

The economic impact of earthquakes: some evidence from Italian provinces¹

Fabrizio Colantoni (Sapienza Università di Roma)

Maria Gabriela Ladu (Università degli Studi dell'Aquila)

Tania Masi (Università G. d'Annunzio di Chieti-Pescara)

Abstract

Natural disasters such as earthquakes, can cause severe loss of human lives and have direct and indirect economic impacts. However, the existing literature offers inconclusive answers regarding their economic effects. Most studies on natural hazards consider different types of disasters at the same time and very few of them focused on earthquakes.

The aim of this paper is to quantify earthquakes' economy-wide (provincial level) and sector-specific impacts. In particular, we want to investigate the consequences of two recent earthquakes that occurred in Italy in 2009 (“L’Aquila”), and in 2012 (“Emilia Romagna”) using a new approach: the Synthetic Difference-in-Differences approach (SDID). This type of analysis could help policy makers to adopt appropriate measures in the aftermath of a disaster.

Our Preliminary results show a positive effect of both the earthquakes on the gross value added (GVA). However, the effect is heterogeneous across the events. The Average Treatment effect on the Treated (ATT) is significantly higher in 2009 than in 2012, when we consider the GVA in the construction sector. Conversely, the effect on GVA in industry, excluding construction, is higher in Emilia Romagna than in L’Aquila.

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