Technological Distance and the Structure of MNC Subunit Knowledge Sourcing

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Abstract

The foreign subunits of multinational corporations (MNCs) have an important role to play in the search for relevant knowledge which is technologically distant from the traditional core domains of the firm. When MNC subunits create new knowledge that relies upon novel combinations of technologically more distant and core knowledge, this affects their relative reliance on internal and external sources of knowledge across geographic space. Focusing on the pharmaceutical industry in Germany, we find that as technological distance rises, firms rely more on both internal and external sources of knowledge accumulation. However, international internal sources are used for a more intensive cross-border exploitation of knowledge within a field, while local external sources are used more for the exploration of new knowledge combinations across distinct and more distant fields. Moreover, as international integration efforts rise, subunits rely more on intra-firm knowledge sources, but when international integration is combined with local responsiveness efforts, knowledge accumulation relies more on inter-organizational sources. These findings suggest that when subunits to play a more creative role in knowledge generation within their corporate group, international knowledge exchanges in MNCs are enhanced (not reduced) and complement external sources.