The Influence of International Dispersed vs. Home based R&D on Corporate Growth

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Abstract

The internationalisation of corporate R&D is a growing phenomenon in both large MNEs and international SMEs. Empirical evidence shows that these firms mainly aim at benefitting from a better adoption of their existing technology to foreign demand and/or from a better access to foreign science and technology resources. The decision to set up an R&D lab abroad is, however, also associated with high costs. Besides the set-up costs for the R&D department, costs may arise due to foregone economies of scale in the R&D production process, intra-firm coordination costs, the risk of intra-firm knowledge losses and outgoing knowledge spillovers. Though the question of whether international research centres are overall beneficial to innovation performance and corporate success is straight forward, there is no large-scale empirical evidence available yet. In this paper, we fill this gap by analysing whether the innovation performance (sales growth of innovative products) as well as overall firm performance (profits) is influenced by doing research activities abroad or whether firms performing research only at their home base are as successful as firms doing R&D abroad. Since the extent of benefits and costs may vary with the number of foreign research labs, we further distinguish different degrees of international decentralisation: firms running only one research centre abroad, firms with a few R&D locations abroad and highly decentralised R&D performers. In a third step we move to a country perspective and test the triad hypothesis stating that firms are more successful if they perform R&D in all triad regions (Europe, North America and Asia) at the same time. We employ a large data set from the Mannheim Innovation Panel which represents the German part of the Community Innovation Survey (CIS) and we retain about 1000 observations. The results indicate that research activities abroad have a positive impact on firms' innovation performance. Furthermore, the innovation performance significantly increases with the level of decentralisation.