

Digital vulnerability and socio-economic well-being in the Galicia-Northern Portugal Euroregion

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Abstract

In a context marked by rapid digitalisation, persistent and widening digital divides risk reinforcing existing socioeconomic inequalities and generating new forms of social exclusion. This paper analyses digital vulnerability in the Galicia–Northern Portugal Euroregion, understood as the set of inequalities in access to, use of, and effective appropriation of digital technologies.

Adopting a multidimensional perspective, the study conceptualises digital vulnerability in both material and skills-related terms and examines its determinants across multiple dimensions. These include individual characteristics (such as age, educational attainment, socioeconomic status, gender, and background), territorial factors (urban–rural context, population density, and availability of digital infrastructure), and institutional factors related to inequalities in access to and use of public services. The cross-border nature of the Galicia–Northern Portugal Euroregion enables a comparative approach, facilitating the identification of common patterns and contextual differences relevant for policy design. The empirical strategy combines official statistical sources, survey data, and administrative records with econometric modelling techniques. In addition, the project develops synthetic indicators of digital vulnerability to identify population groups and territories that are particularly exposed to the risk of digital exclusion. Preliminary evidence points to a robust inverse relationship between digital vulnerability and socioeconomic well-being, as well as to the presence of significant socioeconomic inequalities underlying digital vulnerability. The paper seeks to improve the diagnosis of digital divides in the Euroregion and to provide empirical evidence to support the design of more effective, inclusive, and territorially sensitive public policies, contributing to cross-border cooperation and a socially sustainable digital transition.