

Small Area Estimation of Poverty under Structural Change

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Abstract

Small area poverty maps allow for the design of policies based on spatial differences in welfare. They are typically estimated based on a consumption survey reporting on poverty and a census providing the spatial disaggregation. This paper presents a new method which allows for the estimation of up-to-date small area poverty maps when only a dated census and a more recent survey are available and predictors and structural parameters are subject to drift over time, a situation commonly encountered in practice. Instead of using survey variables to explain consumption in the survey, the new approach uses variables constructed from the census. The proposed estimator has fewer data requirements and weaker assumptions than common small area poverty map estimators. Applications to simulated data and to poverty estimation in Brazil show an overall good performance.

Keywords: Poverty, Population estimates, Censuses, Small Area Estimation

JEL: D63, I32, R12