

A Disaster Aggravates People's Present-Biasness: Evidence from the Great East Japan Earthquake

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Abstract

Since disasters are substantial traumatic events to individuals, they affect not only livelihoods of survivors but also their preferences. However, previous studies have shown mixed results of how disasters affect preference parameters. In this paper, we investigate the nexus between damages caused by a disaster and individual time preferences, which is critical in determining risk coping behaviors. To do so, we adopt unique data collected from two communities seriously affected by the Great East Japan Earthquake of March 11, 2011: Iwanuma city hit by tsunami and a town of Futaba affected by tsunami as well as the nuclear power plant failure. In both places, we found that exposure to a disaster aggravates an individual's present-biasness captured at their junior high school age. Our results suggest a need for providing commitment devices to mitigate harmful behavior induced by aggravated hyperbolic discounting due to disaster exposure. Hence, we believe our study sheds an important light on disaster rehabilitation policies.

Key words: Disaster; Preference; Present-biasness; Hyperbolic discounting

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