

Do Risk Preferences Change?

Evidence from Panel Data Before and After the Great East

Japan Earthquake*

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Abstract

We investigate whether experiencing a natural disaster—the Great East Japan Earthquake in 2011—changes individuals’ risk preferences. The novelty of our study is that we use panel data, and we can track the *change* in risk preference of the *same* individuals before and after the Earthquake. Previous studies use cross-section data collected after the negative shocks have occurred, and hence can be biased by unobserved individual heterogeneity. We find that people who experienced larger intensity of the Earthquake become more risk tolerant. Interestingly, all the results are driven by men and we do not observe such a pattern among women. Men’s increased risk tolerance after exposure to the Earthquake remains at after-Earthquake level for at least two years. Further, we find corroborative evidence that men become more engaged in gambling and drinking if they were more exposed to the Earthquake. Finally, we demonstrate that the estimate relying on cross-section data may be biased by comparing the estimates from cross-section and panel specifications.

Key words: Risk preference, Panel data, Gender difference, Great East Japan Earthquake, Risk-taking behavior

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