

26/03/2014

University spin-offs more productive long-term than other technological companies



Researchers from the Department of Business of the UAB and of the University of Birmingham have analysed the productivity of technology-based companies in Spain with the aim of comparing the characteristics of spin-offs with all other companies. According to the study, spin-offs have lower economic results during the first three years, but their productivity surpasses the other companies after that. According to the study, the reason for this could lie in a higher capacity for learning among academic entrepreneurs.

Autor: iStockphoto/AtnoYdur

The study, published in the journal *Technovation* and written by Pere Ortín Ángel and Ferran Vendrell Herrero, covers financial data from two comparison samples of companies founded between 1994 and 2005. One sample is made up of 104 university spin-offs and the other is made up of 73 technology-based, non-university companies. The study compares what is known as the total factor productivity of these two samples. According to the study, in the university spin-offs this productivity is, on average, inferior the year in which the company is founded. Nevertheless, data shows that after two or three years this productivity equals and after the fifth year the total factor productivity is higher among university spin-offs.

The total factor productivity is a technical term economists use to refer to the greater production systematically obtained by some companies when compared to their competitors even when using the same levels of factors of production (resources such as labour or capital). In management literature, the term most used to refer to these differences is capacity. In fact, distinction is made between substantive capacities, those possessed at a specific moment, and dynamic capacities, those which aid to increase the companies substantive capacities in the long term.

Previous studies focused on the first years of life of a university spin-off and argued that their poorer economic results were caused by the differences in the commercial and management capacities of its founders. This study is the first to measure the differences in dynamic capacities in these types of companies. The results show that, in the case of university spin-offs, dynamic capacities are higher.

The reason for this higher productivity in university companies, according to the study, could be that academic entrepreneurs have a greater learning capacity. According to Pere Ortín, researcher from the Department of Business of the UAB, "one of the possible knowledge transfers between university and business management would be to provide academically created learning tools, such as statistics, experimentals, data treatment, etc. and therefore systematise and improve learning processes within the business sector."

[View low-bandwidth version](#)