Disaster and Structural Change: Case Study on the 1995 Kobe Earthquake

Topic: Input-Output analysis of disasters I

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Okuyama (2014) found that the long-run effects of the Kobe Earthquake, occurred in 1995, appear to be significant, lasting for several years in an increasing manner, based on the time-series of input-output tables for the City of Kobe. It also suggested that a large part of the economic effects be resulted from structural changes of the Kobe economy resulting from the damages of and reconstruction activities after the earthquake. In order to investigate the disaster effects further, this paper aims to analyze the extent and composition of the structural change, based on the input-output framework. The structural changes are measured based on a time-series of custom-built input-output tables for the damaged region (Ahiya-Jinushi, 2001). Based on these tables, the region specific structural change of the Kobe economy is decomposed using the combination of structural decomposition technique and shift-share analysis.