial, agents of public innovation policies. They are business support organizations, located in and around university campuses, that provide physical facilities and services, as well as access to laboratories, government subsidies, customers, suppliers, and employees, which may not be available in other locations. The inconclusive results on their impact and value contribution suggests that their impact is not homogeneous on all types of tenants. The community of entities located in SPs environments is heterogeneous in terms of profile, expectations and needs and, consequently, not all tenants benefit equally from the SP residence.

The decision of a firm to be located in a science park is believed to be strongly dependent on the benefits perceived by tenants and the capabilities and assets they can gain from the SP. Unfortunately, there is still little evidence to date on how the different typologies of tenants take advantage of the on-park location and on the benefits gained by them as SP tenants. Social entrepreneurs can also benefit from the SP location and the resources provided by them. However, even though social entrepreneurship and its support activities are increasing around the world, little attention has been paid so far to the role of SPs as promoters of this type of entrepreneurship.

This study attempts to break new ground on this top by exploring the ways in which SP create value for social-oriented companies and assessing their potential as promoters of this type of entrepreneurship. More specifically, the aim is to figure out to what extent certain attributes of the SP influence in the perception of value by social-led companies and their motivations to set up there.

From a configuration-oriented perspective, the business support provided by SPs includes three main components or potential benefits the tenant firms might perceive from being located in the SP:

- Proximity to a university (to promote technology transfer and knowledge spillovers).
- Strengthening the firms' agglomeration effects (building a strong identity, and increasing the number of firms and the synergies between tenants); and
- Availability of funds (to facilitate access to investment).

Social-oriented companies located in SPs may differ in their prosocial motivation, profit, and innovation capacity. Our review of the literature suggests that tenants' perception of these benefits depends on their profile.

Based on these assumptions, we derive the three propositions of the study:

- **Proposition 1:** Tenants with a greater prosocial motivation decided to locate in the SP due to the easier access to public funding and the preferential rental costs.
- **Proposition 2:** Proximity to the university constitutes the fundamental location factor for the social enterprises located in a SP endowed with the highest degree of innovation located.
- **Proposition 3:** The benefits expected from agglomeration effects becomes a relevant factor for the category of social-led companies with a higher for-profit component located in SP

To check the validity of these propositions, an empirical study has been conducted on a sample of 25 social enterprises located in five Spanish science parks. An fsQCA analysis is applied to link different social enterprise profiles with several possible benefits perceived by locating in a SP. This method enables the assessment of cause-effect relationships by combining features of the case-oriented approach with those of the variable-oriented approach. This methodology is particularly appropriate for small sample sizes and for analysing systems that can reach the same final state or output after starting from different initial conditions and following different paths.

The use of this method allows us to examine the influence of firm profiles – not in isolation but combined with other conditions – on the perceived benefits from being located in SPs. The results of the fuzzy-set analysis confirm that the social-led tenants hold divergent perceptions of the benefits offered by being located in SPs. The findings obtained confirm our propositions and are consistent with the literature on value creation for SP tenants. Our results reveal that the companies with a high prosocial motivation are mainly driven by the public funding opportunities and preferential rental conditions. However, proximity to the University is mainly perceived as a significant benefit for social enterprises endowed with a high degree of innovation and a broader for-profit component. Finally, and concerning the perceived benefits due to the agglomeration effects and the proximity with another similar companies located in a SP, our study concludes that the for-profit component is important, but less relevant than the prosocial motivation.

Our main contribution at the theoretical level lies in being able to link specific types of social entrepreneurship with perceived benefits attached to the SP facilities and services, hence providing a valuable insight into the difference in preferences between firms. From an academic perspective, this study offers a new perspective on the conceptualization of SP development. In addition, our findings bridge to some extent the research gap regarding how these initiatives create value for their tenants.

In terms of managerial implications, our results provide valuable clues for social entrepreneurs considering the option to setting up in a science park. For practitioners, our findings allow for better-informed decision-making in the design and management of SPs. Our results

will help existing and projected SPs by identifying those attributes most appreciated by different typologies of social entrepreneurs and future tenants. In addition, our findings provide a valuable guide for institutions and agents working on the assessment of the impact and prospects of SPs as public-led development initiatives fostering social innovation and entrepreneurship.

Although the fsQCA technique overcomes problems related to sample size, and it is less restrictive than conventional statistical methods, our study is not free from limitations. First, our results offer a restricted view of the perception of social park tenants, as our sample included only tenants from five Spanish Science Park. Despite the insights into the tenants' opinions of a science park being useful, further research with a broader sample is needed in order to generalize these findings to the entire community of SPs. A larger and more randomly selected sample would open the door to identify differences across countries. A second limitation stems from our decision to focus our research on the configuration-oriented support component. Future studies could examine perceived benefits derived from a process-oriented support component, which is related to the services and activities offered to social entrepreneurs, such as incubation, training, and networking activities. Thirdly, other causal conditions, besides prosocial motivation, innovation, and profit, could be considered in future research. Finally, at the methodological level, a more comprehensive econometric framework would yield more precise and rigorous results.