

Anticipated Stochastic Choice

Nobuo Koida*[†]

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Abstract

The objective of this paper is to demonstrate that ex post *stochastic choice* can lead to a preference for commitment. We axiomatize an *anticipated stochastic choice (ASC)* representation, in which a *mood function*, or a probability measure over *mental states*, is chosen from a closed and convex set to maximize the expected utility. A key idea is that the decision maker (DM) identifies randomizations between two menus with the *perfectly correlated mixtures* of the menus, i.e., the mixture of two menus includes only the mixtures of specific pairs of alternatives. The set of mood functions in an ASC representation is unique, thus they can be interpreted as an index of the DM's ability to control her future self.

Special cases of ASC representations include *trembling hands*, i.e., the best alternative is chosen from a menu with probability close to 1 while arbitrary suboptimal alternatives are chosen with positive probability, and *choice under limited consideration sets*, i.e., the best alternative within a proper subset of a given menu is chosen with probability 1. Moreover, ASC representations accommodate (potentially stochastic) choice anomalies such as the attraction effect, cyclical choice, and Allais paradox.

Keywords: preferences over menus, stochastic choice, trembling hands, choice under limited consideration sets

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[†]Faculty of Policy Studies, Iwate Prefectural University, 152-52 Aza-Sugo, Takizawa, Takizawa-mura, Iwate 020-0193, Japan. E-mail: nobuo@iwate-pu.ac.jp, TEL: +81-19-694-2814, FAX: +81-19-694-2701