
Abstract

Theory can be used to test the logic of intuitive decision making—one may ask whether a given set of decisions can be justified by a decision theoretic model in a given class. Indeed, in principal-agent settings, such justifications may be required—a manager of an investment fund may be asked what beliefs she had in mind when making financial decisions for her clients, or when evaluating assets and liabilities. While such a question is formally equivalent to a revealed preference question, our motivation suggests different assumptions about observable data. In this paper we assume that states and utilities are observable, and ask which collections of uncertain-act evaluations can be simultaneously justified by a single probability (for a Bayesian agent) and by a single set of probabilities (for a maxmin expected utility agent). We use a linear-programming-based argument to develop characterization results for each case.