An empirical study on functional diversity and innovation in SMEs

Summary

This thesis examines the research problem of the impact of functional diversity on innovation. Functional diversity within a group can be found either in the specialization of each individual (dominant function diversity) or in the range of functions that each individual can handle (intrapersonal functional diversity). A review of the literature suggests that functional diversity can foster innovation but no comprehensive empirical study has been carried out to understand the effective impact of each concept. In addition, the human resources characteristics of the firm have barely been considered as an important factor affecting the impact of functional diversity on innovation.

The argument advanced herein suggests that functional diversity within the management staff of small and medium enterprises has a positive impact on innovation but, different concepts of functional diversity must be considered depending on the size and the growth of the company. Two issues are of concern in this thesis: first, do different concepts of functional diversity have different impact on innovation? Second, under what circumstances should one concept or the other be taken into account to foster innovation in a company? The research focuses on two different concepts of functional diversity used in the literature, intrapersonal functional diversity and dominant function diversity.
Their respective impact on the innovation process is tested empirically with data drawn from mailed questionnaires. Statistical analyses are conducted to study the evolution of the effect of these two types of functional diversity on innovation according to the human resources size and the growth of the firm. The relevance of these concepts for small and medium enterprises is discussed according to their size and their growth.

The foundation of the research process is a two phase research methodology: (i) literature based development of survey instrument for measuring functional diversity and innovation performance; (ii) large sample survey of 500 SMEs in Singapore.

Survey findings suggest that (i) intrapersonal functional diversity of the management staff has a positive impact on the firm’s innovative performance; (ii) the smaller the firm is, the stronger is the impact of intrapersonal functional diversity on innovation; (iii) dominant function diversity has no significant impact on innovation; (iv) in a staff reduction environment firms should focus on intrapersonal functional diversity of the management staff in order to foster innovation.