Time discounting, uncertainty aversion, and preferences for future environmental policies: A conjoint study

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Abstract

Using unique data (n = 2906) via a Web-based questionnaire, we conduct conjoint analysis to elucidate how Japanese respondents' preferences for future pro-environmental policies relate to (i) their discount rates in the domains of environmental as well as monetary outcome, (ii) their attitude to risk and uncertainty, and (iii) actual pro-environmental activities. We find that imputed discount factors for future environmental improvements are greater than unity, and positively associated with those for monetary concerns. We also find that a more uncertainty-averse person is more patient in waiting for future environmental improvements, although his degree of risk aversion is not associated with his patience in waiting for future environmental improvements. Our findings provide some justification for the idea that policy makers can assess the effects of an environmental policy by using the discount factor that is estimated from the data of people's consumption/saving behaviors.

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