

Can Radiation-contaminated food be marketed?*

Makoto Saito[†] Masataka Suzuki

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Abstract

This paper presents a simple theoretical model to explain consistently heterogeneous patterns in consumers' valuation on radiation-contaminated milk by explicitly incorporating a strong preference for zero radiation risks. In particular, it establishes a rigorous condition under which contaminated milk is still traded at discount prices even when contamination levels are relatively high. Using an internet-based questionnaire survey consisting of 7,600 respondents, we empirically explore whether the above condition holds. According to estimation results, as milk contains more radiation, a contaminated milk market disappears quickly among those who originally perceive their own cancer risks to be rather low. Conversely, contaminated milk is still traded at discount prices among those who are regarded as having already carried considerable cancer risks.

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[†]Correspondence to: Makoto SAITO, Faculty of Economics, Hitotsubashi University, 2-1, Naka, Kunitachi, Tokyo, 186-8601, Japan, E-mail: makoto@econ.hit-u.ac.jp, phone: +81-42-580-8807, fax: +81-42-580-8882.