



ABSTRACT WORKING PAPER 4.12

Interregional Knowledge Network Quality and Research Performance: Do Objective 1 and EU 12 Border Regions Follow Different Patterns than the Rest of Europe?

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Abstract

This paper estimates the impact of interregional knowledge flows on the productivity of research at the regional level with a particular attention given to Objective 1 and EU 12 border regions in this respect. The highlight of this latter aspect is related to the neighboring country focus of the SEARCH project. We apply the novel index of 'ego network quality' in order to measure the contribution of knowledge accessed from the interregional network to the production of new knowledge inside the region. Quality of interregional knowledge networks is related to the level of knowledge accumulated by the partners, the extent of collaboration among partners and the position of partners in the entire knowledge network. Ego network quality impacts on the productivity of research in scientific publications and patenting at the regional level are tested with co-patenting and EU Framework Program collaboration data for 189 European NUTS 2 regions. Though it is not possible to directly test the effects of co-patenting and FP network quality on EU neighboring countries we were able to get some estimates by testing the impacts of co-patenting and FP network quality on research productivity of NUTS 2 regions which possess the characteristics of EU neighboring countries in two respects: first, their GDP per capita is below the 75 % or EU average (Objective 1 regions) and second, they are located at the border of the old EU 12 territory (border regions).