Estimating the Residential Land Damage of the Fukushima Nuclear Accident

Daiji Kawaguchi, Norifumi Yukutake

PII: S0094-1190(17)30023-2
DOI: 10.1016/j.jue.2017.02.005
Reference: YJUEC 3071

To appear in: Journal of Urban Economics

Received date: 24 April 2015
Revised date: 24 February 2017
Accepted date: 27 February 2017

Please cite this article as: Daiji Kawaguchi, Norifumi Yukutake, Estimating the Residential Land Damage of the Fukushima Nuclear Accident, Journal of Urban Economics (2017), doi: 10.1016/j.jue.2017.02.005

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.
Estimating the Residential Land Damage of the Fukushima Nuclear Accident

Daiji Kawaguchi\textsuperscript{a}, Norifumi Yukutake\textsuperscript{b}

\textsuperscript{a}Graduate School of Economics, The University of Tokyo, Hongo 7-3-1, Bunkyo-ku, Tokyo 113-0033, Japan
\textsuperscript{b}College of Economics, Nihon University, Misaki-cho 1-3-2, Chiyoda-ku, Tokyo 102-8360, Japan

Abstract

The cost of a nuclear power plant accident critically depends on people’s willingness to pay for avoiding exposure to the nuclear fallout. This paper is the first to estimate such a willingness to pay by observing the change in transaction prices before and after the Fukushima nuclear accident with the degree of radioactive contamination. The estimates, which are based on hedonic price equations with the degree of radioactive contamination measured by airborne surveys, indicate that the contamination decreased the price of residential land and imply a substantial willingness to pay to avoid exposure to the radioactive fallout. The estimated total residential land depreciation ranges from 1.5 to 3.0 trillion yen, approximately equivalent to 15-30 billion US dollars, or about 0.13-0.25\% of Japan’s total land value.

Keywords: Willingness to Pay, Fukushima, Nuclear Power Plant, Land Property Damage, Radioactive Contamination, Land Contamination

JEL: Q51; Q53; R31

1. Introduction

How high is the cost of nuclear power generation? Radioactive contamination caused by the collapse of the Fukushima Daiichi nuclear power plant
دریافت فوری
متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات