

# The local labor market effects of earthquakes: evidence from a Difference-in-Difference approach with multiple time periods and multiple groups

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## Abstract

Using a balanced panel of Local Labor Market Areas (LLMAs) and adopting a new Difference-in-Differences approach with multiple time periods and multiple groups, in this paper we assess the causal effects on different local labor market outcomes of the earthquakes occurred in Italy in 2009, 2012, and 2016. The results suggest a strong heterogeneity in the earthquake effects: the event in 2009 had significant negative and persistent impacts on the employment and participation rates of the LLMAs involved, while no adverse effects occurred for the LLMAs affected by the events in 2012 and in 2016. We also extended the analysis at the industry level, in order to highlight the sectoral shifts that typically characterize the aftermath of these natural disasters.

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