

Exploring Knowledge Intensity in Entrepreneurship

A Quantitative Study of
Knowledge, Innovation and
Performance in Entrepreneurial Firms

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ABSTRACT

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This Ph.D. dissertation investigates the statistical and theoretical relationships between different dimensions of knowledge intensive entrepreneurship (KIE) in Europe and how knowledge intensity and performance in entrepreneurial firms can be related. KIE is modeled as an application of resource-based theory, connecting pre-entry inputs like education and experience to external search activities to innovativeness and firm financial performance, growth, and survival. The data used was collected during a wide-scale EU financed framework project (FP7 - AEGIS), with additional panel-based firm level data gathering by the author, in order to investigate knowledge intensity, innovation, and performance in entrepreneurial firms: It explores how these concepts might be defined and modeled.

Confirmed results indicate: Positive associations between depth of external search with innovative performance and a partial inverse curvilinear association between breadth of external search and innovative performance; Positive yet inversely curvilinear associations between the beneficial aspects of functional heterogeneity of the founding team with that of financial performance and survival, and negative linear associations between detrimental aspects of functional heterogeneity of the founding team with the same response variables; Finally, positive associations were identified between the radicalness of innovations produced with that of financial performance over time and with the likelihood of firm survival.

Conclusions use these results to reflect on broader relationships between knowledge intensity, innovation and performance in entrepreneurial firms. Recommendations for future research include more advanced modeling of complex latent factors constituting different forms of internal and external knowledge intensity, innovativeness, and performance on the part of entrepreneurial firms. Furthermore, drawing more extensively on existing tools such as resource-based theory may prove more enlightening than constructing new concepts and typologies to explain knowledge intensive entrepreneurship in new light, and policy wishing to promote knowledge intensive entrepreneurship may find it beneficial to focus on the educational and experiential underpinnings of creating such firms in diverse industries including low- and medium-technology industries as well as different types of services.

Key Words: Innovation, Entrepreneurship, Firm Performance, Knowledge Intensity, Search, Human Capital