

# **Technology sourcing by large incumbents through acquisition of small firms**

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## **ABSTRACT**

Innovation activities in high technology industries provide considerable challenges for technology and innovation management. In particular, since these industries have a long history of radical innovations taking place through distinct industry cycles of higher and lower demand, firms frequently consider the option to use acquisitions as a means for technology sourcing. The paper investigates this behaviour for three high technology industries, namely semiconductor manufacturing, biotechnology and electronic design automation which is a specific sub-segment of the semiconductor industry. It analyses the association of firm characteristics with different aspects of acquisition behaviour with a particular focus being put on innovation-related firm characteristics. The paper confirms a substitutive relationship between acquisitions and own research activities as well as between own and acquired firm patenting, but also finds that firm size, financial conditions and geographical origin of the firm matter for acquisition behaviour.

**Keywords:** Acquisition, innovation, high technology, quantitative methods, research, R&D

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