## Abstract

In economic agglomeration studies, the distinction of various externalities circumstances related to knowledge spillovers remains largely unclear. This paper introduces human capital, innovation and several types of entrepreneurship as potential drivers of regional economic performance with an impact of applomeration economies. We use measures of specific types of entrepreneurship, discerned at the individual level, as well as human capital and invention through patenting activity for the period 2001-2006. The empirical application on 111 regions across 14 European countries investigates their relation with observed regional productivity rates in 2006. Our main findings indicate that (i) human capital, patenting activity and entrepreneurship are all linked to regional performance, more so in regions containing large as well as medium-sized cities; (ii) they act as complements rather than substitutes, facilitating productivity differently; and (iii) accounting for patenting activity and entrepreneurship captures agglomeration externalities effects previously subscribed only to the density of resources of regional performance. The particular role of regions with medium sized cities next to regions with large cities complies with observed growth trends as well as recently proposed place-based development approaches that assume that interactions between institutions and geography are critical for regional economic performance.