**German Institute for Japanese Studies (DIJ)** 

## DIJ Business & Economics Study Group



Tuesday, 10 June 2014, 12:30 - 13:30

Yasuyuki SAWADA (University of Tokyo, Graduate School of Economics)

## The Physical and Social Determinants of Mortality in the 3.11 Tsunami

The human consequences of the 3.11 tsunami were not distributed equally across the municipalities of the Tohoku region of northeastern Japan. Instead, the mortality rate from the massive wave varied tremendously from zero to close to ten percent of the local residential population. What accounts for this variation remains a critical question for researchers and policy makers alike. This paper uses a new, sui generis data set including all villages, towns, and cities in the Pacific Ocean side of the Tohoku region to untangle the factors connected to mortality during the disaster. With data on demographic, geophysical, infrastructure, social capital, and political conditions for 133 municipalities, this paper found support for standard theories which focused on the demographic characteristics of the local community and the strength of the tsunami itself. These outcomes were to be expected. However, beyond these prevailing factors, this paper found compelling evidence that the strength of local social ties also mattered in influencing survival. As a new wave of research has demonstrated, social capital and social ties play a critical role in disaster response and recovery. This paper moves the field forward by providing strong support for the argument that social capital also matters during the disaster itself. Given the high probability of future large scale catastrophes, these findings have important policy implications for disaster mitigation policies in Japan and abroad.

Yasuyuki Sawada's research fields are applied micro-econometrics, development economics, economics of disasters, and economics of suicide prevention policies. He led survey and experimental data collection projects in the aftermath of natural and manmade disasters from a number of countries including China, India, Japan, the Philippines, Thailand, and Vietnam. He has been a visiting researcher of ADB Institute, BRAC, JICA-RI, RIETI, and World Bank; a visiting professor of Stanford and Korea Universities; and a member of Inter-Governmental Joint Research Project on a New Era of Japan-Korea Relations. He received a number of awards including 2014 Nikkei Book Award. He is a co-editor of Japanese Economic Review. He received BA from Keio University and Ph.D. from Stanford University.

Everybody is welcome to attend, but we appreciate if you register by e-mail <a href="mailto:busi.econ-studygroup@dijtokyo.org">busi.econ-studygroup@dijtokyo.org</a> any time before the event.