

A review of poverty mapping procedures

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Abstract

Efficient regional development policies require detailed assessment of the socio-economic development level of the regions within countries. Unfortunately, official surveys used to assess the living conditions of people have many times insufficient sample size to cover adequately all the regions within a country. Small area estimation techniques increase the effective sample size of the small areas by using auxiliary information through regression models. The most popular small area estimation approaches for poverty mapping will be revised, including several variants of the basic methods. Their properties, advantages and disadvantages will be discussed and open questions will be outlined. Results from an application with Spanish living conditions data will be shown.

Keywords: empirical Bayes; hierarchical Bayes; linear mixed models; poverty indicators; small area estimation.