Evaluating the Role of Resilience in Reducing Economic Losses from Disasters: A Multi-Regional Analysis of a Seaport Disruption

Topic: Thematic IO analysis: Disaster and Adaptation

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Models to estimate economic impacts of disasters have recently been augmented to include resilience. However, most research to date has incorporated only a limited set of resilience tactics and has not estimated their individual effect on reducing losses. We present a comprehensive framework for decomposing the effects of a broad set of post-disaster resilience tactics. Our methodological innovation is illustrated by adapting the TERM Multi-Regional CGE Model in the case of a seaport disruption, distinguishing inherent resilience working through the price system from primarily adaptive resilience tactics to cope with input shortages. We also overcome a path-dependency problem in the modeling process.