

Spatial Structure and Productivity in Italian NUTS-3 regions

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Abstract

This work is aimed at investigating how spatial structure affects labour productivity in Italian Provinces. The analysis draws on agglomeration theories and studies whether agglomeration benefits might be dependent on the spatial organization of economic activities within regions. Besides size, which has been widely investigated in the literature, we analyse two other central features of spatial structure that characterize the evolution of contemporary regions: dispersion and polycentricity.

Regarding the former, we investigate whether the processes of dispersion of activities across space (i.e. urban sprawl), which reduce the proximity among agents, hinder agglomeration externalities. Regarding polycentricity, we test the hypothesis that agglomeration economies have regionalized. Accordingly, the benefits of agglomeration – such as labour pooling, knowledge spillovers, urbanization externalities – are not confined to large metropolitan centres, but can also arise in regional urban systems composed by medium-sized and interconnected cities. Those systems are supposed to avoid the diseconomies characterising (large) monocentric regions, such as congestion and high land prices.

The analysis is carried out by means of instrumental variables and spatial econometric techniques. We assess the effect of spatial structure for the 103 Italian Provinces, finding negative impacts of both polycentricity and dispersion and a positive impact of size.

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