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NETWORKS, PROXIMITIES AND INTER-FIRM KNOWLEDGE EXCHANGES

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Abstract

Building on previous literature providing extensive evidence on flows of knowledge generated by inter-firm agreements, in this paper we aim to analyse how the occurrence of such collaborations is driven by the multi-dimensional proximity among participants and by their position within firms' network. More specifically, we assess how the likelihood that two firms set up a partnership is influenced by their bilateral geographical, technological, organizational, institutional and social proximity and by their position within networks in terms of centrality and closeness. Our analysis is based on agreements in the form of joint ventures or strategic alliances, announced over the period 2005-2012, in which at least one partner is localised in Italy. We consider the full range of economic activities and this allow us to offer a general scenario and to specifically investigate the role of technological relatedness across different sectors. The econometric analysis, based on the logistic framework for rare events, yielded three noteworthy results. First, all the five dimensions of proximity jointly exert a positive and relevant effect in determining the probability of inter-firm knowledge exchanges, signalling that they are complementary rather than substitute channels. Second, the higher impact on probability is due to the technological proximity, followed by the geographical one, while the other proximities (social, institutional and organizational) have a limited effect. Third, we find evidence on the positive role played by networks, through preferential attachment and transitivity effects, in enhancing the probability of inter-firm agreements.