



Prediction of poverty in Latin America: model selection for the 2000s census round

Pier Francesco De Maria*
UNICAMP, Campinas, Brazil – dpierf@gmail.com

Abstract

Poverty in Latin America is an important question to be solved nowadays; a common pattern can be defined for the whole continent, in order to design correctly poverty indices and public policies. Data were collected from IPUMS International for 9 countries of Latin America; the method combines logistic regressions with ROC curves, which utility is defining a best choice model in the continent. The variables of the best models could be considered as appropriated to elaborate multidimensional poverty indices. Key results show that exists a common poverty pattern in the continent; the confounding factors assume a unique tendency for all the countries. Lastly, the paper concludes that variables for the “educational-working” and the “facilities and utilities” models can be used with the aim of elaborating a MPI, because of them representativeness.

Keywords: binary logistic regression; ROC curve; model comparison.