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TITLE: ECONOMIC IMPACTS OF NATURAL DISASTERS: DEVELOPMENT ISSUES AND EMPIRICAL ANALYSIS

AUTHORS: OKUYAMA, YASUhide ;

EMAIL: okuyama@iuj.ac.jp

COUNTRY: JAPAN

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ABSTRACT:

Since 1991, natural disasters have killed approximately 1 million people worldwide, more than 3 billion people have been affected, and have caused about US\$ 1 trillion of economic damages. The methodologies for evaluating the economic impacts of natural disasters, such as IO, SAM, CGE, and econometric models, have advanced significantly through modification and extension of their frameworks and/or integration with other models. Challenges, such as the assessment of long run impact and incorporation of negative externalities, remain, especially in the developing country context. The present paper examines the higher-order effects of 10 recent disaster cases, employing IO or SAM. The results show that the higher-order effects of disasters are significant and complex. We also find, perhaps surprisingly, there are no particular trends or correlations among damages, losses, and higher-order effects between the types of disaster and the intensity of disasters. Furthermore, analysis of the sectoral distribution of higher-order effects reveals that the manufacturing and services sectors suffer from larger higher-order effects than do other sectors, such as agriculture and mining.