# The role of complementary assets and entrepreneurial environment on the performance of graduated companies

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## Introdução

Understanding how business incubators affect firms' survival after their graduation is of interest for academics and practitioners. Focusing on the complementary assets provided by the incubators, we discuss the effects in mitigating threats of age and size, through the constructs of liabilities of newness/smallness. We propose the firms were imprinted with these assets strengthening their survival. We used a sample of graduated firms from 109 Brazilian incubators. Our findings reveal they played a keyhole in survival, mainly for the specialized assets related to legitimacy and reputation.

## Problema de Pesquisa e Objetivo

We draw in the assets provided by the incubators to neutralize the threats related to liabilities of newness/smallness. This paper investigates the role of complementary assets in the survival of small firms and the moderation role of the entrepreneurial environment, as a mean to facilitate access to resources. To contextualize, we used technology-based incubators and sought to demonstrate the role of complementary assets provided by them in the performance of firms. The proposal of this study is to answer the question: What role do complementary assets play in the survival of small companies?

## Fundamentação Teórica

The purpose of business incubators is to mitigate threats in the early days of a firm's operations by providing services and sharing physical and managerial structures. Through these benefits, incubators enable companies to acquire complementary assets important to determine the success of a venture, complementing other essential assets for its operation. Liability of newness/smallness identify factors that hinder the success of a new firm, either by focusing on internal factors or through explanations found in a company's external environment.

## Metodologia

We used the database for science parks and incubators (SAPI) hosted in the portal "Innovation" of the Brazilian Ministry of Science and Culture. This database focuses on technology-based incubators, including data on the performance of the incubators, as well as incubated and graduated firms, and on the survival of graduated firms. Additional data was collected from the websites of each incubator. We also collect data directly from the incubators; data collection took place between May and June of 2018. We conducted multiple linear regressions and robustness tests to assess our findings.

## Análise dos Resultados

We showed complementary assets have a positive influence on the performance of graduated firms, mitigating threats of newness/smallness and providing the solution to problems on the use of resources and establishing roles not dominated by their managers. We showed social relationships by networks and alliances, enabling knowledge transfer and reputation, has a positive impact on performance. We identified the importance of specialized complementary assets over generic ones, confirmed by the moderation of the entrepreneurial environment providing assets more easily accessed by incubators and st

### Conclusão

In our analysis, we showed that in an entrepreneurial environment, the predominance of generic assets, such as those focused on physical structure, are not transformed into performance. On the other hand, we found that in environments with less access to complementary assets, graduated companies that had at their disposal predominantly generic assets in detriment of specialized ones (structure x legitimacy) have better performance. This fact is reinforced by the cluster analysis performed in the robustness test in our study.

## Referências Bibliográficas

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