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Ken-Ichi Akao, Hiroaki Sakamoto

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#### ACCEPTED MANUSCRIPT

## A theory of disasters and long-run growth

Ken-Ichi Akao\* Hiroaki Sakamoto<sup>†</sup> April 23, 2018

#### Abstract

This paper develops a unified framework in which various types of catastrophic shocks can be simultaneously considered within a standard model of economic growth. We first establish the basic existence and equivalence results. We then apply the framework to an endogenous growth model to consider the influence of disasters on the long-term equilibrium and the transition phase. The result shows that while experiencing disasters may lower the average growth rate of the affected countries, there exist various channels through which the risk of disasters and long-term economic performance are positively correlated. This finding reconciles the apparently contradictory evidence in recent empirical studies.

**Keywords**: disasters; dynamic optimization; long-term growth; endogenous growth; aggregate uncertainty

JEL classification: O41; O44; C61

<sup>\*</sup>School of Social Sciences, Waseda University. (e-mail: akao@waseda.jp)

<sup>&</sup>lt;sup>†</sup>Corresponding author. Faculty of Law, Politics, and Economics, Chiba University. 1-33 Yayoicho Inage-ku, Chiba, Japan. (e-mail: hsakamoto@chiba-u.jp)

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