

Identifying necessary conditions for university spin-offs in Brazilian universities

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Introdução

The entrepreneurial university has attracted interest from policymakers and academics as a way of facilitating technology transfer to the private sector. The diffusion of technologies developed in universities to society is normally done through university spin-offs (USOs). There is growing interest in which factors promote the creation of these firms. The ranking of entrepreneurial universities provides some indicators that could assist in the development of policies to foster USOs, however, there are still no studies on whether the conditions listed in these rankings are necessary for USOs.

Problema de Pesquisa e Objetivo

There are no studies that assess whether the factors measured by this Entrepreneurial University Ranking are necessary for USOs. This research aims to fill this gap, answering the following research question: Are the conditions inherent to Brazilian universities necessary to stimulate the creation of university spin-offs? Our article has a double purpose: first, we intend to evaluate whether entrepreneurial university elements are a necessary condition for promoting USOs. Second, identify the necessary levels of each element to stimulate university spin-offs.

Fundamentação Teórica

Companies that emerge from knowledge and/or technologies originating from universities, the USO, are agents that disseminate the knowledge produced in universities to consumers in the form of new products and/or services, contributing to economic development and technological innovation. USOs are typically technology-based ventures, founded by students, alumni or professors to explore technological. These companies need infrastructure and habitat conducive to their development, such as science and technology parks, incubators, accelerators, and a culture/standards friendly to entrepreneurship

Metodologia

In this study, we applied a necessary condition analysis to a database composed of 126 universities. To collect data, we used the website of entrepreneurial university ranking (see <https://universidadesempreendedoras.org/ranking/>). We collected data from the entrepreneurial university ranking 2021 report (the last available). We select 9 variables that represent entrepreneurial university conditions and one variable that represents USOs. Our sample comprises universities distributed across the 27 Brazilian states, including the federal district.

Análise dos Resultados

Our results showed that factors such as science and technology parks and scientific production are necessary conditions for university spin-offs. However, we do not find empirical evidence that supports entrepreneurial culture, extension projects and patents as conditions that foster USOs. Despite this, entrepreneurial culture and extension are not inadequate support policies, they just do not boost entrepreneurship.

Conclusão

In this research endeavor, our objective was to assess the requirement of Brazilian universities' elements/resources to boost USOs. Employing the NCA approach, we identified the necessary (albeit not sufficient) conditions for the emergence of USOs. Our analysis drew from the Entrepreneurial University Ranking data, encompassing a comprehensive sample of 126 universities. Our study

findings underscore that among the 11 examined conditions, only two were deemed imperative in nurturing USOs: Science and Technology Parks (STP) and Scientific Production (SCP).

Referências Bibliográficas

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