

Generalised calibration for non-response and non-probability samples

Diego Chianella, Michele D'Alò, Claudia De Vitiis, Stefano Gerosa, Marco Dionisio Terribili¹

Abstract

Generalised calibration is a reweighting method useful for addressing non-ignorable unit non-response in probability samples. We review some of the method's key features. Next, we extend its use for non-probability samples. This extension uses new assumptions compared to those usually employed: firstly, the participation probabilities depend on the variable of interest; secondly, we do not assume full population coverage, but only coverage of a subpopulation from which the non-probability sample is selected. Finally, we present some simulation results and discuss the method's pros and cons

Keywords: calibration, reweighting, participation probability, undercoverage.

¹alina.matei@unine.ch, University of Neuchâtel, Switzerland. The views and opinions expressed are those of the author and do not necessarily reflect the official policy or position of the Italian National Institute of Statistics - Istat.