

The origin of stock market volatility — the case of Indonesia and Turkey

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Abstract

One of the advantages to analyze the economic links between two countries on the basis of stock market data, rather than aggregate economic data published by national statistical offices, is that stock market data are readily available, allowing analysis in almost real time. We consider a directed network with equity markets as nodes and return-to-volatility spillovers, obtained via forecast error variance decomposition (fevd), indicating the weights of the edges.

In the course of globalization, it can be generally observed that the share of volatility originating from outside a local stock market has been gradually increasing. This is also the case for Indonesia and Turkey. We show that the link of Indonesia to Turkey has recently become more important, that is, spillovers from the Indonesian to the Turkish stock market have increased, but not in the opposite direction. Using notions related to network centrality and information entropy, we also identify political and economic events having a big impact on the distribution of stock market volatility in Indonesia and Turkey.

Key words: Equity market connectedness; spillover table; relative market entropy; Indonesia; Turkey

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