

First of all, we observe a difference in the amount of patents in favour of the youngest firms. This may be linked to two main processes. First, it might be possible that older structures have changed their original purpose by pursuing innovation and technological transfer without the need for patent filing. This aspect seems to be a common opinion among the experts on this field. It might also be that structures have strategically renounced to the patent as a tool for development, in favour of different tools with a higher reliability. Moreover, a reason can also be represented by the fact that young structures might decide to operate in sectors that notoriously have low levels of patent filing, such as ICT.

Secondly, note that *growth* levels are lower as time passes by, highlighting either a reduced efficiency, or the fact that structures operate in mature or even stagnant markets (as previously discussed). Thirdly, we already discussed the fact that younger structures tend to be more dispersed. Finally, the impact of public investment indicates that younger poles tend to have more money provided by the public institutions. Once again, this evidence brings up the question about the nature of each TP/SP, which might be political most of the time.

6 Conclusions

Despite constituting a pioneering and simplified analysis, our study has showed a lot of interesting features of TP/SP's effects on both regional economic growth and associated (or incubated) firms' growth in terms of revenues. In particular we found both that TP/SP impacts are different if analyzed by geographic location and that their effects are still evident even in the aggregate model. The number of TP/SP per region seems to display a positive role in sustaining the economic growth of corresponding regions. In addition, the patenting activity and the creation of research centers foster the growth of affiliated firms, which in turns affects regional economy's parameters. To the contrary, the distance between the TP/SP and affiliated firms reduces the growing potential of the latter. In addition, firms within an TP/SP turn out outperforms (largely) the regional average. Finally, we find that more recent structures tend to be more prone to both patenting activity and high-level growth. Younger structures are also characterized by higher dispersion rates.

References:

- [1] M. Arellano and S. Bond, Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations, *The Review of Economic Studies*, 58, 1991, pp. 343-373
- [2] M. Castells and P. Hall, *Technopoles of the World: Making of 21st Century Industrial Complexes*, Routledge, London, 1994.
- [3] P. Cooke, From Technopoles to Regional Innovation Systems: The Evolution of Localised Technology Development Policy, *Canadian Journal of Regional Science*, 24-1, 2001.
- [4] I. Masser, Technology and Regional Development Policy: A Review of Japan's Technopolis Programme, *Regional Studies*, 24-1, 1990, pp. 41-53.
- [5] K. Pavitt, Sectoral patterns of technical change: Towards a taxonomy and a theory, *Research Policy* 613, 1984, pp. 343-373.
- [6] Regional Research Intensive Clusters and Science Parks, EU Commission, DG RTD, September 2007 EESC document CCMI/025 (14/12/2005) and CCMI/072 14/07/2010.
- [7] A.J. Scott, *Technopolis: high technology industry and regional development in southern California*, University of California Press, Berkeley Los Angeles Oxford, 1993.