The Effect of Nuclear Accidents on Land Prices: Evidence from Fukushima-Daiichi in Japan

Yoshinori Nishimura* Masato Oikawa [†]

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Abstract

This paper analyzes the effects of the Fukushima-Daiichi Nuclear Power Plant accident on land prices in Japan. The nuclear accident, precipitated by a March 11, 2011 earthquake and accompanying tsunami, released radioactive material that caused unprecedented damage to infrastructure and long-lasting effects on economic activities thoughout the region which, according to our estimates, has approached 15 billion dollars in damages in the residential areas of Fukushima prefecture alone. In this paper, we focus on the long-term effects of the nuclear disaster on land prices, analyzing not only the effect on prices in the immediate vicinity of the accident, but also on land prices in other areas of Japan far from Fukushima but within 60 km of a nuclear power plant. We found that in commercial areas less than 30 km from a nuclear power plant, the accident had a negative effect on land prices, but in residential areas between 40 km and 50 km from the nearest nuclear power plant, land prices increased after the earthquake. We also found an in-migration to some cities in these regions from those moving from Fukushima prefecture.

JEL Classification Numbers: D62, Q48, Q52, Q58, R39 Keywords: environmental pollution, land price, soil contamination, nuclear power plant accident, evidence-based policy making

^{*}Global Institute of Financial Research, Chiba Institute of Technology, 2-17-1, Tsudanuma, Narashino-shi, Chiba 275-0016, Japan. Email: nishimura.yy@gmail.com

 $^{^\}dagger$ Graduate School of Economics, the University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan. Email: masato.oikawa1991@gmail.com