

**Inference procedures to quantify the efficiency-equality trade-off in health from stated preferences:
a case study in Portugal**
Quantification of the efficiency-equality trade-off in health

Micaela Pinho^{1,2} Anabela Botelho²

¹ University Portucalense, Research on Economics, Management and Information Technologies (REMIT). Portugal

² University of Aveiro, Research Unit in Governance, Competitiveness and Public Policies (GOVCOPP). Portugal

Abstract

Objectives: This article develops two inference procedures to calculate the inequality aversion and alpha parameters of a health-related social welfare function with constant elasticity (CES-HRSWF) using stated preferences. Based on the relative concept of inequality, a range of values were proposed for the trade-offs between improving total population health and reducing health inequalities. **Methods:** A self-administered questionnaire was used to collect data from a sample of 422 college students in Portugal. Respondents faced three hypothetical allocation scenarios where they should decide between two health programmes that assign different health gains to two anonymous sub-groups of the populations and to two sub-groups identified by socio-economic class. Combinations of the median response to these three questions were used to estimate the parameters of the CES-HRSWF. **Results:** Findings suggest that the quantification of the efficiency-equality trade-off is not independent of the inference procedure used. Plausible values for the inequality aversion and for the alpha parameters were obtained ranging from 2.24 to 4.85 and from 0.5 to 0.58, respectively. **Conclusions:** Respondents revealed some aversion to health inequality. However, the extent of this aversion seems to be sensitive to the: (i) identification of the groups by occupation status, (ii) size of the health gain and (iii) the inference procedure used.