Incorporating Social Welfare in Program-Evaluation and Treatment Choice∗

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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’ redistributional 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

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