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Does Outsourcing Result in the Outsourcing of Technological Competencies? An Empirical Analysis of the Effect of Vertical Specialization on the Technological Competence Base of Firms**

Over the past two decades multinational firms from high-technology industries have increasingly relied on outsourcing of production to external suppliers. We present a theoretical framework that stems from the resource-based view of the firm (RBV) and develop hypotheses claiming that outsourcing of production will not result in the outsourcing of technological competencies. In other words, vertical specialization will not result in the reduction of the breadth and depth of the technological competence level of firms, especially in high-technology industries. We test our hypothesis with a sample of 50 firms which we selected from the population of the world's top R&D-performing firms, measured by R&D spending. The period of investigation covers 20 years from 1983-2002. Our results indicate that over this 20 years period the technological knowledge base of the sample firms has not been affected by the ongoing outsourcing activities. The empirical observation gives rise to the 'a priori statement' that the knowledge-boundaries of the firms have been decoupled from production activities: In our sample of firms from high-technology industries outsourcing has not coincided with the outsourcing of technological competencies.

**Key words: outsourcing, technological competencies, internationalization,
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