

# Working Papers on Economics - Sovereign Risk and Stock Market Response to Natural Disasters in Emerging Economies

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Publication Date: Monday, 24 of February 2025 **Abstract**

This study examines how natural disasters affect sovereign risk premiums (CDS) and stock returns in emerging economies. Using an event study approach from October 2004 to August 2022, we analyze 1,400 natural disasters across 11 countries, assessing market responses both in aggregate and by disaster type. The analysis also reveals notable country-specific disparities. Results show that: i) while stock returns (mean) are largely unaffected, volatility (variance) increases significantly; ii) sovereign risk premiums respond in both their mean and variance; iii) contagion effects are stronger in volatility than in the mean, with sovereign risk premiums exhibiting greater contagion than stock market dynamics; and iv) Latin American countries are particularly sensitive to contagion, not only from neighboring disasters but also from events in regions like Asia. These findings highlight the differentiated impacts of natural disasters on emerging financial markets, with volatility and sovereign risk exhibiting the most pronounced responses.

**Natural disasters affect both the level and volatility of sovereign risk premiums in emerging economies, whereas stock market only experience changes in volatility.**