

Investigating Fiscal and Social Costs of Recovery Policy:

A Dynamic General Equilibrium Analysis of a Compound Disaster in Northern Taiwan

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Abstract

We investigate a long-run impact of a compound disaster in the northern Taiwan by describing a recovery process from the disaster with a dynamic computable general equilibrium model. After simulating losses of capital and labor in combination with a nuclear power shutdown, we conduct policy experiments that are aimed at recovery of Taiwan's major industries by subsidizing their output or capital use. We found that the semiconductor industry can recover but need a huge amount of subsidies while the electric equipment sector can almost recover even without subsidies. Capital use subsidies cost less than output subsidies. When we use longer duration for a recovery program, we can save the subsidy costs up to 10%.

Keywords: Compound Disaster, Energy, Taiwan, Disaster Recovery, Dynamic CGE

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