

# Natural Disasters and the Economy

## Guest editors

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Natural disasters represent for population a shock that often may be difficult to overcome. However, extreme events may be a challenge but also an opportunity as the socio-economic system may change its structure and functions and may adapt to the new scenario that has been shaped by any kind of disaster.

Furthermore, in the light of the ecological literature, the socio-economic system (e.g. the amount of goods, services and resources that are produced, exchanged and allocated through markets) may be thought integral to nature. This means that human activities are in a sense contingent on the natural system e.g. are influenced by the course of nature.

This fact claims for the consideration that the socio-economic disturbances generated by natural disasters need to be carefully taken into account. Indeed, the always increasing demand, from both the public and the private sectors, of actions aimed at preventing, mitigating and adapting to the damages produced by natural disasters deserve special attention (Zekeňáková and Zvijáková, 2017). To this purpose, several aspects need to be considered in evaluating the impact of natural disaster on the economy, such as socio-economic exposure, vulnerability, resilience, and risk. This can be done both in an ex-ante perspective (e.g. risk reduction, risk assessment) and in an ex-post perspective (e.g. risk management, assessment of damage, reconstruction activities). In fact, according to Pelling (2003), any disaster cycle, namely all the phases that take into account the interaction between natural events and socio-economic system, may be seen as a sequential phenomenon. This phenomenon consists of a pre-event situation (e.g. preserving the status quo or preparing to the natural event), followed by the actual occurrence of the natural event, and concluded by the post-event situation that is the emergency and recovery phase (see Modica and Zoboli, 2016 for more details).

Going in order, *economic exposure* may be seen as all the physical and monetary objects that are potentially affected by external events (e.g. natural and man-made disasters). *Vulnerability* may be defined as an *'inherent characteristics of the exposed objects/areas that create the potential for harm. However, it should be noted that this potential has to be thought independent of the probabilistic risk of occurrence of any hazard'* (Sarewitz et al., 2003 p. 805).

*Resilience* is associated with threatening external events (e.g. financial crises, natural disasters and so on). Starting from the seminal work of Holling (1973), the definitions of resilience have been revised and applied to several fields and it can be seen as the capacity to i) bounce back, ii) recover, iii) adapt to an external shock (see Modica and Reggiani, 2015 and Faggian et al, 2018 for more insights).

Finally, the concept of *risk* results from the interaction of the element exposed to the hazards, the hazards itself (in particular, the frequency and the severity of the hazard) and the vulnerability of the objects under analysis (Birkmann, 2007). More formally, we can define the risk as the potential likely level of loss given the severity of the hazard and the vulnerability (Alexander, 2000).

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As a consequence, there is an increasing need for concrete solutions that can reduce the vulnerability (e.g. earthquake proof buildings, dikes, water reservoirs) and enhance the resilience (e.g. risk management plans) of territories, populations and activities. However, the capacity to foresight, decide, steer and lead policy in such a context of uncertainty may also be one major issue for territories. At the same time, evaluating the objects under risk and the risk itself can provide interesting insights for a correct risk management by policy makers, first responders and even singular individual.

If your recent research deals with the above-mentioned issues that cover the entire *spectrum* of the economic evaluation of natural disasters from both an ex-ante and ex-post perspective and that provides a comprehensive vision of the interaction between natural disasters and socio—economic regional structures, we invite you to submit a paper for the special issue on **Natural Disasters and the Economy** of the *Review of Regional Research*.

## Submission and Deadlines

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The deadline for submission is ***31st May 2019***.

Please note that all submissions have to undergo the usual selection process.

We are looking forward to your submissions.

The Guest Editors,

Alessandra Faggian (Managing Guest Editor)

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