

Abstract

In several economic fields, such as those related to health or education, the individuals' characteristics are measured by bounded variables. Accordingly, these characteristics may be indistinctly represented by achievements or shortfalls. A difficulty arises when inequality needs to be assessed. One may focus either on achievements or on shortfalls, but the respective inequality rankings may lead to contradictory results. In this note, we propose a procedure to define indicators to measure consistently the achievement and shortfall inequality. Specifically, we derive measures which are invariant under ratio-scale or translation transformations, and a decomposable measure also is proposed.

Keywords: Inequality measurement, Health inequality, Achievements, Shortfalls

Casilda Lasso de la Vega is at the Department of Applied Economics IV, University of the Basque Country, Bilbao, Spain.

Oihana Aristondo is at the Department of Applied Mathematics, University of the Basque Country, Barakaldo, Spain.

Acknowledgements: This research has been partially supported by the Spanish Ministry of Education and Science under project SEJ2009-11213, cofunded by FEDER and by the Basque government under the project GIC07/146-IT-377-07. The first author gratefully acknowledges the hospitality of the Brooks World Poverty Institute (BWPI) of the University of Manchester, where she was visiting, supported by the Basque government under the programme MV-2010-1-20, when the first version of this paper was prepared.

We thank our colleague Ana Urrutia for her useful comments and suggestions.