

Abstracts

Natural Disasters and Worker Protection: Learning from Labor Law

Rui Kawai (Iwate University)

Large-scale natural disasters such as earthquakes, tsunamis, and torrential rains can cause extremely wide-ranging damage to the entire social economy, including labor problems. Is the current labor law sufficiently responsive to the labor problems caused by a series of natural disasters? This paper discusses how labor issues in employment contracts, such as worker health and safety issues, compensation for absence from work, and working hours, arise in concrete terms, and what legal issues are involved. I have categorized the time course of natural disaster occurrence and changes in the environment into “four phases”, which I discuss with this in mind. In addition, specific problems when a large-scale natural disaster actually occurs are presented based on the results of interviews with labor unions of private companies and local governments.

Disasters and Housing Assistance: Learning from the Administrative Law

Katsuhiko Itagaki (Yokohama National University)

The Disaster Relief Act provides shelters (housing for weeks to months) and temporary housing (years) to people who have lost their homes due to a disaster. Disaster victims unable rebuild their own houses are moved into public housing for disaster victims (Public Housing Law). However, developing public housing for disaster victims takes a certain amount of time, and forecasting demand is difficult. *Minashi kasetsu jutaku* (post-disaster public-funded rental accommodation) and *kariage koei jutaku* (leased public housing) can dramatically reduce the time required for housing construction. This policy should be highly recommended because it can serve as a buffer. However, the legal scheme is complicated and requires a lot of paperwork for local government officials, and if move-out deadlines are not guaranteed, it may be difficult to find a lender for rental housing. The Act on Support for Reconstructing Livelihoods of Disaster Victims provides financial assistance to victims whose homes are completely or partially destroyed; however, disputes over disaster certification are inevitable. Financial support for disaster victims should be made compulsory through earthquake insurance.

Verification of Effectiveness of Nudges to Promote Early Evacuation Message by Online Experiment: Learning from Behavioral Economics

Shodai Kitano (Osaka University)

Fumio Ohtake (Osaka University)

Early evacuation is an effective way to prepare for disasters such as landslides caused by heavy rainfall. However, early evacuation is not fully implemented currently. We conducted a randomized controlled trial (RCT) in a nationwide online survey to examine the effectiveness of nudge messages in promoting early evacuation behavior to prepare for heavy rainfall disasters. We also analyzed heterogeneity, focusing on normative attitudes toward evacuation and labor. The main results are as follows: first, messages that conveyed the information that one's evacuation behavior promotes the evacuation behavior of others and social norms in terms of gainful expression (social influence messages) increased the intention to evacuate to a shelter by about 7 percentage points. This demonstrates the external validity of the effect of social influence messages. Second, there was no heterogeneity in the effects of nudges due to normative attitudes, such as “I think people around me want me to evacuate”. Moreover, norms were found to be correlated with intention to evacuate to a shelter. Third, heterogeneity of the effects of labor-related messages was evident. In particular, social influence messages were shown to be more effective for working women and for those whose workplace and place of residence were relatively close to each other. Fourth, the results indicate that there may be differences in average evacuation intentions among groups related to work, depending on trust in the community, social norms, and community involvement.

Catastrophic Disasters and Employment Policy: Learning from Social Science of Disasters
Shingo Nagamatsu (Kansai University / National Research Institute for Earth Science and Disaster Resilience)

This paper aims to rethink employment measures in the aftermath of a major disaster in Japan by introducing the concepts of vulnerability and resilience, one of the basic theories in disaster social science. Resilience consists of three levels: the ability to absorb shock from outside the system and maintain its functions (absorptive capacity), the ability to adapt to the damage and recover while maintaining minimum function (adaptive capacity), and the ability to transform the functions of the system itself in response to environmental change (transforming capacity). Japan's employment policy in the aftermath of major disasters has centered on maintaining employment through employment adjustment subsidies. While many jobs were created by these subsidies during the Lehman Shock and the Great East Japan Earthquake, these were not implemented during the COVID-19 pandemic, and employment insecurity was addressed by extending the employment adjustment subsidy to part-time and other non-regular employment. While this measure was intended to increase the absorptive capacity of the employment system, one indicated side effects is that it impedes employment mobility. However, during the COVID-19 pandemic, Cash for Work was implemented as a private-sector job creation project, which not only created jobs but also strengthened employment support function, achieving the desired effect. Based on this experience, publicly funded job creation should be reevaluated to prepare for future major disasters.

Reconstruction Projects and the Job Market: Learning from Macro-Fiscal Policy
Keigo Kameda (Kwansei Gakuin University)

Reconstruction projects after natural disasters can have a significant impact on ex-post economic growth through labor shortages in the private sector; Alesina et al. (2002) called this possibility the "labor market channel of fiscal policy" and argued that an increase in public employment would reduce private employment through upward pressure on wages, which would reduce capital investment by firms' attempts to maintain an optimal capital-labor ratio. Thus, if this effect is true in areas affected by the Great East Japan Earthquake, such areas will face economic stagnation in the future. Kameda, Miwa and Nagamine (2021) confirmed the existence of this crowding-out effect of employment in the stricken areas through a survival analysis using individual job data. However, the scope of this study is limited to Miyagi Prefecture. In this paper, we apply this analysis to Iwate Prefecture and compare the results of both studies. The results confirm a stronger employment crowding-out effect in municipalities with higher mortality rates in tsunami-inundated areas, similar to Kameda, Miwa and Nagamine (2021). For this reason, future reconstruction policies should aim at increasing labor participation rates and private investment as well as rebuilding public infrastructure.

Disasters and Employment: Learning from Development Economics
Yasuyuki Sawada (The University of Tokyo)

This paper summarizes existing research, particularly in developing countries, focusing on how access to employment and labor markets, or more broadly additional income through labor, can function as an ex-post risk coping mechanism and insurance against disasters. This insurance function of ex-post labor supply also manifests itself in the form of increased migrant labor and additional income or remittances. Moreover, these informal insurance functions through labor adjustment do not necessarily have to be through the labor market. For example, after a disaster, households or individuals may acquire community resources through additional labor, thereby overcoming the losses from the disaster, even if only partially. The labor supply of children may also have an informal insurance function within the household, explicitly or implicitly. In cases where governments offer workfare programs, as is the case in India and elsewhere, the additional wages earned through participation in such programs can be an important risk-coping and insurance tool. From a broader perspective, other non-market insurance mechanisms that can be effective as ex-post risk coping mechanisms after a disaster include private or public transfers, withdrawal of one's own financial and physical assets,

and even borrowing funds.

Climate Change and Agricultural Production: Learning From History

Koichi Takei (University of the Ryukyus)

Throughout history, there have been times when agricultural production was threatened by climate change. One such time was during the Edo period (1603–1867), a time when bad harvests and famines occurred frequently across Japan. A typical example of this is the Great Tenmei Famine (1783–1784), which killed more than 300,000 people. For this reason, what people dread most during a natural disaster is a food crisis. This paper focuses on the Edo period as it attempts to explain the relationship between climate change and food production from the following three perspectives. (1) We verify what the climate during the Edo period was like and what kind of agricultural production was performed within that climate. (2) Using fixed-point observation on the Noto Peninsula during the mid-Edo period, two food crises that occurred in this area are elucidated in great detail. (3) We identify the causes behind these food crises and analyze their impact on agricultural production based on (2) above. Results reveal that rice suited to a warmer climate was planted during the Edo period, when the climate was cooler than it is now. This is because the social structure at the time required that cultivators pay annual tribute in rice. However, what caused these food crises was not the cool climate, but instead the decisions of the cultivators who grew the rice and lived in village communities. In other words, while the food crises of the Edo period may have appeared to be a natural disaster to the people living during that period, this is a mistake; these were unequivocally man-made disasters.

Will HR Department Continue to Change Human Resource Management for Elderly Workers in Japan? Focusing on the Support System for Elderly Workers by HR Department

Haruyuki Kanou (Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers)

Etsuko Oshima (Mayekawa MFG. Co., Ltd.)

Miho Fujinami (Chiba Keizai University)

Eiichi Ohki (Tamagawa University)

In this paper, we focus on utilization strategies for elderly workers (early 60s) in Japan. Japanese companies are trying to utilize elderly workers by changing their HRM strategy and HR management practice for both regular workers and elderly workers. In the future, almost all Japanese companies will integrate HRM for regular workers and old workers, but this change will take some time. The “Weak Utilization Strategy (WUS)” slowly utilize elderly workers, and working conditions of the elderly workers are not expected to improve sufficiently. On the other hand, the “Strong Utilization Strategy (SUS)” for elderly workers, which aims to create similar working styles as regular workers, may improve their working conditions faster. We examined whether Japanese companies would change their strategies for utilizing elderly workers from WUS to SUS using survey data for white-collar workers in their early 60s (n=725) and a case study for a company in Japan that utilizes elderly workers with support from human resources department. Our results indicate that companies have the potential to choose SUS, but adoption of this strategy is expected to be slow.