

Spanish Science and Technology Parks Diagnosis

(13th Conference EU-SPRI. April 2013) María José Herrero-Villa. DEGIN (UAM)

Objective:

- Analyze the success of the Spanish Science and Technology Parks (STP) as R&D and innovation environments and whether companies on Parks benefit from their location on competitive terms.

Research questions

- To what degree are STPs in Spain innovation and R&D enclaves?
- To what extent does public funding link to STPs improve the companies' R&D activities and performance?
- To what level is relevant the location on a STPs for a company's competitiveness in terms of a better performance?

Evolutionary theory

- Meso-economic level: i) "Mode 2" knowledge production, ii) Triple Helix model, iii) Innovation Systems and iv) Clusters.
- Microeconomic level: i) innovation and competitiveness determinants and ii) intellectual capital.

STPs as interfaces University-Industry and enclaves of innovation

| Spanish situation | | | |
|-------------------|---|------------|----------------------------|
| Year | Members of the Spanish STPs Association (APTE)* | Companies* | Public Funds last decade** |
| 1985 | 1st Park | — | € 1,600 millions |
| 1988 | 6 | — | |
| 2000 | 23 | 965 | |
| 2011 | 81 | 6.030 | |

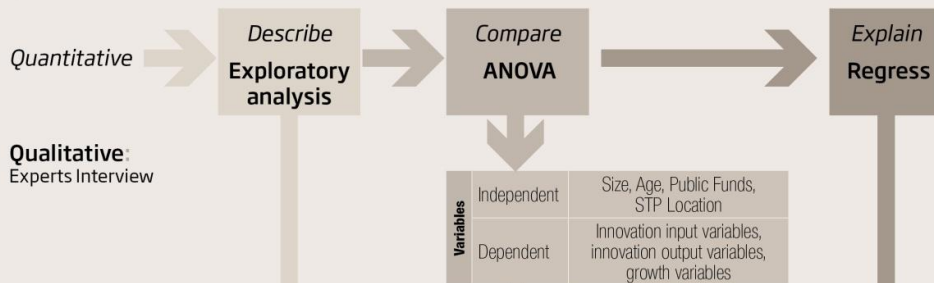
* Source: www.apte.org (25/01/13)

** MOLAS, J., FERNÁNDEZ DE LUCO, I. Y VILLALBA, A. **Análisis de la evolución de los parques científicos españoles**. Colección Innovación Práctica. Fundación Cotec para la Innovación Tecnológica, Madrid, 2011.

This research approach: Comparison of companies' variables on/off STPs (Match sample)
Period: 2005-2009. Data Base: PITEC - Panel of Technology Innovation (Source: INE - National Spanish Statistics Institute)

METHODOLOGY

Sample selection criteria: **Size, Activity** (according to the STPs residents) **Total innovation Expenses**



RESULTS

- STPs residents tend to be small and to have good internal technological knowledge and capacity.
- Commercial skills seem to be similar to other companies according to the fact that they achieve international markets showing same rates and launching new products that are important on the P&L Account.
- The STPs attract NewCos very strongly.

- On statistics terms: STPs residents are stronger on innovation input indicators as well as on public funding of the innovation activity.
- Related to innovation output, these companies patent more but there is no significant evidence of other better results.
- Growth variables show no differences on sales however on employment SPTs' tenants achieve better performance.

WIP

PRELIMINARY CONCLUSIONS

Spanish STPs attract new companies, deal with small business, foster innovation activities intensively and offer easier access to public funds. However, these activities do not seem to translate into better economic performance for the resident companies. Additionally, there is a common opinion of a current STPs' inflation in Spain. Therefore, the STPs might have to face a concentration and specialization process in order to increase efficiency on more specific added-value services from the market perspective for their residents.