

# Incorporating Social Welfare in Program-Evaluation and Treatment Choice\*

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August 13, 2021

## Abstract

The econometric literature on program-evaluation and optimal treatment-choice takes functionals of *outcome*-distributions as ‘social-welfare’ and ignores program-impacts on unobserved *utilities*, whereas the utility-based welfare-analysis tradition in public-finance ignores unobserved heterogeneity in individual preferences. This paper reconciles the econometric and public-finance approaches to welfare-analysis in the practically important setting of discrete-choice. We show that under unrestricted preference-heterogeneity and income-effects, the distribution of individual indirect-utility is nonparametrically identified from average demand. This enables cost-benefit analysis of non-marginal policy-interventions and their optimal targeting based on planners’ redistributive preferences. Our methods are illustrated via empirical analyses of an experimental and an observational dataset.

Keywords: Social Welfare, Indirect Utility, Cost-Benefit Analysis, Policy Interventions, Social Marginal Utility of Income, Discrete Choice, Continuous Choice, Unobserved Heterogeneity, Nonparametric Identification

JEL Codes C14 C25 D12 D31 D61 D63

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\*We are grateful to Peter Hammond and Arthur Lewbel for discussions related to the topic of this paper and to Pascaline Dupas for access to the mosquito-net data.

<sup>†</sup>Bhattacharya acknowledges financial support from the European Research Council via a Consolidator Grant EDWEL, Project number 681565.

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