

Interdependent Utility Functions in an Intergenerational Context

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Abstract. We investigate the question of representing nonpaternalistic functions (aggregators) in paternalistic form, which was posed by Ray (1987), in an intergenerational setting. As in Hori (2001), the aggregators in this paper may differ across generations and depend possibly on the utility levels of all other generations. We discuss two approaches to deal with an infinite horizon. The first one explores monotonicity structures inherent in nonpaternalistic altruism. By means of lattice-theoretic arguments, we establish the existence of representations of nonpaternalistic functions in paternalistic form. The second approach uses the requirement of small degree of altruism.

Key words: Nonpaternalistic intergenerational altruism, Paternalistic representation, Aggregator.