
[Document](#)

Keep in mind

The series *Documentos de trabajo sobre economía regional y urbana* (only in Spanish, Working Papers on Regional and Urban Economics) is a publication of Banco de la República in Cartagena. The opinions contained in this document are the sole responsibility of the authors and do not commit Banco de la República or its Board of Directors.

AUTHOR OR EDITOR

Ayala-García, Jhorland

Dall'erba, Sandy

The series [Documentos de Trabajo Sobre Economía Regional y Urbana](#) is a publication of Banco de la República in Cartagena. The opinions contained in this document are the sole responsibility of the authors and do not commit Banco de la República or its Board of Directors.

Publication Date:

Monday, 06 September 2021

Abstract

Extreme rainfall events are expected to become more frequent and more intense in the future. Because their mitigation is a challenge and their cost to human life is large, this paper studies the impact of preemptive investment against natural disasters on the future occurrence of landslides and the losses associated with it. Based on a panel of 746 Colombian municipalities with medium and high risk of landslides and an instrumental variable approach, we find that preemptive public investment can reduce the number of landslides, the number of people who die, are injured, or disappear after a landslide, as well as the number of people affected. However, we do not find any effect on the number of houses destroyed. The results reveal that local governments focus their preventive measures on saving the lives and the physical integrity of their citizens, but they pay less attention to the direct market losses of natural disasters. These results are relevant in the presence of imperfect private insurance markets and increased informal settlements.