

When More Does Not Necessarily Mean Better: Health-Related Illfare Comparisons with Non-Monotone Well-Being Relationships

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Abstract

Most welfare studies assume that well-being is monotonically related to the variables used for the analysis. While this assumption is reasonable for many dimensions of well-being like income, education, or empowerment, there are some cases where it is definitively not relevant, in particular with respect to health. For instance, health status is often proxied using the Body Mass Index (BMI). Low BMI values can capture undernutrition or the incidence of severe illness, yet a high BMI is neither desirable as it indicates obesity. Usual illfare indices derived from poverty measurement are then not appropriate. This paper proposes illfare indices that are consistent with some situations of non-monotonic well-being relationships and examines the partial orderings of different distributions derived from various classes of illfare indices. An illustration is provided for child health as proxied by a weight-for-age indicator using DHS data for Bangladesh, Colombia and Egypt during the last few decades.

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- D63
- I3
- illfare comparisons
- monotonicity
- nutrition transition
- poverty measurement
- stochastic dominance