

Using Google Trends and Baidu Index to analyze the impacts of disaster events on company stock prices 🛒

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Purpose

With the ascendance of information technology, particularly through the internet, external information sources and their impacts can be readily transferred to influence the performance of financial markets within a short period of time. The purpose of this paper is to investigate how incidents affect stock prices and volatility using vector error correction and autoregressive-generalized auto regressive conditional Heteroskedasticity models, respectively.

Design/methodology/approach

To characterize the investors' responses to incidents, the authors introduce indices derived using search volumes from Google Trends and the Baidu Index.

Findings

The empirical results indicate that an outbreak of disasters can increase volatility temporarily, and exert significant negative effects on stock prices in a relatively long time. In addition, indices derived from different search engines show differentiation, with the Google Trends search index mainly representing international investors and appearing more significant and persistent.

Originality/value

This study contributes to the existing literature by incorporating open-source data to analyze how catastrophic events affect financial markets and effect persistence.

Keywords: [Stock market](#), [AR-GARCH](#), [Crash incidents](#), [Search volume index](#)

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