



**PCED**

Philippine Center for  
Economic Development

*present a seminar on*

**DISASTER AND PREFERENCE: EVIDENCE FROM JAPAN AND  
THE PHILIPPINES**

by



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**ABSTRACT**

A number of recent studies have investigated the impact of disasters on individual preference parameters such as risk aversion coefficient and time discount rate. Yet, existing empirical results are mixed on disaster impacts which can be, at least partially, attributed to the lack of theoretical underpinning to interpret these empirical findings. We aim to bridge these gaps in the existing literature by investigating the impact of natural disasters on present bias, time discount, and curvature parameters, which are elicited in an integrated manner by the Convex Time Budget (CTB) experiments developed by Andreoni and Sprenger (2012) and the Double Multiple Price List experiment developed by Andersen et al. (2008). Based on these approaches, we employ unique experimental data together with accurate damage information from official metrical surveys and satellite images collected from a city in Japan and a village in the Philippines, respectively, which were hit by a strong earthquake in 2011 and by a strong flood, Habagat, in 2012. Three findings emerge. First, with two experimental methods applied to two events, we commonly find that exposure to a disaster makes individuals more present-biased and less risk averse. Second, in Japan, we find the impact has persisted for six years at least. Finally, our results are consistent with Callen et al. (2014) and Hanaoka et al. (2018) which emphasize the channel through emotional responses. We also discuss robustness and external validity of our main findings.

**ABOUT THE AUTHOR**

Yasuyuki Sawada is Chief Economist of the Asian Development Bank (ADB). He is the chief spokesperson for ADB on economic and development trends, and serves as Director General of the Economic Research and Regional Cooperation Department, which publishes ADB's flagship knowledge products.