

# **The Measurement of Adequacy and Coverage in Decentralized Minimum Income Schemes: An Application to Spanish Regions**

Luis Ayala\*

Elena Bárcena-Martín\*\*

**Not to be quoted without the authors' permission.**

---

\* Facultad de Ciencias Jurídicas y Sociales, Universidad Rey Juan Carlos, Paseo de los Artilleros s/n, 28032 Madrid, Spain. Email: [luis.ayala@urjc.es](mailto:luis.ayala@urjc.es)

\*\*Facultad de Ciencias Económicas y Empresariales, Universidad de Málaga, Plaza del Ejido s/n 29071, Málaga, Spain. Email: [barcena@uma.es](mailto:barcena@uma.es)

# **The measurement of Adequacy and Coverage in Decentralized Minimum Income Schemes: An Application to Spanish Regions**

## **Abstract**

The existing literature on welfare decentralization has not produced a robust set of measures and properties and no consensus has emerged on how inequalities arising from welfare decentralization should be aggregated into a composite index. The measurement of the global effects on inequality has usually focused on one of two dimensions: adequacy and coverage. The orderings of regions or the levels of inter-regional inequality can be very different depending on the chosen outcome. In this paper we propose new approaches that may contribute to the development of a more comprehensive picture of these types of inequality. First, we propose new measures combining both dimensions. Second, we propose to measure the contribution of each region to inequality making use of the Gini index and the interpretation of this inequality measure in terms of deprivation. Third, we provide an interpretation of the decomposition of the change in welfare inequalities in terms of progressivity and re-ranking components. Fourth, we analyze the notions of inequality and convergence considering adequacy, coverage and a measure that combines both dimensions under a unified framework.

**Keywords:** minimum income, inequality, adequacy, progressivity, re-ranking