

## Earthquakes and Economic Growth

Natural disasters are known to have devastating immediate impacts, but their longrun effect on economic growth is not well understood. For the natural hazard of earthquakes, this paper provides the first global empirical study on this topic that applies a measure of the exogenous physical hazard responsible for earthquake impacts, earthquake ground shaking. I exploit the random within-country year-to-year variation of shaking to identify the causal effect of earthquakes on economic growth. To construct a panel dataset with country-year observations of earthquake exposure and socioeconomic variables, I combine the universe of relevant earthquake ground shaking data from 1973 to 2015 with country-level World Bank indicators. I find negative long-run growth impacts for an average country comparable with recent findings for climaterelated natural disasters. A typical earthquake reduces GDP per capita by 1.6% eight years later, with substantial heterogeneity by country categories. In particular, low and middle-income countries experience the greatest long-run economic damages while high-income countries may even experience some positive “building back better” effects. Based on an analysis of alternative spatial aggregation approaches, I find earthquake impacts are driven by local high-intensity events rather than spatially diffuse exposure to lower intensity shaking.